

**Oak Trails
Parcel Split
APN 102-200-56**

Wildfire Fire Safe Plan

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Oak Trails
APN: 102-200-56

Plan Approved by:

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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 Oak Trails forty-two acre development and to identify measures to reduce these hazards and risks and protect the native vegetation. There are moderate fuel hazards and topography associated with this proposed development both on and adjacent to the project.

The possibility of large fires occurring when this 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 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 Oak Trails Parcel Map 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 development design. The Plan contains measures for providing and maintaining defensible space 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 Wildfire Fire Safe Plan for this 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. WILDFIRE FIRE SAFE PLAN

1. PROJECT DESCRIPTION

This forty-two acre parcel is located within the unincorporated community of Rescue on a generally west facing slope and east of Deer Valley Road. Sweetwater Creek cuts through the property. This project is splitting the acreage into four parcels and building a road to provide access to all the parcels. Each parcel is approximately 10+ acres in size. The property lies north of Green Valley Road and west of Starbuck Road. Access is from Deer Valley Road, approximately 1 mile from Green Valley Road. The key topographic features are moderate slopes with an oak overstory and Sweetwater Creek flowing through a portion of the project. Slopes range generally 15-30% with some steeper areas mostly along the creek.

Structural fire protection is provided by the Rescue Fire Protection District and wildland fire protection by the California Department of Forestry and Fire Protection (CDF). A private fire hydrant system will serve each new home. Lot 4 has an existing home and is not required to meet the fire sprinkler/hydrant requirements in this plan. This lot will be required to meet all clearance requirements in PRC 4291.

A fuel hazard reduction zone (FHRZ) shall be constructed and maintained annually along both sides of the road and each driveway. The zone along the road shall be a minimum of 20' on each side of the roadway. Each driveway shall have a 10' FHRZ along each side. The tree canopy over any roadway shall be pruned up 15' and the canopy closure must be less than 50%. This minimizes ladder fuels and allows emergency equipment safer access.

2. PROJECT VEGETATION (FUELS)

For wildfire planning purposes the vegetation is classified as follows:

- (a) ground fuels-chamise, manzanita, toyon, coffeeberry, blackberries, buckeye, poison oak, and annual grasses with scattered down trees and limbs
- (b) overstory- Gray pines, Ponderosa pines, Black oaks, Blue/White oaks and Liveoak
- (c) riparian-alders, grasses and forbes

The heaviest fuel loading is scattered throughout the property. Portions have been cleared of the ground fuels herein referred to as brush. There are a few down trees and many Gray pines. The problem of fuel laddering is very significant. Gray pines are extremely hazardous from a fire ignition and sudden deterioration. These trees and the large quantities of brush, liveoaks and blue oaks set up a highly flammable situation. The oaks have a light to heavy infestation of mistletoe. There is evidence of heart rot in the older oaks. The steep slopes and dense fuels along Sweetwater Creek will also increase the fire hazard.

3. PROBLEM STATEMENTS

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

Fire in the ground fuels on the slopes is the most serious wildfire problem for this project.

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

Wildfires rate of spread increases dramatically as slope increases. This project has moderate brushy 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 use 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 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. 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.

The Oak Trails parcel split is surrounded by rural residential area and Four Springs subdivision. Lots are planned to be about ten acres in size, and all are on slopes that vary from nearly flat to approximately 30%. Fuels are dense stands of brush with oaks and Gray pines scattered throughout. It is recommended that all Gray pines be eliminated due to their highly flammable properties. The brush understory needs thinning. Overstory trees need to be limbed up at least 8 feet above the ground. All the larger downed trees and limbs over 6 inches need to be disposed. Access will be a new road. It shall not be more than 2640 feet

to the turn-around. There will be driveways going off of the turn-around providing access to lot 2, 3 and 4. The driveway to lot 3 will be long and have turnouts every 400'. It will also be necessary for this lot to have a turn-around near the residence. The roads and structures must be 20 feet wide with 10 feet of brushed shoulders. The road surface must be all-season and capable of supporting a 40,000 pound emergency vehicle. The road gradient shall not exceed 12%. Tree canopy over the roadway must not be continuous and no more than 50% touching in the crown. There must be at least 15 feet of vertical clearance over the roadway where tree canopy exists. No roadside parking will be allowed. A bridge over Sweetwater Creek must meet El Dorado County Department of Transportation weight requirements.

