The Promontory

Village 6 Phase 3

Wildfire Fire Safe Plan

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Village 6 Phase 3

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I. PURPOSE AND SCOPE

Communities are increasingly concerned about wildfire safety. Drought years coupled with flammable vegetation and annual periods of severe fire weather insure the potential for periodic wildfires.

The purpose of this plan is to assess the wildfire hazards and risks of The Promontory, Village 6, Phase 3 development. To identify measures to reduce these hazards and risks and protect the native vegetation. There are moderate fuel hazards and steep topography associated with this proposed development both on and adjacent to the project.

The possibility of large fires occurring when The Promontory project is complete will be greatly reduced. However small wildfires in the open space areas and on the larger lots may occur due to the increase in public uses.

Incorporation of the fire hazard reduction measures into the design and maintenance of the future villages will reduce the size and intensity of wildfires and help prevent catastrophic fire losses. State and County regulations provide the basic guidelines and requirements for fire safe mitigation measures and defensible space around dwellings. This plan builds on these basic rules and provides additional fire hazard reduction measures customized to the topography and vegetation of the development with special emphases on the interface of homes and wildland fuels.

The scope of The Promontory Wildfire Fire Safe Plan recognizes the extraordinary natural features of the area and designs wildfire safety measures which are meant to compliment and become part of the community design. The Plan contains measures for providing and maintaining defensible space along utility easements, open space areas and around future homes. Plan implementation measures must be maintained in order to assure adequate wildfire protection.

Homeowners who live in and adjacent to the wildfire environment must take primary responsibility along with the fire services for ensuring their homes have sufficient low ignitability and surrounding fuel reduction treatment. The fire services should become a community partner providing homeowners with technical assistance as well as fire response. For this to succeed it must be shared and implemented equally by homeowners and the fire services.

I. FIRE PLAN LIMITATIONS

The Wildfire Fire Safe Plan for The Promontory Village 6 Phase 3 development does not guarantee that wildfire will not threaten, damage or destroy natural resources, homes or endanger residents. However, the full implementation of the mitigation measures will greatly reduce the exposure of homes to potential loss from wildfire and provide defensible space for firefighters and residents as well as protect the native vegetation. Specific items are listed for homeowner attention to aid in home wildfire safety.

II. THE PROMONTORY WILDFIRE FIRE SAFE PLAN

1. PROJECT DESCRIPTION

Village 6 Phase 3 is located within the unincorporated community of El Dorado Hills on a generally west facing slope and east of the Sacramento/El Dorado County line. This phase is planned for 35 lots ranging in size from 31,045 sq. ft to 62,228 sq.ft.. The majority of the lots are approximately 1 acre in size. Nine lots exceed one acre and must meet the full fire safe clearance requirements. Access is from Sophia Parkway to Alexandra Way to Beatty Drive. The site is also linked with the existing road system west of El Dorado Hills Boulevard. The key topographic features are the steep slopes and an intermittent drainage of Willow Creek. Elevations generally range from 550 to 860 feet. Slopes range generally 20-40% with some steeper areas in excess of 50%.

Some of the residential lots may have a Perpetual Conservation Easement (PCE)*. This is part of a gated community. Structural fire protection is provided by the El Dorado Hills Fire Department and wildland fire protection, by the California Department of Forestry and Fire Protection (CDF). A fire hydrant system will serve the new area.

2. PROJECT VEGETATION (FUELS)

For wildfire planning purposes the vegetation is classified as follows:

(a) ground fuels- annual grasses with scattered down trees and limbs
(b) overstroy- scattered stands of Blue and Live Oak and individual oak trees and California Buckeye
(c) riparian- grasses, forbes and willows

The heaviest fuel loading is along Karavi Drive. There are a few down trees and scattered oak thickets. The problem of fuel laddering is minimal but exists. Oak canopy crown closure may require some thinning of the overstory trees.

* The PCE will be a recorded easement on designated lots, which will create additional space with the Village. PCE's are generally on steep lots and located below the housesites. No structures will be allowed within a PCE areas. Fuel treatment and maintenance shall be the responsibility of the lot owner.

3. PROBLEM STATEMENTS

A. The grass fuels on the western facing slopes will ignite and have a rapid rate of spread.

Fire in the grass fuels on the side slopes of the ridge are the most serious wildfire problems for this project.

