

# Exhibit L

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# CHMWarnick

HOTEL ASSET MANAGERS • BUSINESS ADVISORS

February 20, 2019

Mr. John M. Thompson  
Paraiso Springs Resort, LLC  
P.O. Box 779  
Spring House, PA 19477

Dear John:

I am pleased to hear that you are nearing the ability to develop the Paraiso Springs Resort that we worked on with you several years ago.

The development plan as described in the Environmental Impact Report, that includes 103 hotel rooms, 60 timeshare units, and 17 detached timeshare villas, along with ancillary and support facilities is consistent with the resort envisioned and evaluated when we originally studied the resort plan. We believe that reducing the available bedrooms and or changing the mix could imperil the economic feasibility of the project.

The hotel, with 103 rooms, is small by any standard and alone, without the timeshare component, would not support the ancillary uses, the restaurants, bars, spa and wellness components that would be needed to attract visitors to the resort. Our experience is that the overhead and fixed expenses to operate a 103-room hotel are about the same as the fixed expenses to operate a 250-room hotel; with about half the income that would be generated in a 250-room hotel, the economic feasibility of the standalone hotel is questionable.

The addition of the timeshare units and timeshare villa units, with their inherently higher and more consistent occupancy (annual days and number of occupants) than a standard hotel, would provide year-round support that would further support the hotel operation, the food and beverage facilities, and the spa.

With regard to the timeshare condominiums and timeshare villa components, the marketing costs will be substantial regardless of the number of units, and to put it in context, the proposed 60-unit timeshares and 17 villas is relatively small in comparison to other projects with similar components and infrastructure. Based on our experience, in order to attract financing for this type of project you will need to reduce the cost of marketing of "each unit." Reducing the number of units will only increase the cost of marketing of each unit, thus compromising the financial projections and ability to attract investment.

On the development and construction side, the site and infrastructure costs will be substantially the same regardless of the number of units of either hotel or timeshares that are developed. Again, the economic feasibility of the proposed plan only gets worse as you trim back density; therefore creating risk to the projects ability to attract financing.

Mr. John M. Thompson  
Paraiso Springs Resort, LLC  
February 20, 2019  
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In summary, by hospitality standards, this is not a *large scale project* to begin with. Any density reductions from what was originally proposed when we did our original evaluation, could inhibit the ability for the project to cover fixed costs related to infrastructure, development and operation of the needed components of the project that would be needed to make it successful.

Please feel free to call me if you would like to discuss or have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Tom Morone".

Thomas Morone  
Managing Director & Executive Vice President



**THOMAS MORONE** has a wide range of industry expertise, including general hospitality consulting, asset management, corporate acquisition/disposition, management/franchise selection and contract negotiation, hotel and resort brokerage, strategic planning and market positioning, and hotel operations.

Prior to opening the Los Angeles office of Warnick + Company Tom was the Vice President and Manager of Colliers International Hotel Realty – Los Angeles. At Colliers, Tom was responsible for hotel brokerage services, with an emphasis on larger projects. Among others, he was involved in the sale of hotels such as the Hyatt

Newporter in Newport Beach, the Airport Marina Hotel, Retail, and Commercial Center in Los Angeles, the Midland Hotel and office complex in Chicago and the Olympus Hotel in Salt Lake City.

Tom has advised many clients on the market and economic feasibility, programming, franchise branding, and management company selection for their hotels. He has also assisted in clients' decisions to buy, sell, or hold and has executed a number of innovative solutions for his real estate clients.

Prior to entering brokerage, Tom was Vice President, Corporate Development with Omni Hotels and was a Director of Development with Doubletree Hotels. He has managed regional corporate development and real estate activities throughout the United States. His consulting skills were developed as a Senior Consultant with Pannell Kerr Forster, Los Angeles and honed in his own practice, Hospitality Systems, Inc., which he founded in 1979. Tom has extensive hotel operating experience, has opened new properties, and repositioned several hotels and restaurants. He began his hotel career with Western International Hotels, now Westin Hotels, where he was a member of the opening teams for the Peachtree Plaza Hotel in Atlanta and the Westin Bonaventure Hotel in Los Angeles.

Tom is a licensed real estate broker in California and Arizona. He is a Certified Commercial Investment Member (CCIM), a member of and Chairman Emeritus (2009) of the International Society of Hotel Consultants (ISHC), and is a certified expert in mediation, arbitration, and dispute resolution. Tom coauthored CapEx 2007, a study of capital expenditures in the hotel industry. He holds a lifetime teaching credential in California, lectured in the Hospitality Management Program at UCLA, and formerly taught in the NYU Hospitality program. He sits on the board of directors of the Collins College of Hospitality Management at Cal Poly Pomona. He is a frequent speaker at national hospitality conferences and is a steering committee member in the Planning Committee of America's Lodging Investment Summit (ALIS).



**Painter Preservation**  
HISTORIC PRESERVATION & URBAN DESIGN

June 15, 2018

Mr. John M. Thompson  
Paraiso Springs Resort, LLC  
P.O. Box 779  
Spring House, Pa. 19477

Re Response to Peer Reviews and Mitigation Measures  
Proposed in the Paraiso Hot Springs RDEIR

Dear Mr. Thompson,

I am writing in response to the Recirculated Draft Environmental Impact Report (RDEIR) that was recently released by the County of Monterey and the associated Mitigation Measures outlined in that RDEIR.<sup>1</sup> I am also, by way of this letter, responding to comments submitted as part of this process, specifically comments by Fenton and Keller (April 26, 2018), which references an analysis made by the Architectural Resources Group (ARG) (April 6, 2018), and Land Watch (April 26, 2018). Lastly, I am writing to comment on the peer reviews of the 2008 *Historic Resource Report – Paraiso Hot Springs* submitted by Galvin Preservation Associates (GPA) (July 3, 2008) and CIRCA (June 6, 2014). Specifically, I am responding to proposals in these reports to consider reconstruction and designing the redeveloped resort in the Victorian-era Gothic Revival style as a mitigation for the nine Victorian-era cottages that were demolished in 2003.

In preparation for writing this letter, I reviewed the *Revised Evaluation of Historical Resources at the Paraiso Springs*, prepared by archaeologist Dr. Robert Cartier of Archaeological Resource Management, and dated January 13, 2005. Note that this report found Paraiso Springs ineligible for listing in the California Register as a historic district, even considering the no-longer-extant nine Victorian cottages, due to lack of integrity (p. 28-29). I reviewed the *Historic Resource Report – Paraiso Hot Springs* prepared by my firm and Terra Cognito in February 2008. This report evaluated Paraiso Hot Springs as a potential cultural or historic landscape (a historic district) with a Period of Significance of 1872 to 1928. It found Paraiso Hot Springs to be ineligible as a historic district, which a cultural or historic landscape is often considered under National Park Service (NPS) guidelines, due to lack of integrity.

I also reviewed the peer review of this report prepared for the County of Monterey by Galvin Preservation Associates on July 3, 2008. The peer review concurred with Painter Preservation's assessment that "the site as a whole does not meet the California Register of Historic Resources as a rural historic landscape or as a historic district due to an overall lack of integrity" (pp. 2 and 6). I reviewed the *Historic Resource Report – Paraiso Hot Springs Addendum*, prepared by my firm in September 2014. This Addendum additionally examined Paraiso Hot Springs as a cultural or historic landscape (a historic district) with a Period of Significance pre-dating the Period of Significance examined in 2008. This report also found Paraiso Hot Springs to be ineligible for listing in the California Register as a historic district due to a lack of integrity (pp. 4-5). Note that all these reports considered and evaluated the site as it existed before the November 2003 demolition of the nine Victorian-era cottages. Finally, I reviewed the RDEIR dated February 23, 2018, with a particular focus on the proposed Mitigation Measures.

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<sup>1</sup> The original DEIR was dated July 11, 2013. The Recirculated DEIR is dated February 23, 2018.

### **Paraiso as a Cultural/Historic Landscape**

As seen above, the three historic resource evaluations (2005, 2008, and 2014) prepared for this project, as well as the 2008 peer review commissioned by the County of Monterey, all found that Paraiso Hot Springs was not an eligible historic district or an intact cultural or historic landscape for purposes of the California Environmental Quality Act (CEQA), and that the demolition of the nine Victorian-era cottages is a significant impact under CEQA, warranting the establishment of mitigation measures. This is reiterated in the RDEIR. Consistent with CEQA, all documents note that it is not possible to mitigate for the loss of these historic resources to the degree that the impact is reduced to a less-than-significant level.

#### **2008 Peer Review by GPA**

This peer review agrees with the finding that there was no intact historic landscape or historic district present on the Paraiso Hot Springs site in 2003, and that the nine Victorian-era buildings were historic resources for purposes of CEQA. This peer review notes that mitigations measures should be commensurate with the level of impact on historic resources and should not in themselves cause an impact on the environment. It also suggests that a mitigation measure should directly relate to the [no longer extant] architecture of the site. She continues, “. . . We do not believe that it is outside the purview of the County to require that the cabins be reconstructed according to the Secretary of Interior's Standards for Reconstruction or that any new construction adopt the Gothic Revival style in its design to reflect the historic architectural tradition of the nine historic resources that were present on the site.”

We disagree with the suggestion that adopting the architectural style of the no-longer-extant resources would mitigate for their loss. There is no physical context that the new buildings (whether new or reconstructed) would relate to in terms of style and we believe that this would have no educational value, which mitigation measures should speak to. We do not think that the general public would make the connection between a lost resource and its recreation or reference in new buildings. The feasibility of reconstructing the buildings in a way that meets NPS standards is discussed below in “Reconstruction as Mitigation for the Loss of the Cottages.”

#### **2014 Peer Review by CIRCA**

The *Assessment of Historic Resources and Mitigations for the Paraiso Hot Springs Report* prepared by CIRCA refutes the findings of the *Historic Resource Report – Paraiso Hot Springs* dated February 2008 that Paraiso lacked integrity as cultural or historic landscape (a historic district). This peer review found that the site as it existed in October 2003 displayed intact elements that relate to the site's Natural Systems and Features; Historic land use; Cultural traditions landscape, and cluster arrangement of buildings. The review concludes that a historic landscape did exist in 2003.

This review misstated the conclusions in the 2008 Painter report and possibly as a result, found a historic landscape/historic district to be present. The analysis prepared for the 2008 Historic Resource Report actually analyzed the site's ability in 2003 to reflect its historic character in the Period of Significance of 1872 to 1928. The 2008 Painter report found the following:

The Natural Systems and Features and Land Use of the site were found to be important and largely intact. A number of other landscape elements were important but found to lack integrity from their appearance in the Period of Significance. These include the Spatial Organization, Cultural Traditions, Cluster Arrangement, Circulation, and Vegetation. Topography and Constructed Water Features were found, in general, to be relatively unimportant to site development, to our knowledge. Minor Buildings and Structures and Small Scale Features did not contribute to the historic nature of the site, as most elements within these categories did not date from the Period of Significance or were not intact.

The Major Buildings and Structures were collectively found to lack integrity in Dr. Cartier's 2005 report, in the sense that they did not constitute a historic district. This report makes the same finding. However, the nine Victorian-era cottages of the thirty-six buildings present on the site in 2003 were found herein to be individually eligible for the California Register of Historical Resources due to their importance to the history of the site, their reflection of important architectural trends at the time, their relative integrity, and their relative rarity on the site and as part of the Victorian-era spa movement in this region.<sup>2</sup>

The 2008 Painter Historic Resource Report, which was organized to analyze and evaluate the historic or cultural landscape as recommended by the NPS,<sup>3</sup> found that the Natural Systems and Features and Land Use on the site were intact, as were the Major Buildings and Structures, as found prior to November 2003, when the cottages were demolished. What was not intact, however, was the Spatial Organization of the site, the Cultural Traditions, the Cluster Arrangement, and Circulation. The elements of Topography, Constructed Water Features, Minor Buildings and Structures, and Small Site Features were not found to be overly important to the historic analysis of the site. A property, regardless of the landscape characteristics that remain present, still has to convey the reasons for its significance. It was found in the Historic Resource Report that Paraiso Hot Springs, even in 2003, did not convey the reasons for its significance as a historic landscape or historic district. The intrusion of non-historic buildings, structures and landscape features undermined the ability of the property as a whole to convey this character.

A second evaluation of Paraiso Hot Springs as a cultural or historic landscape was prepared in September 2014 by my firm, and entitled, *Historic Resource Report – Paraiso Hot Springs Addendum*. The second report focused on earlier periods of occupation, prior to the Period of Significance of 1872 to 1928 addressed in the 2008 report. This second report also found that Paraiso Hot Springs lack integrity as a cultural or historic landscape. The findings are summarized in the Executive Summary, an excerpt of which is below.<sup>4</sup>

Although the 20-acre site was found to be historically significant for its association with the Mission Soledad, no introduced features were found to be present that reflect this earlier use. No evidence was found in historic maps or the literature of an irrigation system. The natural setting of the Mission Vineyard is intact, but the only aspects of integrity that remain are its location and setting. The appearance of the site today is much altered from its appearance in the Spanish, Mexican and early American periods. Because of this lack of integrity, the site is not considered a historic resource for its historic uses as a mission vineyard under Criterion 1.

The author of the CIRCA peer review apparently found a sub-set of the site as a whole to be eligible. Nonetheless, the author admittedly notes, "it is evident that the demolition of the nine Victorian cottages significantly reduced the historic significance of the property."<sup>5</sup>

The second conclusion drawn by the author of the CIRCA report was that reconstruction of the cottages was an appropriate mitigation that would help mitigate for the loss of these historic resources. The author notes that it is important to honor and enhance the visitor's experience of a Victorian-era resort and that reconstruction of the Victorian cottages is "essential to the public understanding of the property."<sup>6</sup> Below is a discussion of the feasibility and the desirability of reconstructing the cottages. We suggest that, in place of reconstructing the cottages, which is not feasible and of questionable value in enhancing the

<sup>2</sup> Painter Preservation & Planning, *Historic Resource Report – Paraiso Hot Springs*, February 2008, p. 81.