A fire sprinkler/hydrant system meeting California Residential Building Code and Rescue Fire Protection District specifications shall be installed at each new residence. There will be a minimum of 4,250 gallons of water stored for fire protection and domestic use. Each fire hydrant must have a minimum of 20 pounds of pressure at the head. The water tanks shall be kept full and maintained by the individual residents. A turnout at each fire hydrant shall be installed (see Appendix D).

This project is within a Moderate/High Fire Hazard Severity Zone. Rescue Fire Protection District provides all fire and emergency medical services to this project. The California Department of Forestry and Fire Protection (CAL FIRE) has wildland fire responsibility in state responsibility areas (SRA).

A stream protection zone should extend for 50 feet on either side of Sweetwater Creek. This should be a natural area left undisturbed. Slopes along the creek are steep, 30-50%; it provides a buffer protecting water quality. Fire hazard reduction should occur outside this zone.

Mitigation Measures:

More restrictive standards may be applied by approving El Dorado County Authorities. Approval of this plan does not by itself guarantee approval of this project.

- **Lots over 1 acre shall be landscaped to Firescaping Standards Zones I and II (100 feet).**
 - a. **Responsibility- homeowner within one year of occupancy**
- **Driveways over 300 feet shall provide for a turnout near the midpoint of the driveway. Driveways over 800' in length shall have turnouts every 400'. Vertical clearance for the entire length of the driveway will be 15 feet.**
 - a. **Responsibility- homeowner**
- **Driveways over 150' in length shall have a turn-around at the residence within 150' but no closer than 50'.**
 - a. **Responsibility- homeowner**
- **All fuel hazard reduction zones shall be maintained annually by June 1.**
 - a. **Responsibility- HOA/homeowner**
- **All homes shall have Class A listed roof assembly.**
 - a. **Responsibility- homeowner**
- **Decks that are cantilevered over the natural slope shall be enclosed.**
 - a. **Responsibility- homeowner (See Appendix D 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. (See Item 6, page 7 with lots for setback exception)
 - 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.

All 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.
2. Setbacks will not be less than those required by El Dorado County Zoning Ordinance 17.28.040(D).
3. Rock outcroppings are part of the Firescaping.
4. Windows on the side(s) of the structure, less than 30 feet from a property line, shall have tempered glass with an approved fire resistant frame.
5. Doors on the side(s) of the structure, less than 30 feet from the property line, shall be self closing and one hour rated.
6. Rafter tails shall be enclosed with noncombustible material on the side(s) of the structure that is less than 30 feet from the property line.
7. Exterior wall sheathing shall be one hour rated noncombustible sheathing on the side(s) of the structure that is less than 30 feet from the property line.
8. Gutters and downspouts shall be noncombustible.
9. Attic and floor vents shall be covered with ¼ inch or less noncombustible mesh and horizontal to the ground.

Approval of this Plan by the CALFIRE and the Rescue Fire Protection District will constitute the approval of this Exception.

7. OTHER FIRE SAFE REQUIREMENTS

- A. Every 5 years the Fire Department may review open space areas with the legal entity for the development 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. Each residence on a well shall have a minimum of 4,250 gallons of water stored for domestic and fire protection usage. Water storage supply may need to be more than the minimum based on the square footage of the residence. Rescue Fire shall be consulted prior to construction to determine the actual tank size needed. The domestic well shall be the source of water supply for this system. Refer to the attached El Dorado County Water Supplies Standard for sizing.**
- E. 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 Fire Safe regulations.**
- F. The homeowner/property owner is responsible for any future fire safe or building code changes adopted by the State or local authority when a new building permit is issued.**
- G. Driveways over 15% grade shall be paved. Maximum driveway grade shall not exceed 20%.**
- H. All driveways must be a minimum of 12 feet wide.**
- I. All gates must be at least 2 feet wider than the driveway they gate and set in at least 30 feet from the road. A Knox lock system acceptable to Rescue Fire shall be used. (See attached gate policy)**
- J. Roadway must be posted "No Parking".**
- K. Vegetation on road shoulders shall be maintained annually by June 1 by the HOA/homeowners.**

F. Appendix

Appendix A

OAK TRAILS PARCEL MAP 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.