B. A high percentage of the project has steep slopes which increases the rate of wildfire spread.

Wildfires rate of spread increases dramatically as slope increases. This project has steep grassy slopes.

C. Risk of fire starts will increase with development.

The greatest risk from fire ignition will be along roads, in the open space areas and on large lots as human uses on these areas increase.

D. Provisions must be made to maintain all fuel treatments.

The wildfire protection values of fuel reduction are rapidly lost if not maintained. Annual maintenance by June 1 of each year is necessary.

E. Typical home design and siting often does not recognize adequate wildfire mitigation measures.

A review of many wildfires has conclusively shown that most home losses occur when: (1) there is inadequate clearing of flammable vegetation around a house, (2) roofs are not fire resistant, (3) homes are sited in hazardous locations, (4) firebrand ignition points and heat traps are not adequately protected and (5) there is a lack of water for suppression.

4. FIRE BEHAVIOR ANALYSIS

Proper planning requires an estimate of how wildfire would behave within the project area. This was accomplished through study of a standard Fire Behavior Fuel Model 1, Grass. Fire spread in this model is governed by the fine, very porous and continuous herbaceous fuels that have cured. Fires are surface fires that move rapidly through the cured grass and associated material. This model with winds of 6 mi/hr and fuel moisture content of 2 % on a 30% slope indicates a rate of spread of 224 chains per hour and flame lengths of 7.7 feet.

5. GOALS

A. Modify the continuity of high hazard vegetation fuels.
B. Reduce the size and intensity of wildfires.
C. Ensure defensible space is provided around all structures.
D. Design fuel treatments to minimize tree removal

E. Ensure fuel treatment measures are maintained.
F. Identify fire safe structural features.
G. Help homeowners protect their homes from wildfire.

6. WILDFIRE MITIGATION MEASURES

Wildfire mitigation measures are designed to accomplish the Goals by providing and maintaining defensible space and treating high hazard fuel areas. Fire hazard severity is reduced through these mitigation measures. The Wildfire Fire Safe Plan places emphasis on defensible space around structures.

Village 6 Phase 3

This Phase of Village 6 is adjacent and below the approved Phase 2 of Village 6. Thirty five lots are planned averaging about one acre in size and all are on slopes of approximately 30%. Fuels are dense stands of oak and scattered open grasslands. Karavi Drive will be a one way road and will connect with future roads in Phase 2. Beatty Drive will connect with the Village Center connector Alexandra Way which will connect to Sophia Parkway. Egress will also be provided to the north via Powers Drive and to the south via Beatty Drive. Lots 1-11 have a multi-use trail at the bottom lot line. There are 9 lots over 1 acre in size;12-15, 24-27, and 35. Each lot will have a designated building envelop. Driveway access to the lots, except 13, 14 and 35 will be from the downhill side of the lot.

Mitigation Measures:

- **Lots over I acre shall be landscaped to Firescaping Standards Zones I and II (100 feet).**
  - **a. Responsibility- homeowner within one year of occupancy**

- **Lots less than 1 acre shall be landscaped to Firescaping Standards for Zone I.**
  - **a. Responsibility- homeowner within one year of occupancy**

- **Lots 1-11, with the multi-use trail adjacent will treat the remaining area outside the Firescaping Zones to the specifications identified in Appendix B.**
  - **a. Responsibility- homeowner within one year of accupancy**

- **All fences that border on the open space areas shall be of noncombustible material. Pedestrian gates to the open space will be provided and may be lockable.**
  - **a. Responsibility- homeowner**

- **Driveways over 150 feet shall provide for a turnout near the midpoint of the driveway. Vertical clearance for the entire length of the driveway will be 15 feet.**
  - **a. Responsibility- homeowner**

- **If the driveway exceeds 20% in grade and over 50 feet in length, the residence shall have an approved residential fire sprinkler system built into the residence.**
    a. Responsibility- homeowner

- **All homes shall have Class A listed roof assembly and siding of fire resistant material. Single coat stucco over foam insulation is not acceptable. A three coat stucco process is acceptable.**
    a. Responsibility- homeowner

- **Decks that are cantilevered over the natural slope shall be enclosed.**
    a. Responsibility- homeowner (See Appendix D for guidelines)

- **El Dorado Hills Fire Department Weed Abatement Resolution shall apply to vacant lots adjacent to lots with structures.**
    a. Responsibility- lot owner and Fire Department