<sup>3</sup> See for example, *The Secretary of the Interior's Standards for the Treatment of Historic Properties* and the *Guidelines for the Treatment of Cultural Landscapes*.

<sup>4</sup> The entire summary can be found in the referenced report.

<sup>5</sup> CIRCA, "Assessment of Historic Resource Impacts and Mitigations for the Paraiso Hot Springs Report," June 6, 2014, 8.

<sup>6</sup> CIRCA, 2014, 10.

public's understanding of the site, that a video or film be prepared that does just that (see "Video as a Mitigation Measure" below).

**2018 Review by ARG and  
Comments by Fenton and Keller**

A memo dated April 6, 2018 was prepared by ARG to inform comments on the RDEIR made by Fenton and Keller dated April 26, 2018. In this memo, ARG suggests that the replacement value of the cottages, as designed and built in the 1880s, is a more appropriate donation to the Monterey County Historical Society than the \$10,000 suggested in the Mitigation Measures. The \$10,000 is identified in the RDEIR to fund the review and technical costs for uploading a digital presentation on Paraiso Hot Springs and for purchasing rights, accessioning, cataloguing, displaying, creating archival-quality reproductions, and archiving any materials collected on Paraiso Hot Springs. It is not clear why a donation to the historical society should reflect the cost of reconstructing the cottages and indeed, the ARG memo says, "While there is no language that directly links this mitigation to the cost of demolished resources . . . the \$10,000 is not sufficient to offset the illegal demolition."<sup>7</sup>

Nonetheless, Fenton and Keller advocate for analyzing a "fee in lieu of" alternative, which they estimate to be valued at \$2,000,000, with a cost of \$100,000 just to further establish the value of a "in lieu of" fee. Fenton and Keller also demand reconstruction of the cottages, noting that it is both feasible and serves "a legitimate historical purpose."

The response to the latter recommendation is addressed below. The recommendation to develop a "fee in lieu of" amount, at a cost of \$100,000, in addition to potentially contributing that fee, preliminarily estimated at \$2,000,000, plus reconstructing the cottages is not commensurate with the level of impact on historic resources, in this author's opinion. It also does nothing to mitigate for the actual loss of the buildings or educate the public about the Victorian-era resort. Reconstruction does not recreate some of the lost heritage, as stated in the Fenton and Keller comments. The recreated cottages would not be historic resources and in the altered setting of the redeveloped property, they would not enhance interpretation of the site.

See "Video as a Mitigation Measure" for a concept for a more robust mitigation measure that is designed to educate the public about the resort and be readily accessible to a broader public.

**2018 Comments by Land Watch**

It is not clear what is meant by the comment about having a consultant define consistent and cohesive themes for the site. The consultant will be defining themes for the documentation for the site, as defined in Mitigation Measure 3.5-1a.

**Reconstruction as Mitigation for the Loss of the Cottages**

The proposed mitigation measures outlined in the RDEIR do not reduce the impacts of the demolition of the Victorian cottages to a level that is less-than-significant. This is not in dispute.<sup>8</sup> However, we take issue with the statement in the CIRCA Assessment that reconstruction is feasible and serves a "legitimate historical purpose."<sup>7</sup> We also find that it is not possible to meet National Park Service (NPS) standards for reconstruction for this project and to also construct the project as proposed and as evaluated in the RDEIR.<sup>9</sup> We find that it is possible, through other means, to ensure that the public's experience of the site is recreated for purposes of interpretation (see "Video as a Mitigation Measure" below).

<sup>7</sup> ARG, "Paraiso Hot Springs Resort Mitigation Assessment Memo, Monterey County, California, April 6, 2019.

<sup>8</sup> CIRCA, 2014, 8.

<sup>9</sup> A project that has been determined to conform with the Secretary of the Interior's Standards for the Treatment of Historic Properties can generally be considered to be a project that will not cause a significant impact (14 CCR

The NPS offers four treatments for the preservation of historic properties. They are Preservation, Rehabilitation, Restoration, and Reconstruction. As pointed out in the 2014 CIRCA assessment, rehabilitation of the cottages would have been the appropriate treatment if the cottages were extant, as they were considered local historic resources. However, this is not a possibility. Reconstruction, as defined by the NPS, would be the most appropriate treatment today, if this was feasible. The following discussion explains why it is not feasible to meet this standard.

Reconstruction is defined by the National Park Service as follows:

Reconstruction is defined as the act or process of depicting, by means of new construction, the form, features, and detailing of a non-surviving site, landscape, building, structure, or object for the purpose of replicating its appearance at a specific period of time and in its historic location. The Reconstruction Standards establish a limited framework for recreating a vanished or non-surviving building with new materials, primarily for interpretive purposes.<sup>10</sup>

The NPS standards for reconstruction are below, followed by a response as to how they might be addressed or cannot be addressed with this project.

1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture and such reconstruction is essential to the public understanding of the property.

*There is not sufficient information available on the cottages to reconstruct them without a certain amount of conjecture (see #4 below). Further, this letter suggests that public understanding is not furthered by reconstruction of the cottages and it therefore not essential to public understanding of the property (see "Video as a Proposed Mitigation" below).*

2. Reconstruction of a landscape, building, structure or object in its historic location will be preceded by a thorough archeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.

*A thorough archaeological investigation, in addition to the archaeological investigations that have already been prepared for this project and examined in conjunction with the DEIR and RDEIR, is beyond the scope of this project. Further, it is quite likely that the ground-disturbing activity that took place in conjunction with the removal of the nine Victorian-era cottages – which likely had post-and-pier foundations - damaged any archaeological evidence that may have been available to precisely identify the location of the buildings and relevant features.*

3. Reconstruction will include measures to preserve any remaining historic materials, features, and spatial relationships.

*There are no known remaining materials or features related to the cottages. It is possible to approximate the spatial relationships of the cottages to each other and other features of the site*

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Section 15126.4(b)(1)). In fact, in most cases if a project meets the Secretary of Interior's Standards for the Treatment of Historic Properties it can be considered categorically exempt from CEQA (14 CCR Section 15331). "How Can Substantial Adverse Change be Avoided or Mitigated?" California Office of Historic Preservation, [http://ohp.parks.ca.gov/?page\\_id=21727](http://ohp.parks.ca.gov/?page_id=21727), accessed June 5, 2018.

<sup>10</sup> Anne E. Grimmer (revisions), *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, rehabilitating, restoring & Reconstructing Historic Buildings*. Washington DC: U.S. Department of the Interior, National Park Service, Technical Preservation Services, 2017, 3.

*by examining the 1934 schematic site plan of Paraiso and older aerial photographs. However, the spatial relationships are conjectural to a degree, because of the schematic nature of the 1934 drawing. Also, the topography has been altered from the demolition of the cottages, changing the relationship of the cottages to the ground plane, which cannot be recreated from aerial photos..*

4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary or physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property will re-create the appearance of the non-surviving historic property in materials, design, color and texture.

*The best documentary information on the buildings is found in the January 13, 2005 report prepared by Dr. Robert R. Cartier of Archaeological Resource Management. This report, entitled "Revised Evaluation of Historical Resources at the Paraiso Springs . . ." contains photographs of the cottages taken in the 1990s by Josie Lopez, a former office manager at Paraiso Hot Springs; stills from an 11-minute video created by J. Cutoff, a former resident; and photographs taken by the Monterey Planning and Building Inspection Department prior to demolition of the cottages. The latter are relatively systematic, in that they include various facades of the buildings and some architectural details. Additionally, some historic photos and engravings exist, although these are typically bird's-eye views and not a detailed portrayal of individual buildings.*

*None of these resources display the professional, systematic documentation of the appearance of the cottages that would be necessary to reconstruct them without some degree of conjecture. They also do not include any interior views of the cottages. What is known about the cottages is that most of them were constructed with channel rustic, drop siding and some displayed decorative shingles and some Gothic-style detailing. What is not known is the appearance of all facades of all the cottages, the location and design of all windows and doors, the design of all decorative detailing, the construction method (frame or single or double-wall construction), and the color, texture, and appearance of all building materials.<sup>11</sup>*

*(Note that not all of the cottages had good integrity. For example, the Monterey Cottage had a large addition in 2003, as did the Spreckles cottage. Dr. Cartier notes in his 2005 report that only three of the cottages were "highly significant," which is interpreted here to mean that they had good integrity (p. 28). He further states, "Most of the 2003 buildings were lacking in integrity and none were outstanding examples of Victorian architecture." If reconstruction was an option, which we believe it is not, a decision would have to be made as to whether all the known features on the cottages would be reconstructed, which would include – in some cases – unsympathetic additions.)*

5. A reconstruction will be clearly identified as a contemporary re-creation.

*Not applicable.*

6. Designs that were never executed historically will not be constructed

*Not applicable.*

In the recently submitted RDEIR comments, reconstruction of the nine Victorian cottages has been suggested as an appropriate mitigation for their loss. Reconstruction is not an appropriate or a desirable

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<sup>11</sup> Approximately 16 views of the cottages are available from earlier photographs and film stills and 24 views are available from the Monterey County Planning and Building Inspection Department, as seen in the 2005 ARM report.

mitigation under these circumstances. Reconstruction does not accomplish the larger goal of the mitigation, which is to allow the public and others, including historians, to learn about and experience the Victorian-era resort. The cottages are only a fragment of the original resort; still missing would be the hotel and the larger setting of the resort, which included the gardens and introduced landscaping that were historically an essential component of this resort experience. In the case of the hotel and the hotel annex, they were – in addition to the hot springs - the focus of the resort. In this instance, the physical context would not be present, which would undermine the public's ability to understand the significance of the cottages.

Reconstruction is not a treatment embraced by the NPS.<sup>12</sup> A reconstructed property is only eligible if it meets certain conditions. While the goal of mitigation is not to make the property eligible for listing in the National or California Register of Historic Places, the philosophy of the NPS is clear in this statement: "A reconstructed property is eligible when it is accurately executed in a suitable environment *and* (emphasis from original guidance) presented in a dignified manner as part of a restoration master plan *and* when no other building or structure with the same associations has survived. All three of these requirements must be met."<sup>13</sup> Re-creation of the group of cottages within a new resort with a wholly different aesthetic would not be appropriate. It would not meet the standard of being presented in a dignified manner.

In conclusion, reconstruction of the nine Victorian-era historic cottages is not a feasible or appropriate mitigation for the loss of the cottages and could not be done in a way that meets NPS standards for reconstruction. Further, the present and future setting of the cottages would not be conducive to the interpretation of a Victorian-era resort. As pointed out by Dr. Cartier in his 2005 report, the main buildings, such as the hotel and hotel annex, on which the cottages would have been focused, have not been present since the 1920s and 1950s. The main buildings and the springs themselves (or more accurately the buildings and structures that housed the springs) are what gave the site its primary meaning, and these are no longer extant. Further, the garden and other landscape features that conveyed the character and meaning of the resort are also no longer present or not present in the form they took during the resort's period of significance of 1872 to 1928.<sup>14</sup> Further, the design of the new resort as envisioned and as evaluated in the RDEIR proposes a formal landscape in the location formerly occupied by the informally sited cottages. It envisions a formal landscape with an axial, framed view beginning with a large, symmetrical building, passing through the "bowl" of the site, and terminating with a wine pavilion and visitor's center where the vineyard was once located. If this landscape scheme is carried forward, it would not be possible to interpret the reconstructed cottages, which were remnants of the Victorian-era resort, in any meaningful way.

### **Video as a Mitigation Measure**

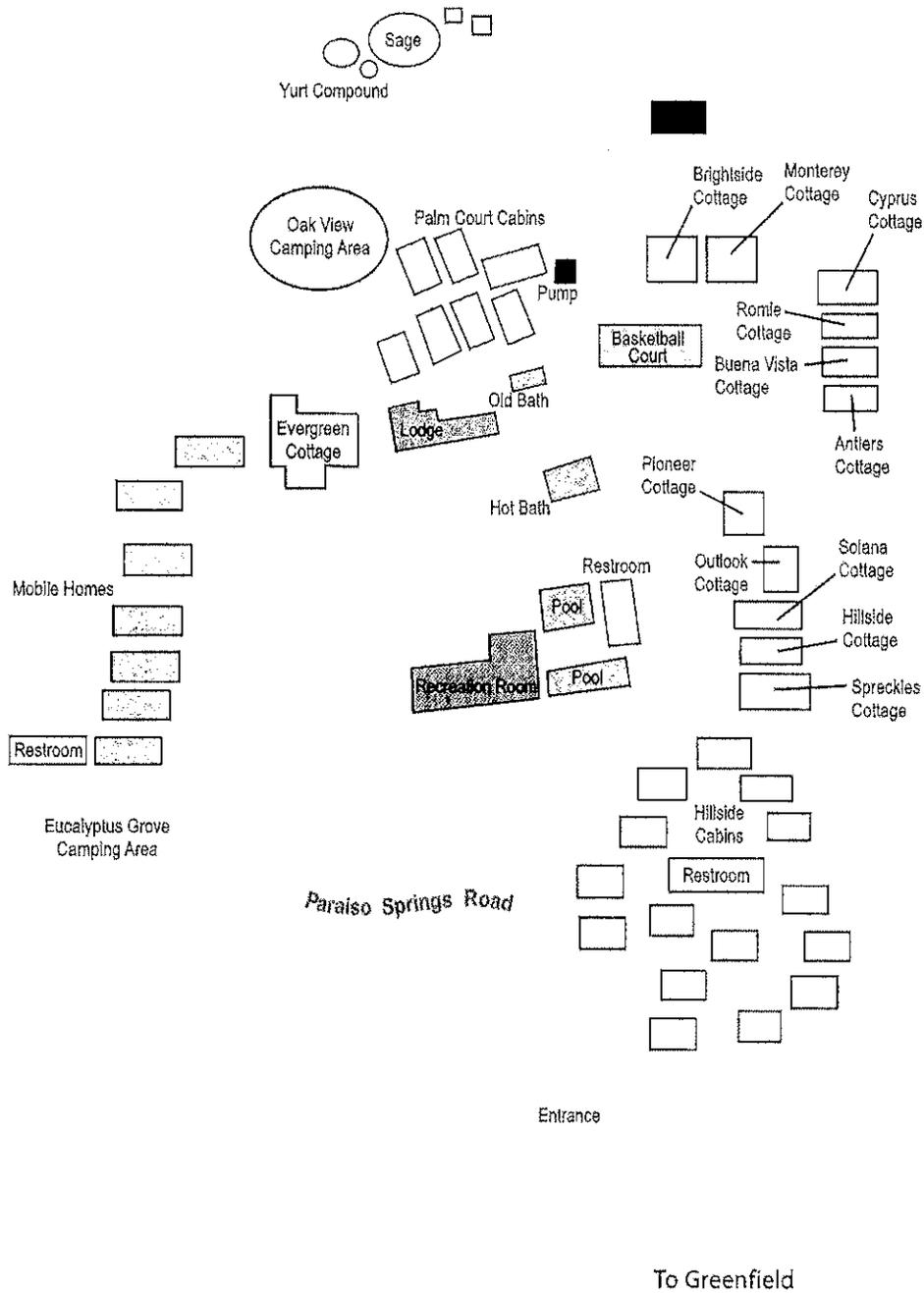
We recommend, in place of this mitigation, creating a film of Paraiso Hot Springs using the historic and available photographs, etchings and postcards, with a narrative that talks about the historic of the Springs from prehistoric times through the 1920s, when the main buildings were lost. This is envisioned as a "Ken Burns-like" film that conveys the character of the resort from available resources, which is not possible with a reconstruction and is available only in a limited way with a static, on-site interpretation such as display panels. This would be a truly educational tool. It would have the added advantage of being widely available. That is, it could be included on web sites, such as a website for the resort, on the web page of

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<sup>12</sup> Note that National Park Service standards, including the standards for the Treatment of Historic Properties, is referenced regularly as a part of CEQA compliance.