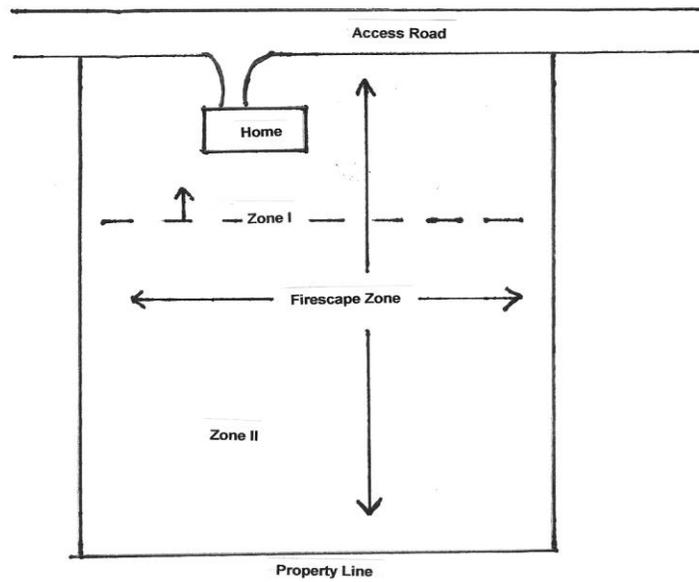
Zone I

The zone extends to not less than 50 feet from all structures **or to the property line** 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 except for Gray pines, 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 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 50 feet to Zone I and extends a minimum of 100 feet from all structures in all directions, **or to the property line** 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, dead 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 are preserved and pruned of limbs up to 8 feet above the ground as measured on the uphill side. Brush may be in isolated clumps free of tree canopy. Dead limbs must be pruned out. If Gray pines are to remain in this zone, they must be isolated from surrounding brush species by at least 10 feet on all sides of the pine.

**APPENDIX A-1
FIRESCAPING ZONES
EXHIBIT**



Typical Lot in Oak Woodland
(schematic, no scale)

APPENDIX B

OAK TRAILS PARCEL MAP FUEL TREATMENT SPECIFICATIONS For OAK WOODLAND VEGETATION

Within The Designated Fuel Treatment Areas

1. Leave all live trees **EXCEPT** Gray pines.
2. Remove all dead trees.
3. Remove all brush or leave small isolated clumps.
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. Mature, multi stem Live Oak trees: must have all dead limbs and stems removed, green stems cut off at 8 feet above the ground as measured on the uphill side that arch over and are growing towards the ground.
7. Gray pines in Zone II or farther out from structures must be isolated from any brush by at least 10 feet.

