Migianella

Wildland Fire Safe Plan

Prepared for:

Marie Mitchell

Prepared by:

CDS Fire Prevention Planning William F. Draper Registered Professional Forester #898 4645 Meadowlark Way Placerville, CA 95667

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Migianella Safe Plan

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Plan Approved by:

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<u>7/30/13</u> Date

Michael Lälentbal, Battolion Chief Fire Marshel El Dorado Häls Fire Department

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Jac Mc Farlin, Fire Capitain Fire Prevention California Department of Forestry and Fire Protection

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William F. Draper BPF 398



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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 Migianella development, to identify measures to reduce these hazards and risks and to protect the native vegetation. There are moderate fuel hazards and moderate topography associated with this proposed development both on and adjacent to the project.

The possibility of large fires occurring when the Migianella project is complete will be 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 development 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 emphasis on the interface of homes and wildland fuels.

The scope of the Migianella Wildland 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 roads 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.

II. FIRE PLAN LIMITATIONS

The Wildland Fire Safe Plan for the Migianella 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's attention to aid in home wildfire safety.

III. THE MIGIANELLA WILDLAND FIRE SAFE PLAN

1. PROJECT DESCRIPTION

The Migianella development is located within the unincorporated community of El Dorado Hills on a generally east facing flat to moderate slope and lies between Salmon Falls Road to the east and Lakehills Drive to its west. This project will divide APN's: 110-020-45 and 110-430-01 consisting of 26.05 acres into 8 lots ranging in size from 3 acres to 5 acres. All lots are over 1 acre in size and must meet the full fire safe clearance requirements. Access is from Salmon Falls Road to Kaila Way. A cul-de-sac, road "A" and "B", will come off of Kaila Way providing access to parcels 1, 3 through 8. A new driveway will go north along the east side of the development to provide access to parcel 2. Also, the cul-de-sac at the end of road "B" will be at the property line between parcels 7 and 8. The key topographic features are the flat to moderate slopes and the oak canopy shading much of the property.

Kaila Way will be rebuilt to bring the road grade down to within 15% for 325'. All other segments of Kaila Way and Road "A" shall meet the specifications of the Transportation Division. Road "B" shall be longer than 1,320' and have an approved turn around at its end. There will be a "T" turn around between parcels 3 and 5.

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 (CALFIRE). A fire hydrant system will serve the new area. Water is to be supplied by El Dorado Irrigation District.

2. PROJECT VEGETATION (FUELS)

For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels- annual grasses and poison oak, vineyard and scattered down trees and limbs (Brush)
- (b) overstroy- scattered stands of Blue Oaks and Liveoak and individual Gray Pines

Light to moderate fuel loading is throughout the property. There are larger parcels on the east, north and west outside of this development. There are pockets of wildland along these borders of the project in the developed parcels. Downed trees and dense oak canopy mixed with the brush comprise the problem of fuel laddering. Ladder fuels are mainly oak limbs and poison oak. Oak canopy crown closure may require some thinning of the overstory trees. Gray Pines (digger pines) should be eliminated as they are a very hazardous tree.

Lakehills Court borders parcel 1 on the north end of this development and provides marginal access and buffer from wildfire threat. Folsom Lake lies to the northeast of this development.

3. PROBLEM STATEMENTS

A. The grass/brush fuels will ignite and have a rapid rate of spread.

Fire in the grass/brush fuels on the slopes of the development are the most serious wildfire problem for this project.

B. 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 use on these areas increase.

C. 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.

D. 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. **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.

5. 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.

Migianella

Eight lots are planned that are three plus acres in size. A new road, Road "A" will be built to a minimum of 24 feet of travel surface with a 20 foot wide fuel hazard reduction zone along each side of the roadway. The new road will have rolled curbs to provide added width for vehicle passage on the roadway. The road shall be posted "No Parking". A cul-de-sac will be at the end. This road shall be longer than 1,320' as agreed to with the fire agencies. A "T" turn around will be built along road "A" between parcels 3 and 5. The fuel hazard reduction zone shall be annually maintained. The roads and cul-de-sac shall conform to El Dorado Transportation Division (TD) specifications. The road "B" is yet to be named.