<sup>13</sup> Note that the philosophy of the National Park Service permeates all preservation programs throughout the United States, including informing compliance with the California Environmental Quality Act. National Park Service, *National Register Bulletin 15, How to Apply the National Register Criteria for Evaluation*. Washington DC: U.S. Department of the Interior, 1995:37.

<sup>14</sup> Gardens were very important to Victorian-era resorts, as they provided the fresh and wholesome food for which many of the resorts were known.



Source: RBF Consulting 2010

Site Plan showing Victorian cottages in yellow (note that the Outlook, Solana and Hillside cottages are not considered historic)

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# Keith Higgins

## Traffic Engineer

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March 8, 2019

John M. Thompson  
Paraiso Springs Resort, LLC  
P.O. Box 779  
Spring House, Pa. 19477

Re: Paraiso Hot Springs Resort Traffic Responses to Comments, Monterey County, California

Dear John,

The following is a response to the M R Wolfe and Associates letter dated January 15, 2019 regarding comments related to emergency access and evacuation, primarily related to potential impacts to Paraiso Springs Road. These responses were prepared with consultation from Michael Huff, Practice Manager for Urban Forestry and Fire Protection Planning of the environmental consulting firm, Dudek. The following assumptions were used in developing the impacts to Paraiso Springs road during a mass evacuation.

1. The highest employee shift count for the day shift was used to estimate personnel onsite and would equate to 98 on-site employees.
2. 10 percent of those employees were management employees and drove their vehicles to the site which equated to approximately 10 management cars on-site.
3. One shuttle bus would be on-site to shuttle employees and resort guests from the property during an evacuation that did not have vehicles.
4. 6.25 percent of the guests used a shuttle to get to the resort.
5. 100 percent occupancy of the resort.
6. A total of 2 vehicles per household for existing residents (neighbors) and 5 cars at the adjacent vineyard
7. There would be approximately 5 to 8 vehicles and or utility vehicles on the property at all times used for internal maintenance activities.

In an emergency evacuation, the impact to Paraiso Springs Road from the project site to its intersection of Clark Road is the main subject of this response. Evacuees would typically be out of immediate danger at that intersection. Also, there would be ample dispersion from that location using Clark Road or Paraiso Springs Road to reach Foothill Road, Arroyo Seco Road and ultimately Highway 101 to the northeast or Greenfield to the southeast. These locations are only a short distance from the Paraiso Springs Road/Clark Road intersection.

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John Thompson  
March 8, 2019

Based on the parking calculations listed in Table 3.12-5 on page 3-343 of the Recirculated Draft Environmental Impact Report, a maximum of 269 cars at full capacity could be directed to leave the project site to exit onto Paraiso Springs Road.

The internal road circulation of the project is very basic and intuitive with all of the main roads leading to the project gate and exit. The on-site evacuation process would minimize confusion as guests and employees would have easily recognizable internal road exit points to get to the main entrance gate of the resort and then ultimately to exit the site on to Paraiso Springs Road. Signs would be strategically placed to assist day to day guests as well as evacuation traffic.

In an evacuation, all 269 cars could exit the project site at a safe headway of 3 seconds for each vehicle. This is a flow rate of 1,200 vehicles per hour, which is much less than the per lane capacity of a two-lane road of 2,000 vehicles per hour. Vehicles are anticipated to travel at about 30 miles per hour down the two-lane road and traverse the 1.3-mile section of the Road to the Clark Road intersection in approximately 3 minutes. It is conservatively expected that all cars would be able exit the site and travel from the main gate to the Clark Road dispersion intersection in approximately 15 minutes, which is a good evacuation time as most wildfire events would enable longer timeframes before fire threatened the site or its evacuation roads.

In the provided scenario, there would be approximately 100 people reliant on the shuttle or other vehicles for evacuation. Those 100 people include non-management employees as well as guests who were shuttled to the site.

In an evacuation, a single shuttle could hold up to 35 or 40 people. Also, the management employees could carpool up to 4 additional employees off the property per vehicle, inclusive of themselves, giving the ability between shuttle and management to evacuate up to 80 personnel in one trip out of the 100 employees/resort guests needing rides. In speaking with the project proponent, it is anticipated that approximately 20 employees would be the last to exit the property after insuring that all evacuees were safely off the property. The remaining employees would be directed to evacuate using any of the 5 to 8 work vehicles that would be maintained on the property at all times. It is also reasonable to expect that if necessary, resort guests could be directed to assist in the evacuation and would allow other guests (shuttle dependent guests and staff) to carpool off the site. This would expedite the evacuation process. However, as part of a conservative approach, this likely occurrence has not been incorporated into the evacuation and travel time estimates.

With respect to traffic impacts to the neighboring properties in an evacuation, there are 5 houses and a vineyard located on Paraiso Springs Road between Clark Road and the Project that would also use Paraiso Springs Road in an area wide evacuation. If each house would use 2 vehicles and the vineyard would use five vehicles for evacuation, an additional 15 vehicles could be evacuating using Paraiso Springs Road. It is anticipated that this number of vehicles could be accommodated on the road by simply merging into the outgoing one-way project traffic at natural breaks in the vehicle flow.

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John Thompson  
March 8, 2019

Also, it is possible that the merging neighbor traffic would evacuate before the resort traffic due to their locations which are closer to the Clark Road intersection.

The one lane on the road going toward the project site would remain open almost exclusively to inbound emergency access.

In summary, the road is capable of handling incoming and outgoing traffic in a mass evacuation with no significant conflict with the surrounding neighbors or incoming emergency vehicles. The entire evacuation process would be over in about 15 minutes, at which time Paraiso Springs Road would have no Project traffic and be fully available for emergency services traffic and fire suppression.

In a wildfire scenario where the access road is threatened or could be threatened by wildfire, it may be determined by law enforcement or other emergency managers that it is safer to temporarily refuge resort guests on site in designated spaces. In these cases, Paraiso Springs Road would remain available to existing residents and vineyard employees without additional resort traffic. The resort will be designed, constructed, and maintained in a condition that will allow emergency managers the flexibility to direct temporary on-site refuge if it is considered preferable to directing evacuees toward a wildfire that is within the vicinity of and moving toward the Resort or Paraiso Springs Road.

Please let me know if you have any questions regarding this assessment.

Thank you for the opportunity to assist you.

Sincerely,

*Keith Higgins*

Keith B. Higgins, PE, TE

March 15, 2019

11760

Mr. John M. Thompson  
Paraiso Springs Resort, LLC  
P.O. Box 779  
Spring House, Pa. 19477

**Subject:** *Fire Protection Technical Analysis – Paraiso Springs Resort, Monterey County*

Dear Mr. Thompson:

In response to your request, we have provided this technical analysis as a response to comments received regarding your planned resort development at Paraiso Hot Springs. The recommendations provided in this analysis address identified areas of fire protection and safety to amplify and expand upon the information in the Project's Recirculated Draft Environmental Impact Report (RDEIR)<sup>1</sup>. These recommendations should become Project conditions.

The Project, known as Paraiso Springs Resort, is located in unincorporated southern Monterey County in the western foothills of the Central Salinas Valley, approximately seven miles west of the City of Greenfield at the western terminus of Paraiso Springs Road. It is our understanding that the project site consists of approximately 235 acres located in the entrance of Paraiso Springs Valley and Indian Valley and extending westward into the foothills between the crest of the Sierra de Salinas Foothills and the Salinas Valley. The site is bordered to the east by grazing and farmland, and to the north, south and west by the Santa Lucia Mountains.

Fire related comments submitted to Monterey County pertaining to the Project's DEIR include those from:

**LAFCO** – comments regarding fire response service levels, fire station necessity, and impact fees

**CAL FIRE** – defensible space details, addressing Public Resources Code (PRC) 4290 and 4291<sup>2</sup> application, vegetation management plan, reforestation plan details, need for Temporary Refuge Areas, excessive response time for structure fire response, access gate details and alternative access

**City of Soledad** – comments regarding fire service, impact fees, distance and fire response time

**LandWatch** – Project not consistent with PRC 4290 and County Code chapter 18.56, EIR recirculation to address fire hazards, revise project for consistency with fire protection in SRA, dead end road length and width less

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<sup>1</sup> Paraiso Springs Resort Recirculated Draft Environmental Impact Report. EMC Planning Group; February 2018.

<sup>2</sup> California Public Resources Code (PRC) 4290 addresses building and infrastructure requirements in State Responsibility Areas (SRAs). PRC 4291 addresses defensible space requirements in SRA.

than 18 feet, Project will compromise its neighbors' safety, on-site fire station, evacuation and shuttles, no evacuation plan, no significant impact determination, not consistent with Monterey County Code for dead end road length and cannot meet same practical effect

In summary, the comments primarily focus on requests for more details regarding the Project's fire protection plan, fire response details, conformance with applicable codes and standards, and generally whether the Project has adequately considered the site and its visitors and staff safety. This technical analysis provides additional details and assessment of the Project's fire protection and safety and responds to the comments noted above. In addition, this report provides a summary of Dudek's evaluation of the proposed project and its fire protection and recommendations for incorporation into the Project's design and fire protection system. The recommendations herein do not introduce new actions requiring environmental analysis, but review and provide expanded Project fire protection plan details.

## Project Information

The Project site is located in Monterey County, California (Project Location; Figure 1) in the vicinity of Greenfield and Soledad. It is located approximately 5 miles west of Highway 101, 22 miles east of the Pacific Ocean, 7 miles southwest of Soledad, and 6.5 miles west/northwest of Greenfield. Specifically, the approximately 235-acre project site is located at the terminus of Paraiso Springs Road. The project site is located in a valley surrounded by foothills of the Sierra de Salinas Foothills. The Project site is disturbed having been a resort destination for well over 100 years but that has been unused in this capacity since 2003. Vegetation on the Project site includes disturbed landscapes of grassland, oak woodland, and sage scrub. The hills directly north, south and east of the site are undisturbed, including sage scrub, grassland, and oak trees. Land cover/uses to the northeast, east and southeast is dominated by agriculture, including vineyards. The existing terrain on the site is generally characterized as flat to gently sloping. Elevations at the project site range from approximately 1,000 feet above mean sea level (amsl) to 1,200 feet amsl. Slopes around the project site vary from up to approximately 2,000 feet to the south, 2,800 feet to the west, and 2,450 feet to the north.

The proposed Project includes redevelopment of the property into a variety of resort land uses including a hotel, timeshares, spa/fitness center, instructional training center, restaurants, and outdoor fields and gardens. Access to the site will be provided via Paraiso Springs Road. A staffed guard gate at the property's entrance will control traffic entering and leaving the site. Paraiso Springs Road is the Project's only access road and traverses through agriculture fields and natural vegetation near the Project, as illustrated in Figure 2.

The Project site is partially within a State Responsibility Area (SRA) and the majority of the development area is in the Mission Soledad Rural Fire Protection District (MSRFPD) and is planned to be annexed into MSRFPD jurisdiction, which would change the SRA to Local Responsibility Area (LRA). The site will remain a Very High Fire Hazard Severity Zone (VHFHSZ), as designated by CAL FIRE. Because of this designation, the Project would be required to be built to the latest ignition resistant building codes found in PRC 4290 and Chapter 7A of the California Building Code, as adopted by Monterey County, and any additional restrictions or requirements adopted locally by the MSRFPD.

## Fire History

Fire history is an important component of wildfire analysis. Wildfire history information can provide an understanding of fire frequency, fire type, most vulnerable project areas, and significant ignition sources, amongst others. CAL FIRE's Fire and Resource Assessment Program (FRAP) database was used to evaluate the Project's fire

history. FRAP summarizes fire perimeter data dating to the late 1800's, but which is incomplete due to the fact that it includes only fires over 10 acres in size and has incomplete perimeter data, especially for the first half of the 20th century (Syphard and Keeley 2016). However, the data does provide a summary of recorded fires and can be used to show whether large fires have occurred in the project area, which indicates whether they may be possible in the future.

According to available data from CAL FIRE's FRAP (CAL FIRE 2014), several wildfires have burned in the vicinity of the Project site since the beginning of the historical fire data record (Figure 3). These fires, burned within 5 miles of the Project site. While structural fires have occurred on site in the old resort buildings, no wildfires in the recorded history have burned onto the project site.