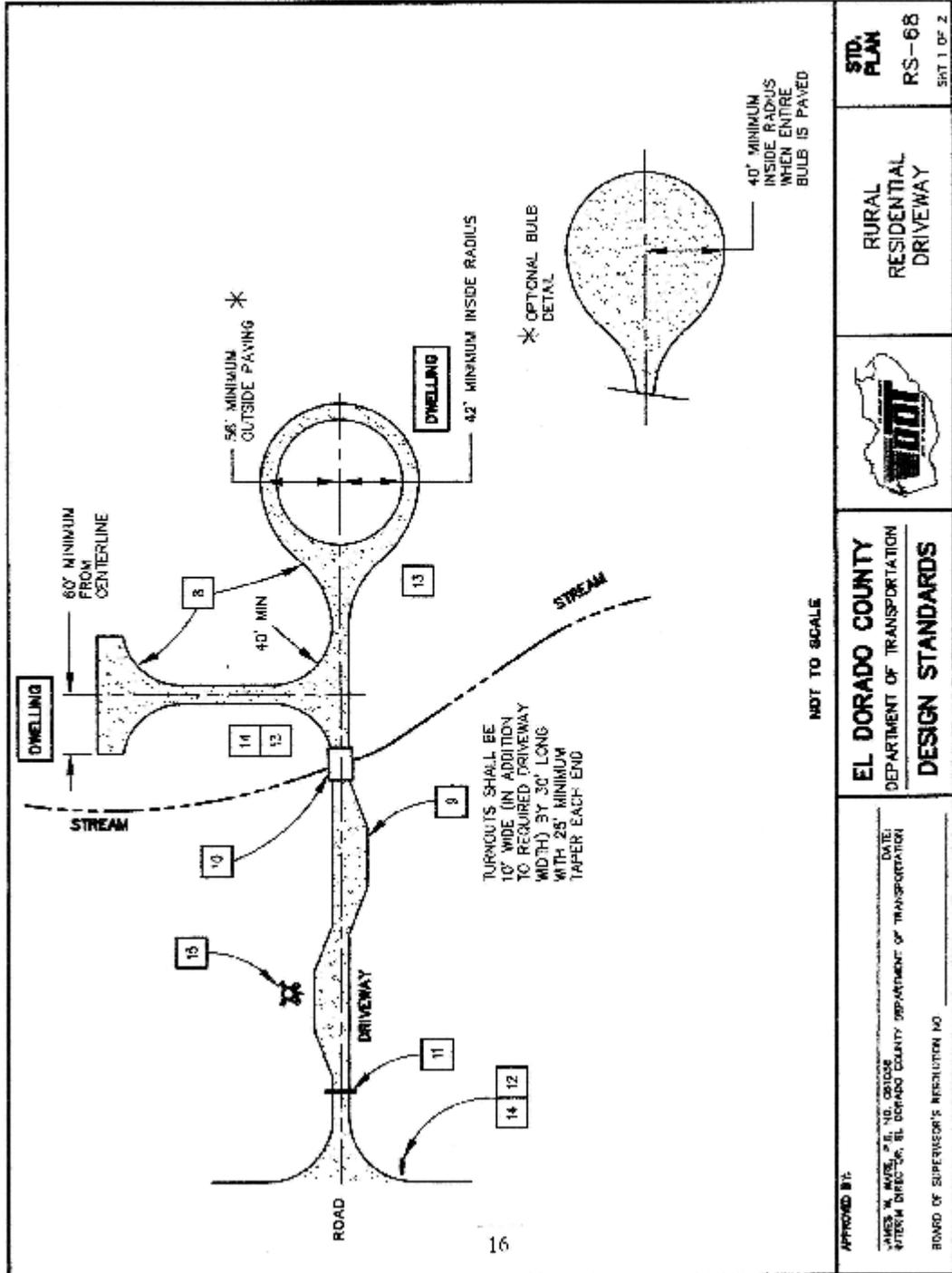
APPENDIX C

OAK TRAILS PARCEL MAP 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. This does not apply to decks that are constructed using fire resistant materials such as concrete, steel, stucco etc.
2. This applies to decks one story or less above natural slopes.
3. Combustible material must not be stored under the deck.

Appendix D



NOT TO SCALE

APPROVED BY: _____ JAMES M. WATSON, JR., P.E., DISTRICT ENGINEER EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION BOARD OF SUPERVISOR'S RESOLUTION NO. _____	EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS		RURAL RESIDENTIAL DRIVEWAY	STD. PLAN RS-6B SHT. 1 OF 2
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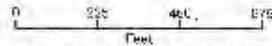
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Disclaimer: This depiction was compiled from unverified public and private sources and is illustrative only. No representation is made as to accuracy of this information. Parcel boundaries are particularly unreliable. Users make use of this depiction at their own risk.