A long driveway will be constructed from the end of Kaila Way to serve parcel 2. Driveways longer than 400' shall have a turnout built near the driveway mid-point. The turnout for parcel 2 shall be at the curve in the drive. A turn-around will also be built at the end of the driveway near the new residence. (See TD Guideline)

One existing residence is on parcel 1. There is a new vineyard on this parcel as well as parcels 3 and 4.

Fuels are dense stands of oak and scattered open grasslands. Tree limbs, brush and pockets of poison oak are the major ladder fuels. Appendix B outlines the treatment of oaks.

The project is in a Moderate Fire Hazard Severity Zone. Implementation of Wildland-Urban Interface Fire Areas Building Standards will be required for the construction of new residences. These standards address roofing, venting, eave enclosure, windows, exterior doors, siding, and decking.

Clearance along the road and around structures is very important and necessary. Fire Safe specifications state that all trees in the fuel hazard reduction zones shall be thinned so the crowns are not touching. Branches on the remaining trees shall be pruned up 10 feet as measured on the uphill side of the tree. Brush shall be removed. Grass shall be kept mowed to a 2 inch stubble annually by June 1. Any tree crown canopy over the road or driveways shall be pruned at least 15 feet up from the roadway surface.

The fuel hazard reduction zone shall continue along both sides of the driveways and be at least 20' wide. This zone is in addition to the clearances required by state law. The State required Fire Safe clearances PRC 4291) shall be implemented around all structures (See CALFIRE Guidelines). <u>Clearances may be required at the time of construction by the County.</u>

More restrictive standards maybe applied by approving El Dorado County authorities. Approval of this plan does not guarantee approval of this project.

Mitigation Measures:

- All lots shall be landscaped to Firescaping Standards Zones I and II (Appendix A).
 - a. Responsibility- homeowner within one year of occupancy
- Driveways over 400 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. Driveways over 300 feet in length shall have a turn-around at the residence.
 - a. Responsibility- homeowner
- All homes shall have Class A listed roof and assembles and siding of fire resistant material.
 - a. Responsibility- homeowner
- Decks that are cantilevered over the natural slope shall be enclosed.
 a. Responsibility- homeowner (See Appendix C for guidelines)
- All lots shall have a 30 foot setback for buildings and accessory buildings or to all property lines which ever is less and a 30 foot setback from the center of the road.
 - a. Responsibility- builder

6. 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.

7. OTHER FIRE SAFE REQUIREMENTS

- A. 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.
- B. A copy of the Wildfire Fire Safe Plan shall be given to each new landowner within the development.
- C. Each new property owner prior to construction shall be required to contact El Dorado Community Development Agency/Building Division to have the residential fire sprinkler plan approved. All fire sprinkler systems shall be designed and installed by a licensed contractor.
- D. Road improvements and fire hydrants shall be completed prior to the filing of the final map or completion of a "Bonding and Completion Plan".
- E. 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.
- F. A legal entity (HOA) shall be created with authority for maintaining and enforcing all 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 and vegetation Fire Safe regulations and the maintenance of the fuel hazard reduction zones.
- G. The fire hydrant system shall meet the California Fire Code specifications to water volume, pressure and spacing.
- H. The homeowner/property owner is responsible for any future fire safe or building code changes adopted by the State or local authority.
- I. All driveways must be a minimum of 12 feet wide with a minimum of 15 feet of vertical clearance over the driveway and a 20 foot wide fuel treatment zone on both sides.
- J. All gates must be at least 2 feet wider than the driveway they gate. Gates must be set into the property a minimum of 30 feet from the edge of the roadway.