## Project Understanding

The purpose of this analysis is to examine the proposed Paraiso Springs Resort, its consistency with the applicable code requirements, its potential impact to the fire response resources, and to explore whether additional fire protection measures/features are justified. To complete this analysis, Dudek Fire Protection Planners evaluated the available site plans, the existing roadways that would be used in an evacuation, and the planned fire protection measures. The analysis summarized herein is based on project-related information including the Project's RDEIR, comment letters, and available aerial images and site data.

## Technical Analysis Methods

Dudek evaluated the project site and its consistency with applicable fire safety requirements. The following tasks were completed:

1. Reviewed provided site plans, comment letters, Recirculated Draft Environmental Impact Report (RDEIR), and applicable fire codes.
2. Conducted aerial image review of the site, access roads, and potentially available emergency egress routes.
3. Measured distances from the Project site to the nearest fire station and calculated response time.
4. Measured distances from the project site to various road intersections.
5. Reviewed PRC 4290 and 4291 and Monterey County Fire Code (Chapter 18.09 of Monterey County Code)
6. Documented unique circumstances, features, characteristics related to the project and how they support code modification findings.
7. Generated recommended fire protection measures/features to enhance the existing plan

The following sections present our observations, analysis, findings, and recommendations regarding the Paraiso Springs Resort's fire protection and overall wildfire safety.

## Observations

### Key Project Fire Safety Features

1. The Paraiso Springs Resort structural and infrastructural fire protection components will comply with the applicable code requirements, including the latest codes in place at the time of construction.
2. Structures will be of the latest ignition and ember resistant methods and materials including for:
  - Walls
  - Roofs
  - Eaves
  - Windows
  - Doors
  - Appendages
3. Structures will include fire sprinklers to occupancy requirements.
4. A Project condition prohibits solid fuels in outdoor fireplaces, barbeques, and grills.
5. Fuel Modification will be provided throughout the perimeter of the site and will at a minimum, meet the applicable 100 foot wide standard (Figure 4).
6. Landscaping would be maintained on an ongoing basis. This would assure that the use of highly flammable species is prohibited and that appropriate plant densities would be maintained. This would also reduce the impact of landscaping hanging into the roadways by reviewing size and location of trees and maintain 13-foot, 6-inch vertical clearance for fire apparatus.
7. Fire apparatus access roads will be provided throughout the facility and will be 20 to 24 feet wide, with no parking, with limited exceptions. Designated 12 foot wide circulation roads not open to visitor vehicle use will be designated for fire apparatus access to buildings beyond the area where 20 to 24 foot wide roads are provided.
8. Paraiso Springs Road will be improved off-site to include 18 to 20 foot road widths with possible exceptions based on terrain constraints.
9. Water capacity and delivery improvements including upgraded storage (500,000 gallons) and pipe size provide for a reliable water source for operations and during emergencies requiring extended fire flow. Water availability and delivery is gravity fed and would provide for a reliable water source during daily and emergency usage.
10. Potential firefighting operations staging areas are available within the facility in developed areas and site green spaces.

## Project Issue Analysis

The following analysis considers the key components of the Project's fire protection and evacuation system. It is assumed that the Project's structures will be ignition resistant because they will be built to the code requirements that were put in place to minimize the ability of embers to penetrate and cause ignition. Similarly, the site's landscape will be ignition resistant and maintained in a condition that would not facilitate the spread of fire into the developed portions of the resort landscape. Water availability has been addressed and includes dedicated stored water, gravity flow, and hydrants throughout the site.

### 1. Road Capacity

Paraiso Springs Road is able to accommodate up to 2,000 vehicles per hour (Keith Higgins 2019)<sup>3</sup>. This means that the maximum number of vehicles that can be accommodated per hour, assuming traffic flow is maintained, is 2,000 vehicles, or about 33 vehicles per minute. In an emergency that required evacuation of the Paraiso Springs Resort, all estimated 275 vehicles can be moved down to the intersection of Clark Road in less than 10 minutes (actual "wheels rolling" time – which is the time when a vehicle leaves the resort gate and arrives at the Clark Road intersection). The amount of time for vehicles to reach Paraiso Springs Road varies based on distance from the road and could require an additional 5 to 10 minutes or more for some of the resort guests to assemble and exit the property.

It is understood that there can be delays, congestion, and slower movement of traffic that reduces the ability to reach the maximum hourly capacity. In this case, however, even if the maximum capacity is reduced by 50%, there would still be enough capacity to evacuate the Project within 17 minutes travel time. This is considered an acceptable "wheels rolling" evacuation time for the anticipated population. Traffic congestion is expected to be minimized as there are few driveway or heavily used intersections on Paraiso Springs Road (few vehicles to merge into evacuating vehicle procession). Additionally, it would be possible to position minimal law enforcement or other emergency responders at Clark Road/Paraiso Springs Road and then downstream to keep traffic moving and avoid backups. Traffic is anticipated to be able to be moved steadily as there are at least three, and up to seven potential vehicle dispersion routes that are available off of both Paraiso Springs and Clark Roads.

**Conclusion:** Paraiso Springs Road and its connectors include significantly more capacity to move vehicles than would be utilized with the combined Paraiso Springs Project and existing resident and vineyard evacuation traffic. This capacity represents a buffer that can offset traffic congestion that may occur during an emergency evacuation and still maintain acceptable vehicle movement and evacuation times. The Project's calculated fast evacuation can be contrasted with more densely populated areas where road congestion can continue for several hours or more.

### 2. Offsite Road Improvements

The Project would improve Paraiso Springs Road from the Project boundary to its intersection with Clark Road by increasing the currently 16 to 22 feet road widths to a minimum of 18 feet, where feasible and installing safety

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<sup>3</sup> Letter dated March 8, 2019 from Traffic Engineer Keith Higgins with review and input by Dudek to John Thompson, Paraiso Springs Resort, LLC. Subject – Project evacuation traffic analysis.

signage, delineators and centerline striping. Road widening and related improvements are an important component of this Project's Roadway Improvement Plan (Hatch Mott MacDonald, 2008)<sup>4</sup> in terms of emergency vehicle access and visitor evacuation. The planned improvements would occur in phases concurring with each Project phase.

**Conclusion:** The off-site road improvements are considered very important for meeting the intent of the applicable fire codes and for creating an access road that minimizes pinch points that could negatively impact fire apparatus response or an evacuation. To the extent possible, the segments of roadway that are less than 18 feet wide (two 9 foot travel lanes) must be widened to 18 feet or provided appropriate measures to facilitate safe traffic flow during an evacuation. The planned signage and striping may address potential issues.

### 3. Project Population Impact on Evacuation Traffic

The project is proposing a daily population of approximately 500 people at full buildout with 100 percent occupancy, including staff and visitors. Dudek has utilized 2 persons per vehicle to estimate the additional number of vehicles that would be generated during an emergency, which is a common vehicle population used for evacuation calculations and is consistent with the planned parking spaces and shuttle capacity. Additionally, there may be Project vehicles and a shuttle that would be used in an evacuation. This results in a total of up to approximately 275 vehicles that may be leaving the site during a declared evacuation. The existing Paraiso Springs Road includes approximately 5 homes and a vineyard. The homes would be expected to generate roughly 11 vehicles (2.2 vehicles per home – Cal Poly San Luis Obispo study 2016)<sup>5</sup> while the vineyard may include up to 5 vehicles during an evacuation. The evacuation of these existing residents and vineyard workers, along with the Project's population is anticipated to require up to 10 minutes travel time for the last vehicle to reach the Clark Road intersection. The actual travel time for the existing residents and vineyard workers would be less than 10 minutes due to their location, and is estimated at between 5 and 7 minutes. The Clark Road intersection is considered a point of lower risk because it is amongst the irrigated and maintained vineyards where wildfire exposure would be limited. Currently, the existing residents and vineyard workers would be anticipated to evacuate the area within 2 to 3 minutes travel time (Higgins 2019). During evacuations, it would be expected that existing residents would evacuate sooner and be at or beyond the Clark Road intersection before the resort traffic reached them since they are closer to the Clark Road intersection. This likely scenario would, in effect, maintain the current condition for the existing residents and vineyard workers. However, if for some reason the residents and vineyard workers evacuated the area concurrently with resort traffic, an additional 3 to 4 minutes timeframe may be incurred. This increase would be considered an insignificant impact as that evacuation time is considered acceptable. In addition, it is the intent of the Project as part of its emergency preparation plan, to place 2 evacuation managers at the two curves in Paraiso Springs Road during an emergency evacuation. One person would be placed at the intersection where 3 of the neighboring houses and the vineyard employees would exit onto Paraiso Springs Road and the other closer to the other 2 "downstream" houses. In the event that these residents and workers are not already evacuated and off Paraiso Springs Road (estimated 2 to 3 minutes travel) before the Project evacuates, this Project commitment would aid in maintaining traffic movement and as needed, assist with emergency vehicles heading toward the Project. This would also allow breaks in Project vehicles to allow the existing resident's ability to merge onto the

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<sup>4</sup> Hatch Mott MacDonald. 2008. Paraiso Springs Roadway Improvement Plan. September 5, 2008

<sup>5</sup> Developing a Planning tool for Evaluating Proposed Developments Accessible by Dead-End Roads. February 2016. W. David Conn, Principal Investigator, Cornelius K. Nuworsoo, Co-Principal Investigator, Christopher A. Dicus, Co-Principal, Investigator, Kenneth C. Topping, Senior Advisor, Dan Turner, Senior Consultant. 81 pp. Refers to US Census average of vehicles per house.

road and proceed toward the Clark Road intersection. The insignificant impact is further minimized by the Project's benefits to the neighbors including: Paraiso Springs Road improvements, increased tax base that results in additional resources for fire protection, modified fire behavior as the Project presents a fuel break to the west of the existing residents, and the Project provides designated temporary refuge area if evacuation via Paraiso Springs Road is considered unsafe. The evacuation of Paraiso Springs Resort is aided by the short distance to areas of relative safety and the roadside protection the agricultural landscapes would provide.

**Conclusion:** The calculated evacuation travel time of approximately 10 minutes to areas where exposure to wildfire would be limited is considered a good travel time for 500 persons on the project site and the local residents and vineyard workers. Again, this travel time estimate is considered a worst case because it would be expected that the local residents and vineyard workers would evacuate prior to incurring any resort traffic. Efforts aimed at education of staff and visitors regarding emergency procedures would facilitate evacuations and minimize the mobilization time for visitors to go to their vehicles, carpools, or shuttles. The addition of approximately 275 vehicles associated with the Project would be expected to potentially increase the evacuation time along Paraiso Springs Road for existing residents and vineyard workers, but would not be expected to adversely impact the ability to move people from the area in acceptable timeframes due to the finite population evacuating vs. an urban area where many more vehicles would be evacuating, extending travel times significantly.

#### 4. Evacuation Contingency Plan

The proposed Project includes several buildings that would be acceptable as temporary refuge areas. Larger structures that would be built to the latest ignition resistant building requirements and provided maintained defensible space could be used by visitors, staff, and emergency responders to temporarily shelter during a wildfire. The landscapes would be required to include a minimum of 100 feet of fuel modification/defensible space. Structures that are built to the latest requirements for very high fire hazard severity zones and are provided maintained defensible space perform very well during wildfires, as noted by numerous after action assessments (evaluations following wildfires of why homes were lost or saved). As such, it would be possible for persons at the resort to seek temporary refuge within these buildings if evacuation was considered unsafe. Emergency managers would have the flexibility to direct persons to these buildings to temporarily refuge if the evacuation roads were considered unusable during a late evacuation where the wildfire or other emergency has encroached upon the area. The first priority for these guests would be early evacuation, long before a wildfire threatened the area and its evacuation route. Temporarily seeking refuge in a protected building would be a contingency option, improving the emergency responders' procedural flexibility and resort population safety. Because the Project's population is transient, there would be no reason for anyone to stay and defend personal property, early evacuation is largely improved and would be mandatory.

**Conclusion:** In addition to the evacuation route from the Project to various connector roads, the potential to temporarily refuge during a wildfire or other emergency provides a contingency option that increases overall safety by avoiding the limitation of relying only on evacuation during an emergency. The ability to temporarily refuge visitors, staff and firefighters on site would be available to emergency managers should evacuation via the available options be considered unsafe or less desirable.

#### 5. Dead End Road Length Intent

In terms of the dead end road length allowances within Title 14 Fire Safe Regulations, Article 2, the original intent included minimizing the exposure of evacuating people and responding emergency personnel to wildfire conditions.

This intent was seemingly based on conditions where readily available fuels were situated along the roadways and where buildings were built within the fuels (scattered homes/buildings in a wildland urban intermix condition). These conditions partially exist along Paraiso Springs Road where approximately 1 mile of travel includes natural or unmaintained fuels along the roadside. Beyond that point, agricultural, primarily vineyard fields, occur and present a considerable fuel break with low potential for ignition and fire spread.

**Conclusion:** The project intends to comply with PRC 4290 if applicable, achieving the same practical effect through the various recommendations/measures discussed herein.

## 6. Emergency Response

MSRFPD fire station 37 is within 8.9 miles of the Paraiso Springs Resort. Station 37 has an estimated response travel time of slightly above 15 minutes, which assumes travel time to the project entrance and an adjusted speed based on the Insurance Services Office travel time formula<sup>6</sup>. The 15'46" minute response travel time is substantially conforming with the Monterey County General Plan policy standard of 15 minutes and the additional 46 seconds can be largely offset by drive speed on open stretches of the response route.