Map of 10220056 from B.C. Code: Geographical Information



Map displayed in State Plane Coordinate System (NAD 1983 California Zone 2, foot)

El Dorado County Fire Prevention Standard
WATER SUPPLIES
RESIDENTIAL, WITHOUT A PURVEYOR
(Storage Tank and Piping)

SCOPE: This standard identifies minimum water supply requirements (fire sprinklers and fire fighting) for one and two family dwellings in rural and suburban areas in which an adequate reliable water supply does not exist.

TIMING OF INSTALLATION: Operable Fire Hydrants (water supply) and required access roads shall be provided prior to and during the time of combustible construction.

WATER PURVEYOR WATER SYSTEM: Projects located within a water purveyor's service area shall utilize the water purveyor's system for the most reliable water system. With the approval of the local Fire District, a water tank system may be used in lieu of the water purveyor's system.

DEFINITIONS

FIRE FLOW: The flow rate of a water supply, measured at 20 pounds per square inch (PSI) (137.9kPa) residual pressure that is available for firefighting. When water supply tanks are approved for use, the flow rate of a water supply may be at draft.

FIRE FLOW CALCULATION AREA: The total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of the building. This calculation will determine the square footage and in turn will determine the size of the water tank.

WATER PURVEYOR: A public utility, a mutual water company, a governmental body, or other entity, owning and operating a water system and holding a valid permit from the State Department of Public Health to purvey water (El Dorado County Irrigation District, Georgetown Divide Public Utility District, etc...).

HOSE STREAM ALLOWANCE: Water supply that is used for fire department personnel specifically for the purpose of suppressing a fire of any type.

SPRINKLER DEMAND- NEPA 13D: This standard shall cover the design and installation of automatic sprinkler systems for protection against fire hazards in one and two-family dwellings and manufactured homes.

DOMESTIC WATER SUPPLY: Water that is used for domestic consumption only.

I. TANKS:

- A. Storage Tanks shall be constructed in accordance with the American Water Works Association Standards (AWWA). Some examples could be;
- 1) Plastic Tanks for potable use with UV Protection
 - 2) Underground metal tanks that are protected against corrosion and lined
 - 3) Fiberglass tanks approved for potable use
 - 4) Above ground metal tanks that are corrosion protected and lined for potable use.

B. Location

- 1) Water tank(s) shall be located a minimum of 30 feet from the structure to be protected and a minimum of 10 feet from the property line. This will limit the water tanks exposure to a wildland fire. Where this is impractical, fire proofing of not less than two hours may be required. All combustible vegetation shall be cleared and maintained 30 feet around the tank, or to the property line, to prevent damage in a wildland fire.
- 2) Footings or foundational supports shall be required per tank manufacturer's specifications. The foundation around the outside edge of the tank shall be tapered away from the tank to avoid undermining from outside water runoff.
- 3) Water tanks 5,000 gallons and greater require a building permit and could require additional agency approvals.
- 4) Elevation of the tank floor shall not be more than 5 feet below the fire hydrant outlet.
- 5) Where topography allows, the water tank should be located as high of an elevation as possible to create the greatest amount of head pressure.
- 6) The water tanks may be located within a structure as long as the vegetation and setback requirements are met.

C. Venting

- 1) An air vent shall be located above the maximum water level. It shall have a cross sectional area at least equal to one half the area of the draft dwarf hydrant supply pipe or fill pipe, whichever is larger.
- 2) Screens and filters shall be installed to prevent animals and insects from entry into the vent pipe. The vent shall be installed so that the open end is facing downward to keep debris and litter from falling in. Filters must be on the inlet side.

D. Sight Gauge

- 1) A mechanical level indicator gauge board shall be furnished using a stainless steel float and tube. Recommended manufacturer is Varea or equal (the clear tube has a tendency to become obscure and is not allowed).

E. Automatic Fill

- 1) A suitable means shall be provided to automatically maintain the water level in the tank. The auto fill feature shall be set to the amount indicated on either Chart A or B. The water level shall not drop below the domestic water use level. It is optimum that the tank will completely refill within 8-10 hours.