- K. Fuel treatment along public roads and driveways shall have all fuels within 20 feet of the shoulder of the roadway treated annually by June 1 (See Appendix B).
- L. The fuel hazard reduction zone along driveways may incorporate irrigated landscaping providing the planting is less than 24" in height and has low flammability.
- M. Clearance requirements may be required by El Dorado County at the time of construction.
- N. All roads 24 feet wide or less shall be posted "No Parking".
- O. Residential construction contractors may be required to submit a parking plan to El Dorado Hills Fire Department to insure off street parking during construction.
- P. Fencing adjacent to open space shall be constructed from nonflammable material.
- Q. The El Dorado Hills Fire Department Weed Abatement ordinance shall apply to any vacant lot.

E. Appendix

Appendix A

MIGIANELLA

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

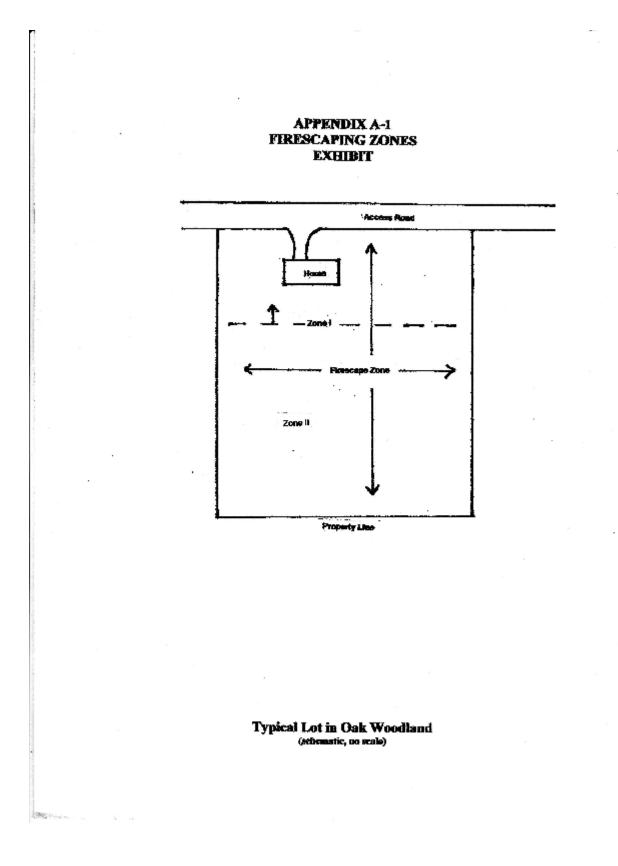
The zone extends to not less than 30 feet from <u>all structures **or to the property line**</u> in all directions and has a traditional look of irrigated shrubs, flowers gardens, trees and lawns. All dead trees, brush, concentrations of dead ground fuels (tree limbs, logs etc. exceeding 1 inch in diameter) 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. Gray pines shall be excluded from this area. 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 adds to Zone I and extends 70 feet or **to the property line** from all structures in all <u>directions</u> and is a transition area to the outlying vegetation. The zone is a band of low growing succulent 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 B MIGIANELLA 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 ladder fuels.

4. Prune all live trees of dead branches and green branches 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 a combination of treatments.

6. With 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.

7. Mistletoe needs to be pruned from oaks. Trees with over 50% mistletoe in the crown should be removed/replaced.

8. Gray pines, if left, must be isolated with nothing growing within their dripline.

9. Oak canopy over the driveways shall be thinned so that it is less than 50% canopy closure.

APPENDIX C

MIGIANELLA ENCLOSED DECK GUIDELINES

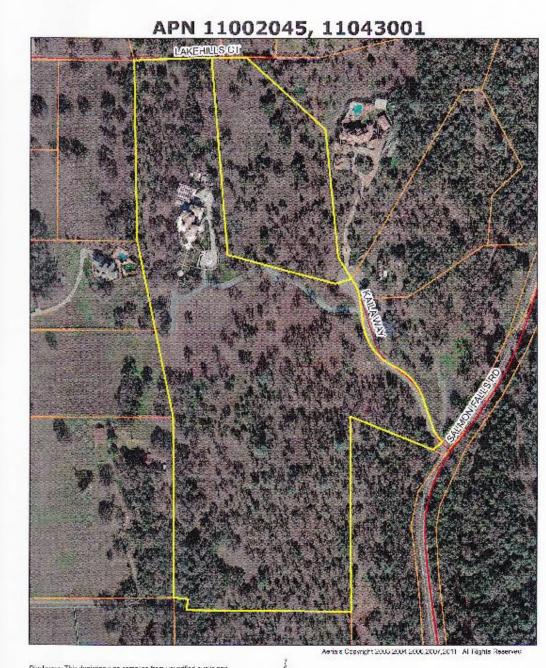
The purpose of enclosing decks that are cantilevered out over the natural slope is to help prevent heat traps and fire brands from a wildfire igniting the deck or fuels under the deck.