The existing fire stations currently respond to approximately 1,600 calls per year<sup>7</sup> (4.4 calls per day), which would be considered approximately average in terms of call volume. For perspective, a busy urban fire station may run 15 or more calls per day and a busy rural fire station may run 7 calls per day (Hunt 2010)<sup>8</sup>. The existing service area includes approximately 34,000 residents. The per capita call volume is 0.047 calls per person per year, which equates to 47 calls per 1,000 population. The majority of these calls (estimated 80% or more) are medical emergencies. The Project would add approximately 500 persons which would result in an anticipated call volume increase of 24 calls per year. This estimate is considered overly conservative in that it combines all socio-economic and age group call generation totals and applies them to the Project, which would typically include a demographic that requires fewer calls. For example, the 379 room Portola Hotel and conference center in Monterey indicate that they average about 10 to 12 per year and the 93 room Quail Lodge resort and golf club average about 4 calls per year. Even using the Project's conservative call number of 24, it equates to 0.07 calls per day or one call every 14 days.

**Conclusion:** The response travel time substantially conforms to the 1982 General Plan's 15 minute timeframe from Fire Station 37. Rural areas are often afforded additional response time (much longer times than experienced within urban areas) due to the low density population, low call volumes, and the lack of sustainable, generated funding and justification to build more stations. There are not enough calls generated to justify a station, therefore, jurisdictions often allow longer response times and the people living and working in these areas typically consider longer response times an acceptable trade off. The General Plan indicates that other on-site fire protections can be provided as mitigation for response exceeding 15 minutes as allowed by the General Plan policy. The site offers several measures that meet the General Plan's focus on fire response. However, because most emergency calls at the Project site will be medical related and Resort clientele may expect fast response for medical emergencies, measures to provide advanced life support capabilities within 5 minutes (critical timeline for cardiac arrest and strokes) is considered worth exploring and is addressed in the following section. With regard to call volume, the

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<sup>6</sup>  $T=0.65 + 1.7D$ , where T = time and D = distance. This formula generally compensates for intersection deceleration and acceleration and does not include turnout time.

<sup>7</sup> City of Soledad Fire Department Web Site: <https://cityofsoledad.com/our-city/public-safety-services/fire-department/>

<sup>8</sup> Personal communication between Jim Hunt (Hunt Research Associates) and the author of this report, May 2010.

project's very conservatively calculated call volume would not be expected to impact the current response capabilities of the MSRFPD, with a conservatively calculated increase of the daily rate from 4.4 calls to less than 4.5 calls per day.

## Findings – Hazard vs Risk

While the Proposed Project site resides in a designated VHFHSZ, it will have significantly lower potential of actual loss than other older communities/structures existing in MSRFPD. This reasoning is based upon the distinction between HAZARD (which the State categorizes) and RISK (which the State does not quantify). HAZARD is a property of the potential fire behavior (flame length, crown fire occurrence, capacity to generate embers) in the likely mature vegetation of a given area. RISK, however, is the potential for structural loss from said fire. Thus, even if there is potential low fire hazard in a given area (expected low flame lengths), a given structure might be at high risk of ignition if the physical characteristics of the property would facilitate structural ignition (e.g., flammable vegetation next to a home with wood siding or unprotected openings).

Conversely (and more appropriate to the Proposed Project), a structure might be in a high hazard area, but may actually be at low risk of ignition if the structure is built with ignition-resistant construction materials and methods and the adequate defensible space around and throughout the development is provided. This is especially true in planned communities and the Paraiso Springs Resort, where fuel modification can be provided over large areas and includes a perimeter zone.

We have confidence that the provided fire protection features along with the recommended measures discussed below would combine to enable the Fire Authority to make findings that the Project provides same practical effect for the dead end road length/lack of true secondary access and for the site and its structures to be able to withstand the type of wildfires that may occur in the vicinity.

## Conclusion

Dudek's conclusion is consistent with that contained in the RDEIR for the project prepared by the County of Monterey, The Project's design, location, access and construction will not expose the public to greater fire related hazard than other newly constructed buildings/communities located in a VHFHSZ and built to the required ignition resistance codes. The response time to the site is within the generally acceptable standards for rural development, the roadway width will meet the requirements under the Code, and the code enables single access with conditions/findings. The proposed development will be required to comply with the fire code in existence at the time of project construction including requirements for the use of fire resistant roofing and construction materials, provision of defensible space adjacent to structures, interior sprinklers, and significant water storage. Based on these facts, it is our conclusion that the construction and use of these premises will not create a public safety hazard.

## Recommendations

The following fire protection and safety measures are recommended as conditions for development of the Paraiso Springs Resort. These measures were developed to directly address identified Project fire protection and safety issues or provide additional detail that was not specifically provided in the Project's DEIR.

1. A facility Fire Safety Coordinator(s) should be designated and would oversee implementation of fire protection and safety and overall fire coordination with MSRFPD/CAL FIRE.
2. The Fire Safety Coordinator(s) would coordinate an annual fire evacuation drill/fire exercise to ensure proper safety measures have been implemented, facility awareness and preparation of facility-wide "Ready, Set, Go!" plan, consistent with Monterey County Community Wildfire Protection Plan (2010)<sup>9</sup>.
3. Trained security staff 24/7, 365 days per year at the guard gate. The security staff should be trained to manage an evacuation of the facility by opening the gates and directing traffic out of the area.
4. Provide a Paramedic level staff person and paramedic kit to be on-site at all times. This position may be the site's security personnel or a cross-staffed position who is capable of providing advanced life support for medical emergencies.
5. Provide a customized one-ton, 4x4 pickup with a skid mounted pump and up to 150 gallon water tank. Multiple staff members and the site security staff should be trained to utilize this apparatus for the purposes of providing initial suppression for any vegetation ignitions, and initial response to other fires.
6. A designated structure (e.g., Hotel, Conference Center) will be selected to house the projected population and to include additional hardening to be designated a temporary refuge area (TRA): exterior glazing to be dual pane with both panes tempered glass, exceeding the code requirement. Primary TRA to include:
  - Large-panel television monitors discreetly located so those that are interested may track newscasts during a wildfire event
  - Wireless internet accessibility
  - Second utility source or U.L.-rated diesel generator for the designated TRA
  - Intercom system to maintain communications with Ranch administration
  - A copy of the Emergency Procedures Plan
  - Food and water provisions for up to 24 hours
  - Educational materials on emergency procedures and temporary sheltering during wildfire
  - Telephones (hard line)
7. All ventilation for the structures for the Project should require ember-resistant vents in addition to 1/8 screening. Require ember resistant O'Hagan or Brandguard vents (or tested equivalent) in all site buildings.
8. Provide a site Wide Public Address (PA) / Intercom system so that visitors and staff throughout the site (indoors and out) can be notified of an emergency quickly to facilitate efficient evacuations or contingency temporary refuging on site.

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<sup>9</sup> Community Wildfire Protection Plan prepared by the Monterey Fire Safe Council to evaluate wildfire risk, identify hazard reduction efforts, detail a strategy and action plan, and educate the public on wildfire safety.

9. Prepare and practice site-wide evacuations following the "Ready, Set, Go!" program guidelines (Attachment 1). Include educational outreach regarding emergencies and the potential for evacuation or temporary refuging on site in designated buildings.
  
10. The Project's Fire Safety Coordinator(s) would prepare an Emergency Preparation Plan that considers:
  - Pre-fire planning and preparations
  - Post-fire recovery actions
  - Reporting Emergency, Alerting Employees and Guests
  - Staff Training
  - Emergency Contact List of Key Personnel
  - Building Identification
  - Facility Protection Systems
  - Increased Fire Prevention Efforts During High Fire Danger and Extreme High Fire Danger Periods
  - Emergency Supplies
  - Telephones/Communications/Technological resources (Twitter, Facebook, Web page, etc.)
  - Media Communications
  - Emergency Response Team Roles and Responsibilities
  - Annual Review and Update
  - Emergency Evacuation Procedures
  - Temporary, On-Site Sheltering Procedures
  - Scripted Emergency Notification Messages
  - Guest Educational Materials on Emergency Procedures
  - Participation in the Alert Monterey County – Emergency Notification System
  - Emergency Decision Matrix
  - Shuttle Bus on site day and night
  - The updated EPP document should be reviewed by MSRFPD and local law enforcement agencies.
  
11. Only one, fully manned gate and no speed bumps or humps should be allowed in this project. This would allow traffic flow (ingress and/or egress) to move more rapidly in the case of emergency. The site entrance gate should be equipped with automatic opening device for fire and law enforcement at their discretion (e.g., Knox, click-to-enter, siren, or similar).
  
12. Fuel modification zones (minimum 100 feet wide) around designated temporary refuge area buildings should be restricted to highly ignition resistant vegetation planted at low densities and maintained free of all accumulated debris/litter.
  
13. A formal landscaping plan should be prepared and reviewed by MSRFPD and/or an experienced fire protection planner for the landscape plan's consistency with accepted wildland urban interface fire safe/fire adapted practices.
  
14. If the vineyard is planted, a professional Vintner should be under contract at all times to manage the vineyard in an irrigated, maintained condition to act as a modified fuel buffer. The grape plants should be grown on trellises made of non-combustible material. The plants should be irrigated via drip irrigation to maintain a high moisture

Mr. John M. Thompson

Subject: Fire Protection Technical Analysis for Paraiso Springs Resort, Monterey County

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content, dead and dying plants or plant materials and debris should be removed from the area on an on-going basis. Should the vineyard operation ever be vacated or otherwise cease to operate, the area should be converted to irrigated turf or equivalent fuel modification zone consistent with the remaining irrigated FMZ throughout the resort.

15. An annual inspection of the site should be completed by MSRFPD or its designee at the Project's expense to ensure that project landscaping is maintained in a wildfire-safe condition. The inspections would document out-of-compliance issues for abatement and follow up to confirm the abatement is completed.
16. Maintain a 1- to 3-foot landscape-free area adjacent to all building structures' foundations. This would prevent available fuels for embers at the building base and flame impingement under the stucco along the weep screed and help prevent ember penetration into the structures' with stucco walls.

Dudek anticipates that the provided fire protection features along with the additional fire protection enhancements described above would reduce likelihood of structure ignition, minimize fire spread potential through the site, and provide for an aware and ready staff and visitor population.

## Limitations

This analysis and its fire protection recommendations are supported by fire science research, results from previous wildfire incidents, and fire agencies that have approved these concepts. However, this study does not provide a guarantee that all residents and visitors at the Paraiso Springs Resort will be safe at all times. There are many variables that may influence overall safety. This analysis provides recommendations based on proposed post-project conditions, anticipated evacuation scenarios, and currently available research. It is recommended that the owner(s) maintain a conservative approach to fire safety and evacuation. This approach must include maintaining fire safe landscape and structural components and evacuating early. The approach should also include a contingency option so that in the rare instance where it is determined by incident managers that it is unsafe to evacuate, seeking temporary refuge within hardened and protected buildings is a practiced contingency plan. Wildfire is a dynamic and somewhat unpredictable occurrence and it is important for anyone living in wildland urban interface areas to educate themselves on practices, including the Project's Evacuation Plan and ongoing public outreach programs.

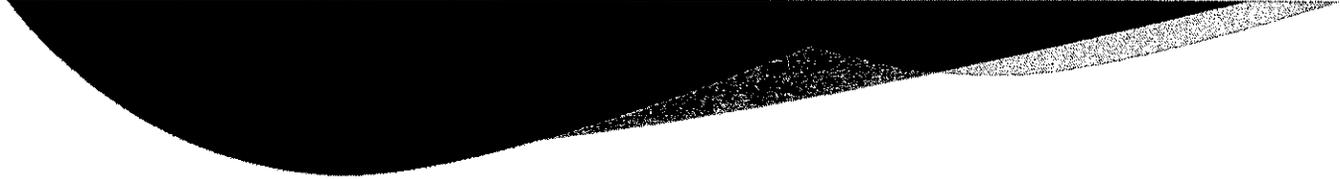
If you have any questions regarding this technical analysis, please contact me at 619.992.9161.

Sincerely,



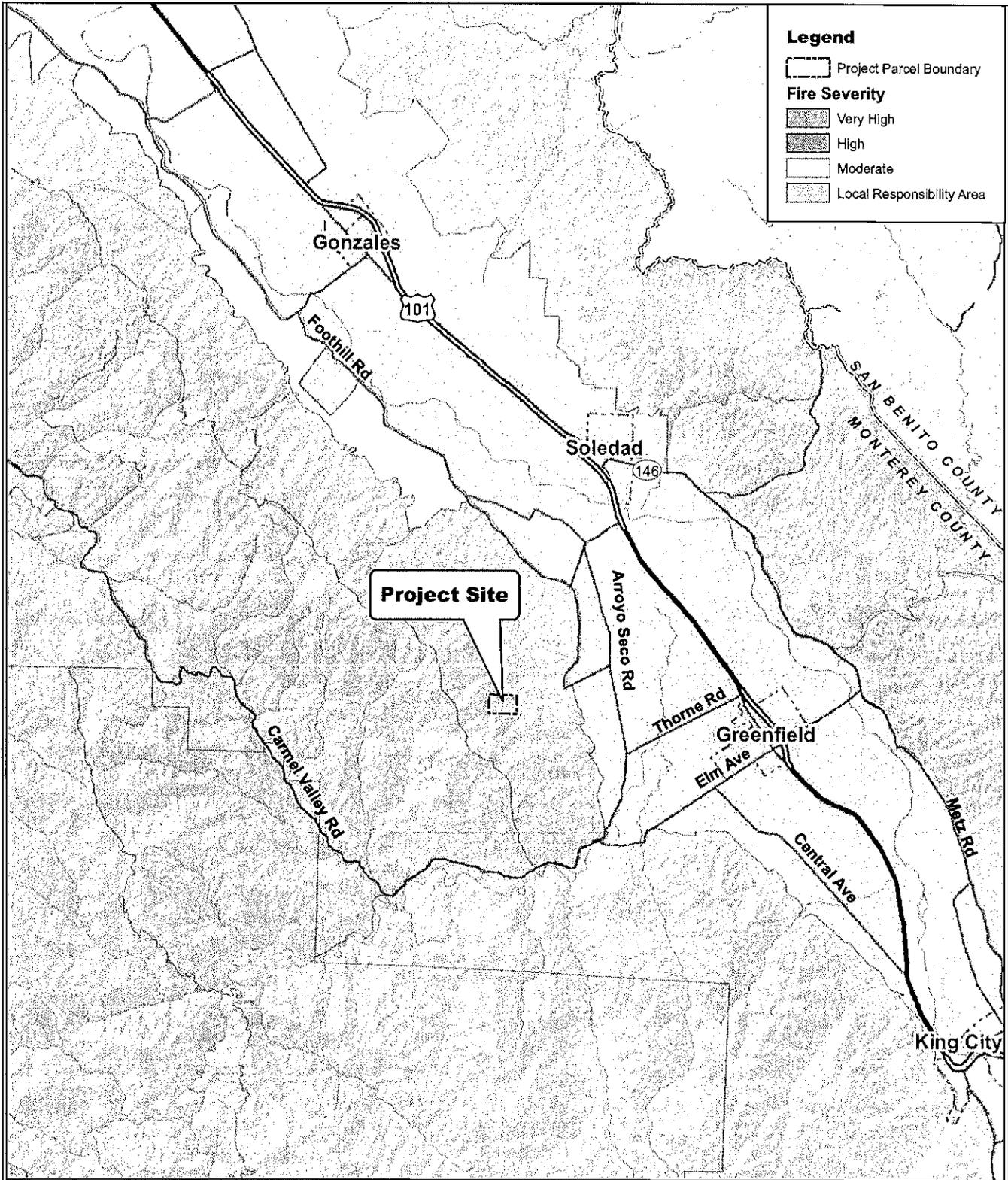
Michael Huff  
Principal/Senior Fire Protection Planner