- **All gates shall meet standards of the El Dorado Hills Fire Department**
    a. Responsibility- developer

- **Karavi Drive shall be signed "No Parking" on the uphill side.**
    a. Responsibility- developer

- **The 20 foot wide utility easement that parallels Lots 1-11 shall have the fuels treated, within the easement, annually to the specifications in Appendix B.**
    a. Responsibility- utility purveyors

- **All lots shall have a 30 foot setback for houses and accessory buildings, or to all property lines, which ever is less and a 30 foot setback from the center of the road. (See Item 8, page 8 with lots for setback exception)**
    a. Responsibility- builder

7. **DEADEND CUL-DE-SACS ROADS**

The following cul-de-sac road exceeds the State of California SRA Fire Safe Regulations (1273.08) length of 800 feet for dead end roads serving lots less than one acre in size.

Village 6 Phase 3
Kymata Court, 1600 feet – 12 Lots

Request for Exception (1270.08)

As authorized representative of the applicant, and as previously agreed, the consultant requests an exception to the SRA dead end standards based on the following material facts:

1. **The Court shall serve less than 24 lots.**
2. **The Court is less than 2,640 feet in length.**
3. **The Court road will be 36 feet wide.**
4. **Fuels on either side of the Court road will be treated as per the mitigation measures outlined for the Village.**

The above mitigation measures offer the Same Practical Effect and support an Exception to the SRA standards. The consultant recommends approval of the Exception. Approval of this Plan by the CDF will constitute the approval of the Exception.

8. **BUILDING SETBACKS ON ONE ACRE OR LARGER LOTS**

State SRA Regulations (1276.01) requires a minimum of a 30 foot setback from all property lines or to the center of the road for lots 1 acre or larger.
All of the lots can not meet the State setback on one or more sides. Criteria for identification of these lots are; (a) access road frontage less than 100 feet, (b) steep topography, (c) rock outcroppings, (d) lot shape.

Request for SRA Exception

As authorized representative, the consultant requests an Exception to 1276.01, Setback Standards for the 1 acre or larger lots.
Mitigation practices providing the same overall practical effect as 1276.01 Regulations are:
1. Firescaping standards will be implemented to the building front and side yards to the lot lines, regardless of distances to these lines.
- **a. This will ensure a continuous belt of Firescaping to neighboring lots.**
- **b. If adjacent lot is vacant, El Dorado Hills Fire Department Weed Abatement Resolution will apply and the vacant lot fuels will be treated for 30 feet from any structure.**

2. Setbacks will not be less than those required by El Dorado County Zoning Ordinance 17.28.080(E) and 17.28.340(D).
3. Rock outcroppings are part of the Firescaping.
4. Windows and doors on the side(s) of the structure less than 30 feet from a property line, shall be tempered glass.
5. Rafter tails will be enclosed with noncombustible material on the side(s) of the structure that is less than 30 feet from the property line.
6. Exterior wall sheathing shall be noncombustible sheathing on the side(s) of the structure that is less than 30 feet from the property line.
7. Gutters and downspouts shall be noncombustible.
8. Attic and floor vents shall be covered with ¼ inch or less noncombustible mesh and horizontal to the ground.
9. If a driveway must exceed 20% grade and is longer than 50 feet in length the house shall have a residential fire sprinkler system to be appropriately engineered for the residence.

Approval of this Plan by the CDF and the El Dorado Hills Fire Department will constitute the approval of this Exception.

9. **OTHER FIRE SAFE REQUIREMENTS**

A. Every 5 years the Fire Department shall review Open Space areas with the HOA to determine if additional fuel hazard reduction work is necessary.

B. A Notice of Restriction shall be filed with the final subdivision map which stipulates that a Wildfire Fire Safe Plan has been prepared and wildfire mitigation measures must be implemented.

C. The project shall meet all the Public Resource Codes 4290 as amended (the 1991 SRA Fire Safe Regulations- Article 2 Access, Article 3 Signing, Article 4 Water, Article 5 Fuels), County and Fire Department ordinances.

D. A legal entity (HOA, CSD etc.) shall be created with authority for maintaining and enforcing the fuel treatment mitigation measures if homeowners fail to implement or maintain. Covenants, Conditions and Restrictions must be developed to ensure the enforcement of the structural Fire Safe regulations.