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

2. Any deck shall not include non fire rated composite deck material.

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

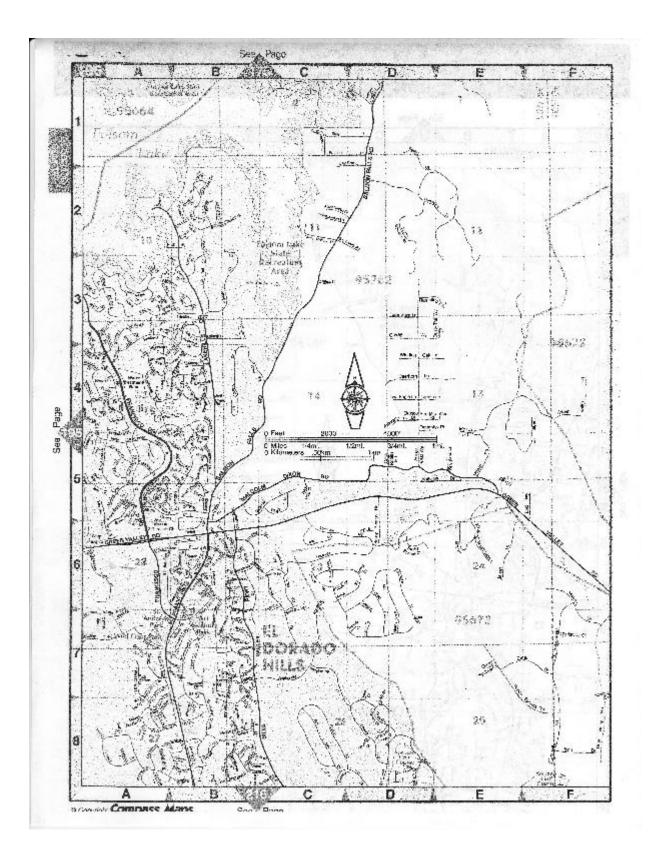
4. Combustible material must not be stored under the deck.