Att.: *Figures 1-4*  
*Attachment 1 - Ready, Set, Go! Action Plan*



# Figures 1-4

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Source: RBF Consulting 2010, Monterey County 2006

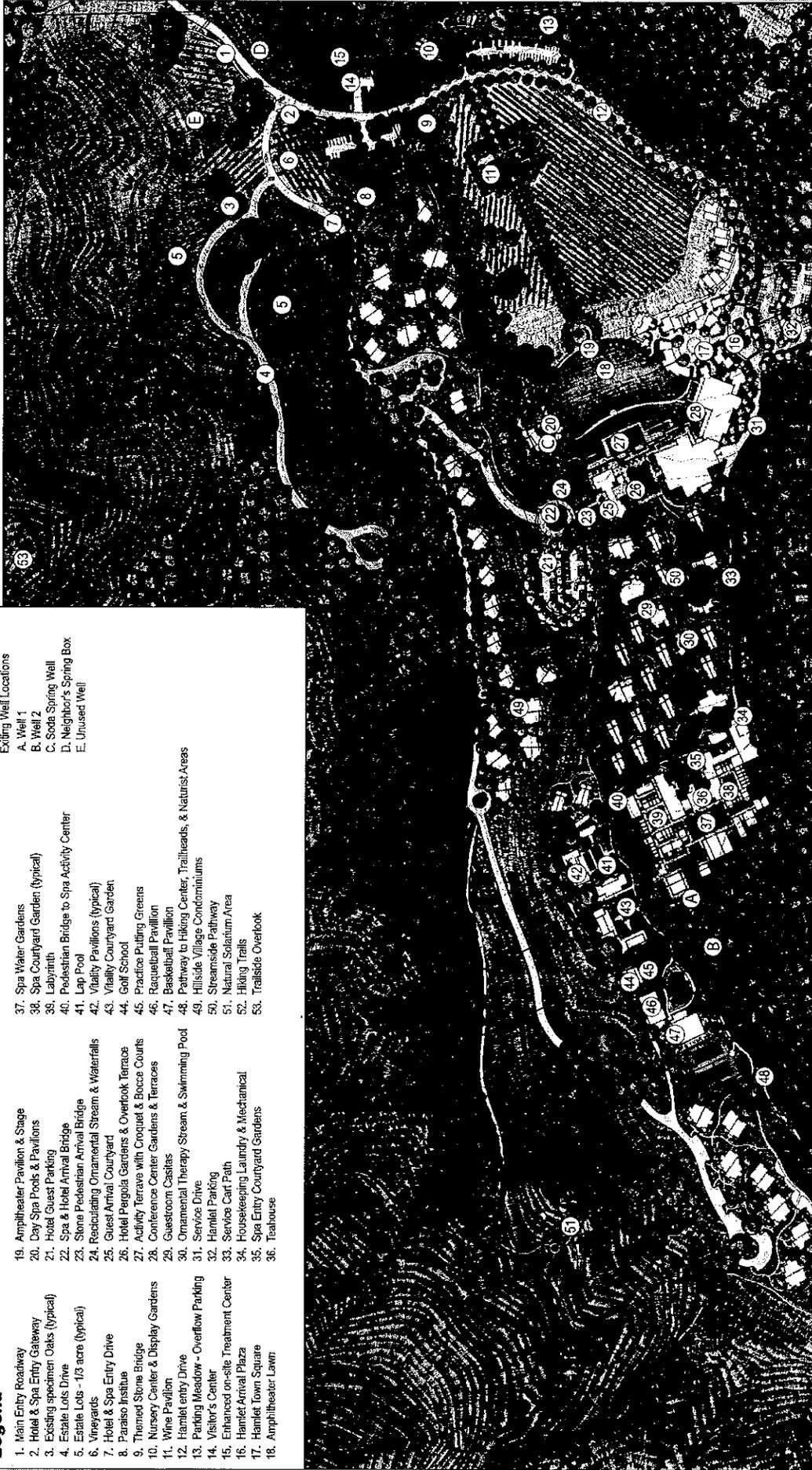
**DUDEK**

**FIGURE 1**  
**Regional Location**

**Legend**

- 1. Main Entry Roadway
- 2. Hotel & Spa Entry Gateway
- 3. Existing specimen Oaks (typical)
- 4. Estate Lots Drive
- 5. Estate Lots - 1/3 acre (typical)
- 6. Vineyards
- 7. Hotel & Spa Entry Drive
- 8. Paraiso Institute
- 9. Themed Stone Bridge
- 10. Nursery Center & Display Gardens
- 11. Wine Pavilion
- 12. Hamlet Entry Drive
- 13. Parking Meadow - Overflow Parking
- 14. Visitor's Center
- 15. Enhanced on-site Treatment Center
- 16. Hamlet Arrival Plaza
- 17. Hamlet Town Square
- 18. Amphitheater Lawn
- 19. Amphitheater Pavilion & Stage
- 20. Day Spa Pools & Pavilions
- 21. Hotel Guest Parking
- 22. Spa & Hotel Arrival Bridge
- 23. Stone Pedestrian Arrival Bridge
- 24. Recirculating Ornamental Stream & Waterfalls
- 25. Guest Arrival Courtyard
- 26. Hotel Pergola Gardens & Overlook Terrace
- 27. Activity Terraces with Croquet & Bocce Courts
- 28. Conference Center Gardens & Terraces
- 29. Guestroom Casitas
- 30. Ornamental Therapy Stream & Swimming Pool
- 31. Service Drive
- 32. Hamlet Parking
- 33. Service Cart Path
- 34. Housekeeping Laundry & Mechanical
- 35. Spa Entry Courtyard Gardens
- 36. Teahouse
- 37. Spa Water Gardens
- 38. Spa Courtyard Garden (typical)
- 39. Labyrinth
- 40. Pedestrian Bridge to Spa Activity Center
- 41. Lap Pool
- 42. Vitality Pavilions (typical)
- 43. Vitality Courtyard Garden
- 44. Golf School
- 45. Practice Putting Greens
- 46. Raquetball Pavilion
- 47. Basketball Pavilion
- 48. Pathway to Hiking Center, Trailheads, & Natural Areas
- 49. Hillside Village Condominiums
- 50. Streamside Pathway
- 51. Natural Solatium Area
- 52. Hiking Trails
- 53. Trailside Overlook

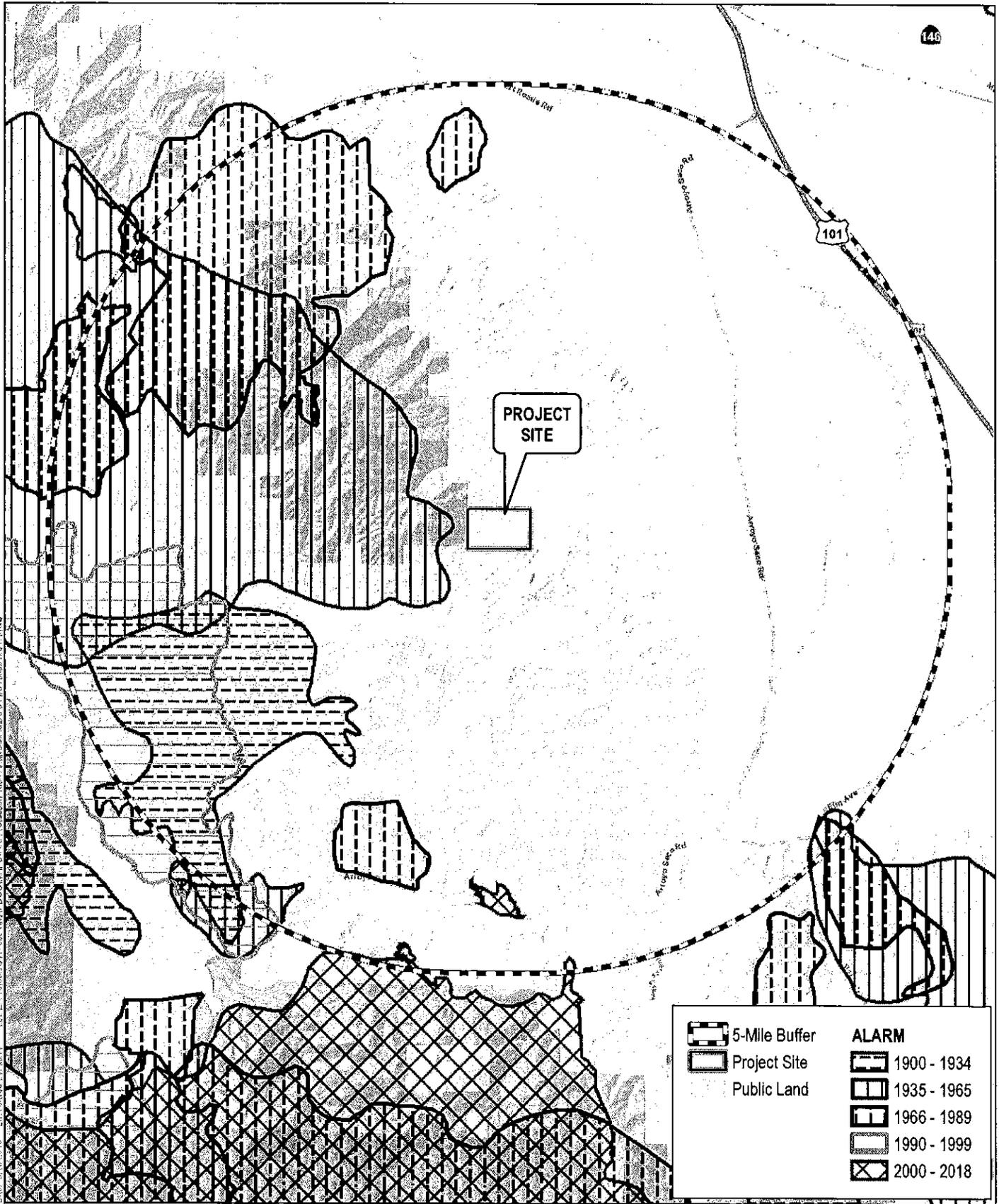
- Existing Well Locations**
- A. Well 1
  - B. Well 2
  - C. Soda Spring Well
  - D. Neighbor's Spring Box
  - E. Unused Well