E. The water hydrant system shall meet the Uniform Fire Code specifications to water volume and pressure.

F. The homeowner/property owner is responsible for any future fire safe or building code changes adopted by the State or local authority.

F. Appendix

Appendix A

The Promontory

Firescaping Standards

Firescaping is an approach to landscaping to help protect homes from wildland fires. The goal is to create a landscape that will slow the advance of a wildfire and create a Defensible Space that provides the key point for fire fighting agencies to defend the home. This approach has a landscape zone surrounding the home containing a balance of native and exotic plants that are fire and drought resistant, help control erosion, and are visually pleasing. Firescaping is designed not only to protect the home but to reduce damage to oaks and other plants.

Zone I

The zone extends to not less than 50 feet from the house **or to the property line** in all directions and has a traditional look of irrigated shrubs, flower gardens, trees and lawns. All dead trees, brush, concentrations of dead ground fuels (tree limbs, logs etc. exceeding 1inch in diameter) are removed. All native oak trees and brush species are pruned up to 6-8 feet above the ground as measured on the uphill side but no more than 1/3 of the live crown. The plants in this zone are generally less than 18 inches in height, must be slow to ignite from wind blown sparks and flames. Such plants produce only small amounts of litter and retain high levels of moisture in their foliage year around. Native and exotic trees are permitted inside the Zone, but foliage may not be within 10 feet of the roof or chimney. Grass and other herbaceous growth within this zone must be irrigated or if left to cure must be mowed to a 2 inch stubble, chemically treated or removed. Such treatment must be accomplished by June 1, annually. This zone has built in firebreaks created by driveways, sidewalks etc.

Zone II

This Zone is a transition area to the outlying vegetation and adds 50 feet to Zone I and extends a minimum of 100 feet from the house in all directions, **or to the property line**. The zone is a band of low growing succulents and ground covers designed to reduce the intensity, flame length and rate of spread of an approaching wildfire. Irrigation may be necessary to maintain a quality appearance and retain the retardant ability of the plants. All dead trees, brush, concentration of dead ground fuels (tree limbs, logs etc.) exceeding 2 inches in diameter are removed. Annual grasses are mowed after they have cured to a 2 inch stubble by June 1, annually. Native trees and brush species are preserved and pruned of limbs up to 8 feet above the ground as measured on the uphill side.

For All Zones With Live Oaks

Mature, multi stemmed Live Oaks can present a serious wildfire problem if untreated. Treat the Live Oaks as to the following specifications: (a) remove all dead limbs and stems and (b) cut off green stems at 8 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.

APPENDIX A-1
FIRESCAPING ZONES
EXHIBIT

Typical Lot in
Oak Woodland Thicket
(schematic, no scale)

APPENDIX B

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FUEL TREATMENT SPECIFICATIONS

For

OAK WOODLAND VEGETATION

Within The Designated Fuel Treatment Areas

1.Leave all live trees.

2.Remove all dead trees.

3.Remove all brush.

4.Prune all live trees of dead branches and green branched for 8 feet from the ground as measured on the uphill side of the tree, except no more than 1/3 of the live crown is removed. All slash created by pruning must be disposed of by chipping or hauling off site.

5.Annually, by June 1, reduce the grass or weeds to a 2 inch stubble by mowing, chemical treatment, disking or by a combination of treatments.

6.Mature, multi stem Live Oak trees: remove all dead limbs and stems, cut off green stems at 8 feet above the ground as measured on the uphill side that arch over and are growing down towards the ground.

APPENDIX C

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EMERGENCY VEHICLE OPEN SPACE ACCESS SPECIFICATIONS

The purpose of the Emergency Vehicle Access to Open Space areas is to provide rapid access to wildland fuels in open space areas for wildfire suppression resources such as bulldozers, 4-wheeldrive fire engines, firefighters, hoselays etc.

Specifications are:

a. 15 feet in width
b. “Break” in the curb
c. Signed
d. Gated and gate equipped with a Knox Lock

APPENDIX D

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ENCLOSED DECK GUIDELINES

The purpose of enclosing decks that are cantilevered out over the natural slope is to help prevent heat traps and fire brands from a wildfire igniting the deck or fuels under the deck.

1. Does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.

2. Applies to decks one story or less above natural slopes.

3. Combustible material must not be stored under the deck