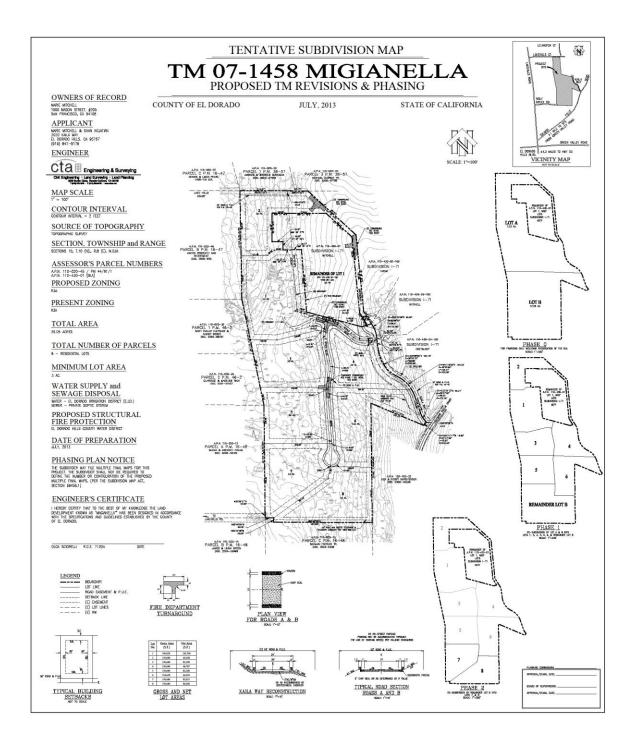


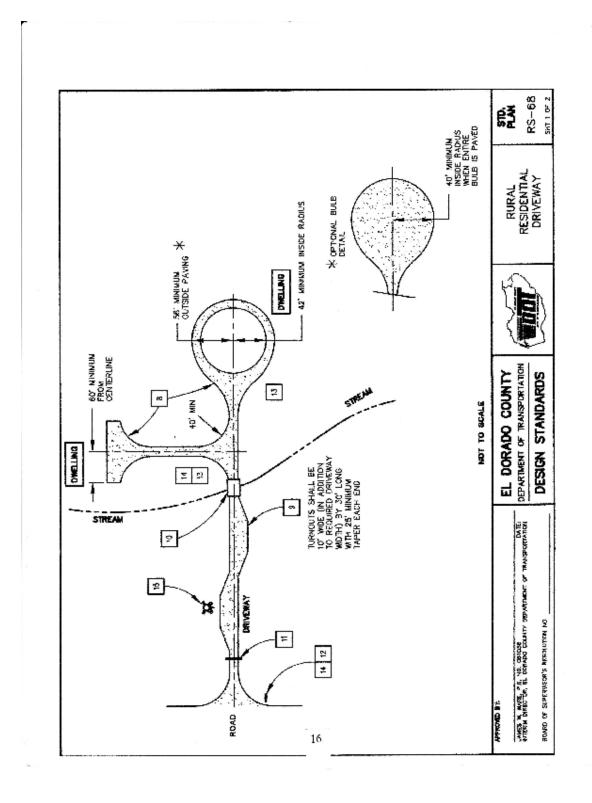
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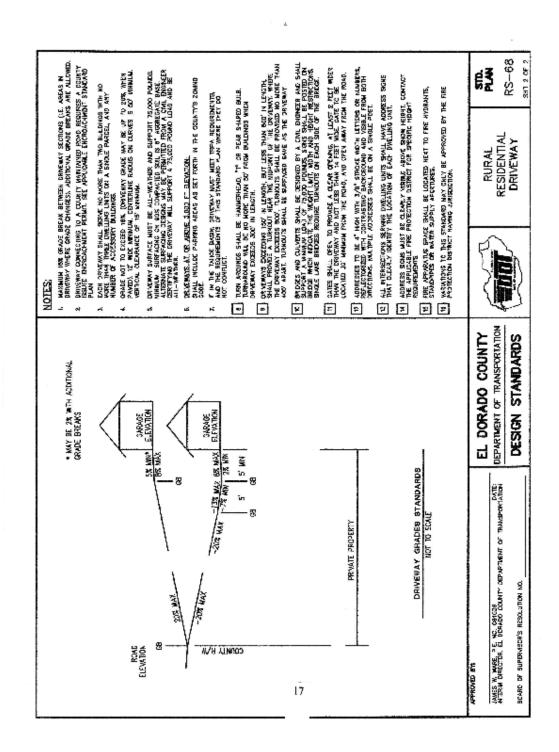
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Why 100 Feet?

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A Distancible Space of 109 feet around your home is required by tax.¹ The goal is to protect your hank white providing a safe area for thelighters.

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Spacing between plan is improves the chance of shopping a wirdline before it destroys your borne. You have less quirus to this erea:

Create horizontal and venisal spacing botwath piants. The amount of space will depend on how steep the stope is and the size of the plants.

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State of California Department of Forestry and Fire Protection

FIRE HAZARD INSPECTION

A representative from CAL FIRE has inspected your property for fire hazards. You are hereby notified to correct the violation(s) indicated below. Failure to correct these violations may result in a citation and fine.

Occupant:	Physical Address:		Phone #:				
Occupant Not Home: Occupant N 1ª Atiempt: J_J 2**Attempt	Inspection:	For Questions	ctor at: (Battalion #:			
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