Source: HUI Glazier Architects 2005

**FIGURE 2**  
Site Plan

Fire Protection Technical Analysis—Paraiso Springs Resort



SOURCE: BASEMAP- ESRI; FIRE DATA-CAL FIRE 2017

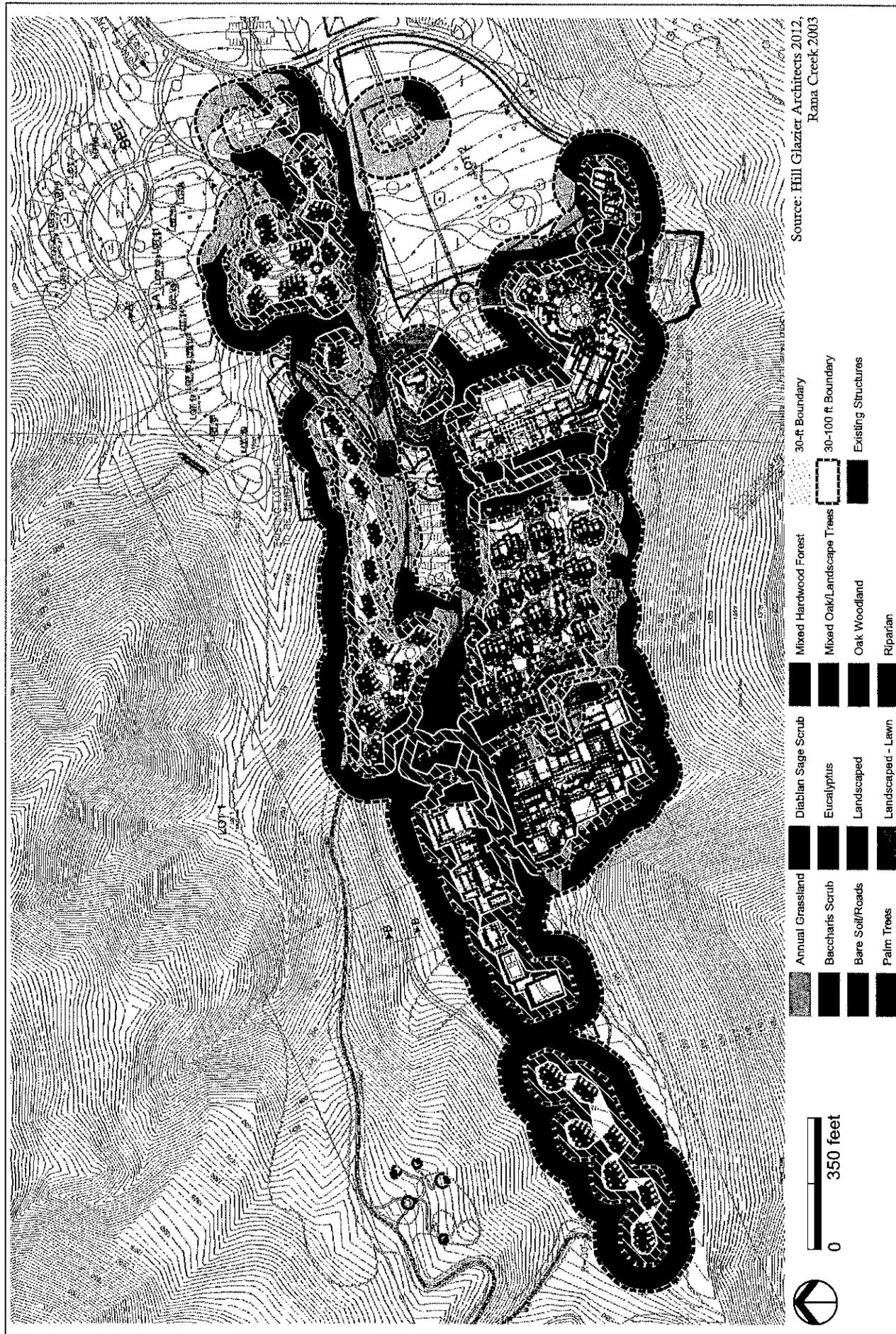
**DUDEK**



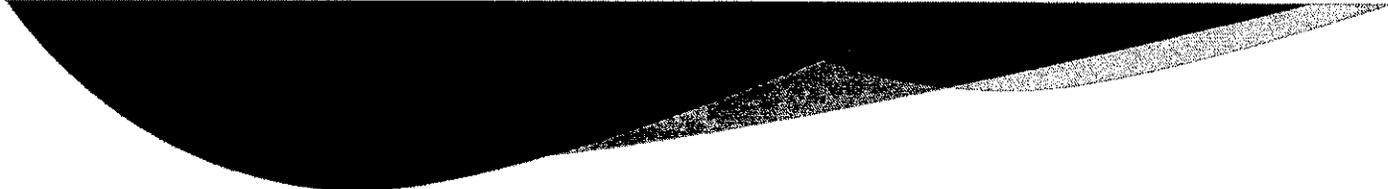
**FIGURE 3**

**Fire History Map**

Fire Protection Technical Analysis - Paraiso Springs Resort



**FIGURE 4**  
**Fuel Modification Zones/Defensible Space**  
 Fire Protection Technical Analysis—Paraiso Springs Resort



# Attachment 1

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Example Ready, Set, Go! Action Plan

# READY, SET, GO!

YOUR PERSONAL WILL TO LIVE



# READY, SET, GO!

## Wildfire Action Plan

Saving Lives and Property  
through Advance Planning



**W**ildfire is a serious threat to lives, property and natural resources in California. The men and women of CAL FIRE make countless preparations and train frequently in order to be ready for all types of emergencies, including wildfires. Residents need to do the same.

You can dramatically increase your safety and the survivability of your property by preparing well in advance of a wildfire. This brochure provides comprehensive information on how to improve your home's resistance to wildfires and prepare your family to be ready to leave early in a safe manner. We call this process, "Ready, Set, Go!"

The guide illustrates the importance of having defensible space around your home and it will help educate you about the preparations you need to make so you can leave early and evacuate well ahead of a wildfire. This brochure also provides information on how to retrofit your home with ignition resistant materials to address the threat of flying embers that can travel as far as a mile ahead of a flame front.

Fire is, and always has been, a natural part of the beautiful state we've chosen to live in. Wildfires, fueled by a build-up of dry vegetation and driven by hot, dry winds, are extremely dangerous and are challenging for firefighters to control. This publication will help you prepare your home so you can leave early; confident in the fact that you've done everything you reasonably can to protect your home from devastating wildfire.

I hope you'll find the information on the next pages helpful. As always, if you need more information about preparing for wildfire or any other disaster, contact your nearest fire station or visit us on the web at [www.fire.ca.gov](http://www.fire.ca.gov).

Chief Del Walters  
Director, CAL FIRE

All suggestions and requirements are based on State Codes and Regulations, specifically the California Building Code Chapter 7A, California Fire Code, and Title 14 Fire Safe Regulations. Contact your local fire and building department for specific requirements or recommendations for your community.

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This publication was prepared by the Ventura County Fire Department. Special thanks to CAL FIRE, Orange County Fire Authority, FireSafe Council, Firewise Communities, and the Institute for Business and Home Safety as well as many other organizations for their contributions to content.

Ready, Set, Go! is supported by:

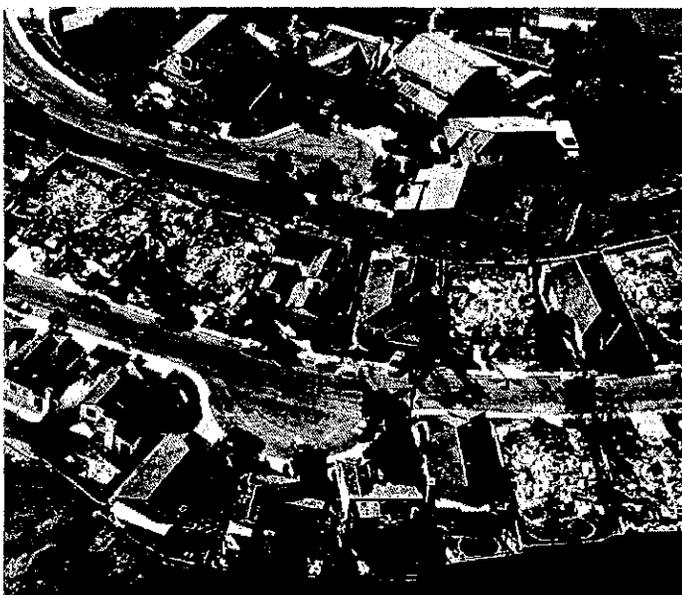
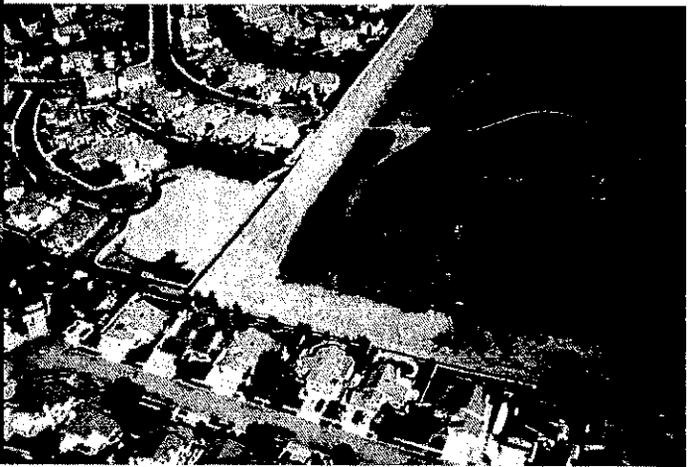


# Living in the Wildland Urban Interface

Ready, Set, Go! begins with a house that firefighters can defend.

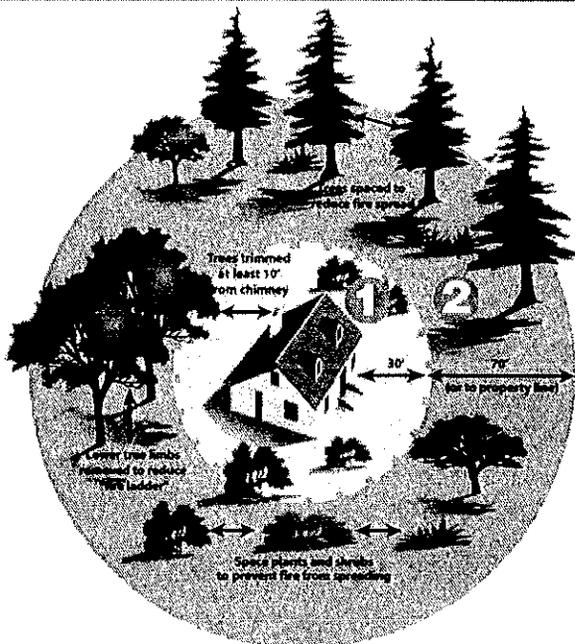
## Defensible space works!

If you live next to a natural area, the Wildland Urban Interface, you must provide firefighters with the defensible space they need to protect your home. The buffer you create by removing weeds, brush and other vegetation helps to keep the fire away from your home and reduces the risks from flying embers.



A home within one mile of a natural area is at risk of flying embers. Wind-driven embers can attack your home. You and your home must be prepared well before a fire occurs. Ember fires can destroy homes or neighborhoods far from the actual flame front of the wildfire.

# What is Defensible Space?



Defensible space is the required space between a structure and the wildland area that, under normal conditions, creates a sufficient buffer to slow or halt the spread of wildfire to a structure. It protects the home from igniting due to direct flame or radiant heat. Defensible space is essential for structure survivability during wildfire conditions and for the protection to firefighters defending your home.

## ZONE ONE

Zone One extends 30 feet out from buildings, structures, decks, etc.

- Remove all dead or dying vegetation.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from structures and other trees.
- Remove leaf litter (dry leaves/pine needles) from yard, roof and rain gutters.
- Relocate woodpiles or other combustible materials into Zone Two.
- Remove combustible material and vegetation from around and under decks.
- Remove or prune vegetation near windows.
- Remove "ladder fuels" (low-level vegetation that allows the fire to spread from the ground to the tree canopy). Create a separation between low-level vegetation and non-vegetative materials such as patio furniture, wood piles, swing set, etc., from tree branches. This can be done by reducing the height of low-level vegetation and/or trimming low tree branches.

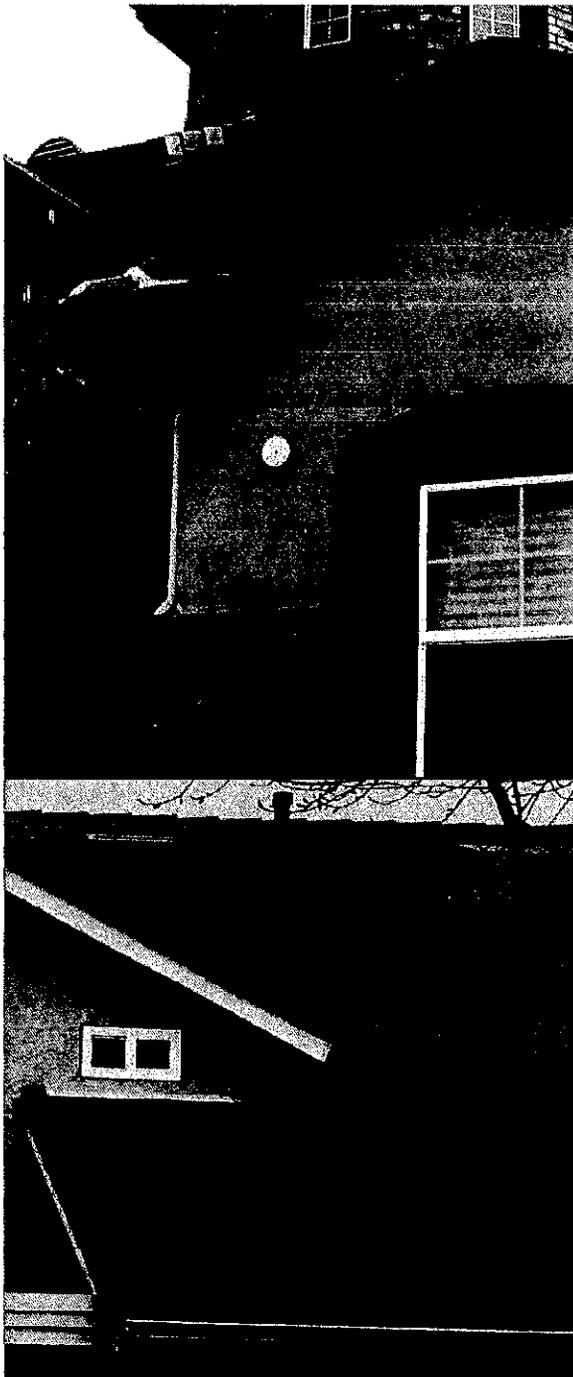
## ZONE TWO

Zone Two extends 30 to 100 feet out from buildings, structures and decks. You can minimize the chance of fire jumping from plant to plant or other non-vegetative combustible, by removing dead material and removing, separating, and/or thinning vegetation. The minimum spacing between vegetation is three times the dimension of the plant or other non-vegetative combustible.

- Remove "ladder fuels."
- Cut or mow annual grass down to a maximum height of 4 inches.
- Trim tree canopies regularly to keep their branches a minimum of 10 feet from other trees.
- Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a depth of 3 inches if erosion control is an issue.

# What is a Hardened Home?

Construction materials and the quality of the defensible space surrounding it are what gives a home the best chance to survive a wildfire. Embers from a wildfire will find the weak link in your home's fire protection scheme and gain the upper hand because of a small, overlooked or seemingly inconsequential factor. However, there are measures you can take to safeguard your home from wildfire. While you may not be able to accomplish all the measures listed below, each will increase your home's, and possibly your family's, safety and survival during a wildfire.



## **ROOFS**

Roofs are the most vulnerable surface where embers land because they can lodge and start a fire. Roof valleys, open ends of barrel tiles and rain gutters are all points of entry.

## **EAVES**

Embers can gather under open eaves and ignite exposed wood or other combustible material.

## **VENTS**

Embers can enter the attic or other concealed spaces and ignite combustible materials. Vents in eaves and cornices are particularly vulnerable, as are any unscreened vents. New vents have been developed that prevent flame and embers from getting through to the attic.

## **WALLS**

Combustible siding or other combustible or overlapping materials provide surfaces or crevices for embers to nestle and ignite.

## **WINDOWS and DOORS**

Embers can enter gaps in doors, including garage doors. Plants or combustible storage near windows can be ignited from embers and generate heat that can break windows and/or melt combustible frames.

## **BALCONIES and DECKS**

Embers can collect in or on combustible surfaces or the undersides of decks and balconies, ignite the material and enter the home through walls or windows.

To harden your home even further, consider protecting your homes with a residential fire sprinkler system. In addition to extinguishing a fire started by an ember that enters your home, it also protects you and your family year-round from any fire that may start in your home.

All suggestions and requirements are based on State Codes and Regulations, specifically the California Building Code Chapter 7A, California Fire Code, and Title 14 Fire Safe Regulations. Contact your local fire and building department for specific requirements or recommendations for your community.

# Tour a Wildfire Ready Home

**Home Site and Yard:** Ensure you have at least a 100-foot radius of defensible space (cleared vegetation) around your home. Note that even more clearance may be needed for homes in severe hazard areas. This means looking past what you own to determine the impact a common slope or neighbors' yard will have on your property during a wildfire.

Cut dry weeds and grass before 10 a.m. when temperatures are cooler to reduce the chance of sparking a fire.

Landscape with fire-resistant plants that have a high moisture content and are low-growing.

Keep woodpiles, propane tanks and other non-vegetative combustible materials away from your home and other structures such as garages, barns and sheds.

Ensure that trees are far away from power lines.

**Roof:** Your roof is the most vulnerable part of your home because it can easily catch fire from wind-blown embers. Homes with wood-shake or shingle roofs are at high risk of being destroyed during a wildfire.

Build your roof or re-roof with ignition resistant materials such as composition, metal or tile. Block any spaces between roof decking and covering to prevent ember intrusion.

Clear pine needles, leaves and other debris from your roof and gutters.

Cut any tree branches within ten feet of your roof.

**Vents:** Vents on homes are particularly vulnerable to flying embers.

All vent openings should be covered with 1/8-inch to 1/4 inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.

Attic vents in eaves or cornices should be baffled or otherwise protected to prevent ember intrusion (mesh is not enough).

**Windows:** Heat from a wildfire can cause windows to break even before the home ignites. This allows burning embers to enter and start internal fires. Single-paned and large windows are particularly vulnerable.

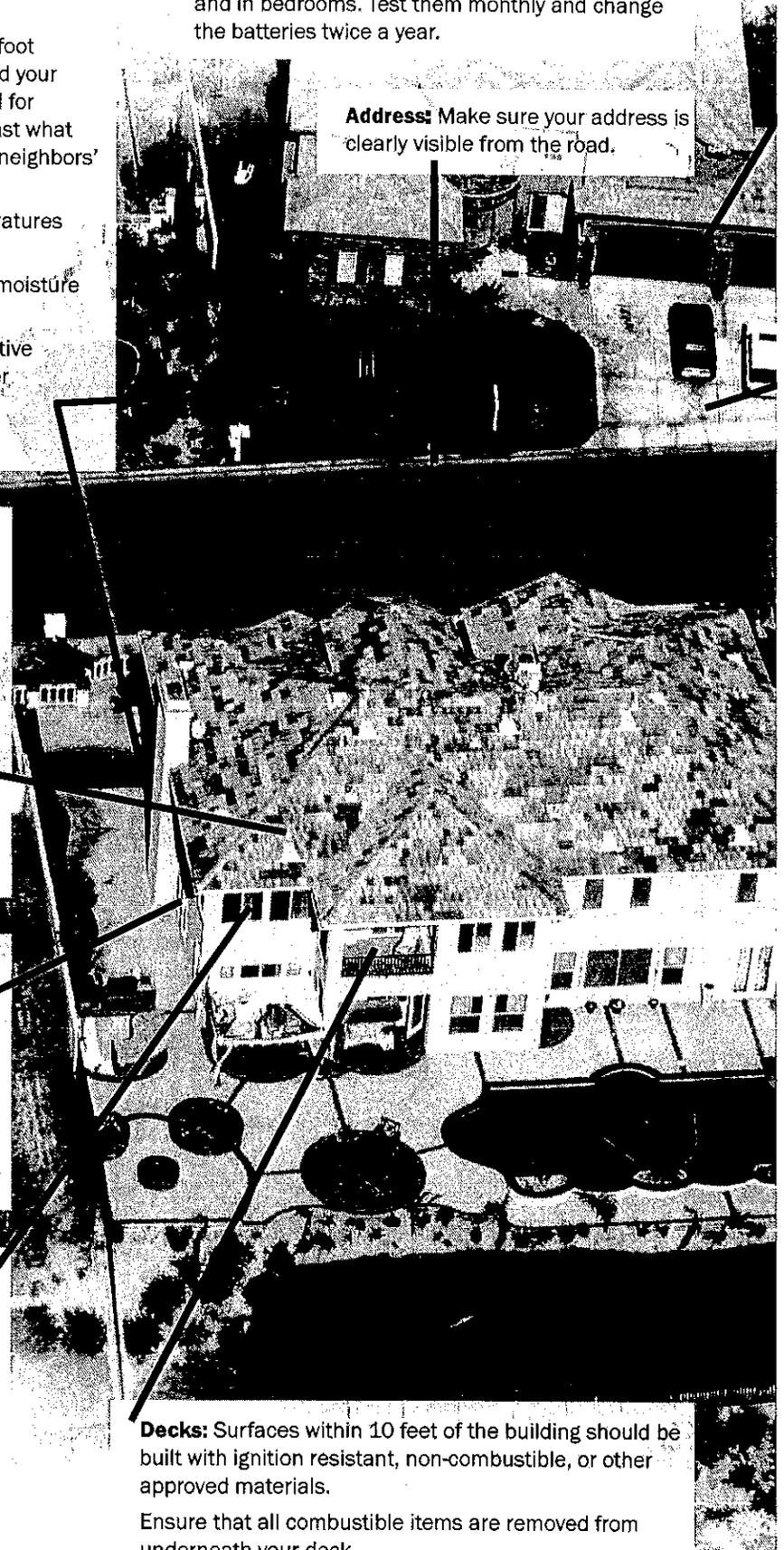
Install dual-paned windows with one pane of tempered glass to reduce the chance of breakage in a fire.

Consider limiting the size and number of windows in your home that face large areas of vegetation.

**Inside:** Keep working fire extinguishers on hand.

Install smoke alarms on each level of your home and in bedrooms. Test them monthly and change the batteries twice a year.

**Address:** Make sure your address is clearly visible from the road.



**Decks:** Surfaces within 10 feet of the building should be built with ignition resistant, non-combustible, or other approved materials.

Ensure that all combustible items are removed from underneath your deck.



**Garage:** Have a fire extinguisher and tools such as a shovel, rake, bucket and hoe available for fire emergencies.

Consider installing weather stripping around and under door to prevent ember intrusion.

Store all combustibles and flammable liquids away from ignition sources.

**Driveways and Access Roads:** Driveways should be built and maintained in accordance to the state and local codes to allow fire and emergency vehicles to reach your house.

Consider maintaining access roads with a minimum 10-foot clearance on either side of the traveled section of the roadway and allowing for two-way traffic.

Ensure that all gates open inward and are wide enough to accommodate emergency equipment.

Trim trees and shrubs overhanging the road to allow emergency vehicles to pass.

**Fencing:** Consider using ignition resistant or non-combustible fencing to protect your home during a wildfire.

**Eaves and Soffits Protection:** Eaves and soffits should be protected with ignition resistant or non-combustible materials.

**Rain Gutters:** Screen or enclose rain gutters to prevent accumulation of plant debris.

**Water Supply:** Consider having multiple garden hoses that are long enough to reach any area of your home and other structures on your property. If you have a pool or well, consider a pump.

**Patio Cover:** Use the same ignition resistant materials for patio covering as a roof.

**Walls:** Wood products, such as boards, panels or shingles, are common siding materials. However, they are combustible and not good choices for fire-prone areas.

Build or remodel with ignition resistant building materials, such as stucco, fiber cement, wall siding, fire retardant, treated wood, or other approved materials.

Be sure to extend materials from foundation to roof.

**Chimney:** Cover your chimney and stovepipe outlets with an approved spark arrestor non-combustible screen with openings no smaller than 3/8 inch and no larger than 1/2 inch to prevent embers from escaping and igniting a fire.

Make sure that your chimney is at least 10 feet away from any tree branches.

# READY, SET, GO!

## Create Your Own Wildfire Action Plan

Now that you've done everything you can to protect your house, it's time to prepare your family. Your **Wildfire Action Plan** must be prepared with all members of your household well in advance of a fire.

Use these checklists to help you prepare your Wildfire Action Plan. Each family's plan will be different, depending on their situation.

Once you finish your plan, practice it regularly with your family and keep it in a safe and accessible place for quick implementation.

## GET READY

### Prepare Your Family

- Create a **Family Disaster Plan** that includes meeting locations and communication plans and practice it regularly. Include in your plan the evacuation of large animals such as horses.
- Have fire extinguishers on hand and train your family how to use them.
- Ensure that your family knows where your gas, electric and water main shut-off controls are and how to use them.
- Plan several different evacuation routes.
- Designate an emergency meeting location outside the fire hazard area.
- Assemble an emergency supply kit as recommended by the American Red Cross.
- Appoint an out-of-area friend or relative as a point of contact so you can communicate with family members who have relocated.
- Maintain a list of emergency contact numbers posted near your phone and in your emergency supply kit.
- Keep an extra emergency supply kit in your car in case you can't get to your home because of fire.
- Have a portable radio or scanner so you can stay updated on the fire.



# GET SET

## As the Fire Approaches

- Evacuate as soon as you are set!
- Alert family and neighbors.
- Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots). Have goggles and a dry bandana or particle mask handy.
- Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and ample drinking water.
- Stay tuned to your TV or local radio stations for updates, or check the fire department Web site.
- Remain close to your house, drink plenty of water and keep an eye on your family and pets until you are ready to leave.

### INSIDE CHECKLIST

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades and curtains and close metal shutters.
- Remove lightweight curtains.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter. Turn off pilot lights.
- Leave your lights on so firefighters can see your house under smoky conditions.
- Shut off the air conditioning.



### OUTSIDE CHECKLIST

- Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- Turn off propane tanks.
- Don't leave sprinklers on or water running - they can waste critical water pressure.
- Leave exterior lights on.
- Back your car into the driveway. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

### IF YOU ARE TRAPPED: SURVIVAL TIPS

- Shelter away from outside walls.
- Bring garden hoses inside house so embers don't destroy them.
- Patrol inside your home for spot fires and extinguish them.
- Wear long sleeves and long pants made of natural fibers such as cotton.
- Stay hydrated.
- Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
- Fill sinks and tubs for an emergency water supply.
- Place wet towels under doors to keep smoke and embers out.
- After the fire has passed, check your roof and extinguish any fires, sparks or embers.
- Check inside the attic for hidden embers.
- Patrol your property and extinguish small fires.
- If there are fires that you can not extinguish with a small amount of water or in a short period of time, call 9-1-1.

# Go! | *Early!*

By leaving early, you give your family the best chance of surviving a wildfire. You also help firefighters by keeping roads clear of congestion, enabling them to move more freely and do their job.

## **WHEN TO LEAVE**

---

Leave early enough to avoid being caught in fire, smoke or road congestion. Don't wait to be told by authorities to leave. In an intense wildfire, they may not have time to knock on every door. If you are advised to leave, don't hesitate!

## **WHERE TO GO**

---

Leave to a predetermined location (it should be a low-risk area, such as a well-prepared neighbor or relative's house, a Red Cross shelter or evacuation center, motel, etc.)

## **HOW TO GET THERE**

---

Have several travel routes in case one route is blocked by the fire or by emergency vehicles and equipment. Choose an escape route away from the fire.

## **WHAT TO TAKE**

---

Take your emergency supply kit containing your family and pet's necessary items.



## **EMERGENCY SUPPLIES**

---

The American Red Cross recommends every family have an emergency supply kit assembled long before a wildfire or other emergency occurs. Use the checklist below to help assemble yours. For more information on emergency supplies, visit the American Red Cross Web site at [www.redcross.org](http://www.redcross.org).

- Three-day supply of water (one gallon per person per day).
- Non-perishable food for all family members and pets (three-day supply).
- First aid kit.
- Flashlight, battery-powered radio, and extra batteries.
- An extra set of car keys, credit cards, cash or traveler's checks.
- Sanitation supplies.
- Extra eyeglasses or contact lenses.
- Important family documents and contact numbers.
- Map marked with evacuation routes.
- Prescriptions or special medications.
- Family photos and other irreplaceable items.
- Easily carried valuables.
- Personal computers (information on hard drives and disks).
- Chargers for cell phones, laptops, etc.

Note: Keep a pair of old shoes and a flashlight handy in case of a sudden evacuation at night.

Write up your Wildfire Action Plan and post it in a location where every member of your family can see it. Rehearse it with your family.

# My Personal Wildfire Action Plan

During High Fire Danger days in your area, monitor your local media for information on brush fires and be ready to implement your plan. Hot, dry and windy conditions create the perfect environment for a wildfire.

## Important Phone Numbers:

Out-of-State Contact: \_\_\_\_\_ Phone: \_\_\_\_\_

Work: \_\_\_\_\_

School: \_\_\_\_\_

Other: \_\_\_\_\_

Evacuation Routes: \_\_\_\_\_

Where to go: \_\_\_\_\_

Location of Emergency Supply Kit: \_\_\_\_\_

Notes: \_\_\_\_\_



California Department of Forestry and Fire Protection  
**If you have an emergency, call 911.**  
CAL FIRE: 916-653-5123  
Web site: <http://www.fire.ca.gov>

**READY, SET, GO!**



This booklet has been adapted from the original, created by the Ventura County Fire Department.