F. Freeze Protection

- 1) All above ground water supply or discharge piping shall be designed to protect against freezing. If the tank installation is at an elevation greater than 5,000 feet, the tank water shall be protected against freezing.
- 2) Where anti-freeze protection is utilized (example- glycol in the sprinkler piping), a backflow prevention device that is approved by the Fire District shall be installed.

G. Tank Circulation

- 1) The water inlet and outlet shall be configured in such a way as to create water movement at all levels of the tank. This will prevent conformation or growth that would render the hose supply and the fire sprinkler water storage unreliable when used.

H. Multiple Buildings

1) Tanks may serve up to three separate buildings on the same parcel. Approval from the Fire District shall be obtained to serve more than one parcel off of one tank system. Reciprocal use and maintenance easements & agreements shall be recorded for each property being served by a single tank. See *Figure 3 and Appendix A for additional information and limitations.*

I. Large Buildings

1) Buildings greater than 10,000 square feet may be subject to additional design requirements as required by the Fire District.

2. CALCULATING TANK SIZE

Tank size shall be calculated using one the following 3 uses:

CASE	WATER TANK TO SUPPLY...	MINIMUM WATER SUPPLY REQUIRED
1.	Sprinklers, Domestic & Hose Stream	Use Table "A"
2.	Hose Stream Only	Use Table "B"
3.	Sprinklers & Domestic	Tank Size: 2,250 Gallons Auto Fill: 1,500 Gallons

3. CONNECTIONS TO THE TANK

Refer to *Figure 1* for all the connections to the water tank.

4. PIPING AND HYDRANT OUTLET REQUIREMENTS

- A. The hydrant outlet shall be no closer than 30 feet nor farther than 250 feet from the structure that is being protected.
- B. The hydrant outlet shall be visible and accessible within 5 foot of the driveway access road. A turnout shall be required per 2007 CFC, D103.1. Final location of the hydrant outlet and turnout shall be subject to Fire District approval. See *Figure 2 for hydrant outlet details.*
- C. A permanent sign, on a minimum of 1/8 inch metal, aluminum or painted steel shall be at the outlet which states the following: "DRAFTING FIRE HYDRANT" _____ Gallons. See *Figure 2 for sign details.*
- D. Hydrant
- 1) The outlet size shall be a 2 1/2 inch with male threads NST (also known as NH & NS). This size may be increased for larger applications.
 - 2) Threads must be protected with a threaded cap that is removable with a lugged hydrant wrench.
 - 3) Hydrant shall be painted red with a white bonnet and identified per *Figure 2* when static head pressure is less than 20 psi.
 - 4) Hydrant outlet shall be 18 to 24 inches above the finished grade. See *Figure 2*
 - 5) The hydrant outlet shall be located no more than 5 feet from the access road edge. This is to allow the use of a 10-foot long hard suction hose from the engine to the hydrant outlet. A turnout may be required so the access road will be passable when the engine is connected to

- the hydrant outlet. See Appendix D103.1, Min. Clearance around a hydrant, in the 2007 California Fire Code.
- 6) A blue reflective hydrant location marker (dot or paddle per Fire District) shall be provided along the access road.
 - 7) All exposed pipes, elbows, fill line and risers shall be steel and painted with a rust inhibiting paint or galvanized.

E. Piping

- 1) Size (minimum)
 - 1 1/2 inch for domestic and fire sprinkler supply.
 - 4 inch pipe from the water tank to the wharf hydrant.
 - 6 inch and above may be used to protect larger structures.
- 2) PVC may be allowed for horizontal runs when not subject to damage, I.E. vehicle traffic, etc. The pipe shall be a minimum of schedule 40.
 - 2 inch to 4 inch pipe, schedule 40
 - 6 inch and above - C900
- 3) All exposed pipes, elbows, fill line and risers shall be steel and painted with a rust inhibiting paint or galvanized.
- 4) The following applies to underground installations:
 - Steel pipe shall be coated and wrapped.
 - Steel pipe joints shall be field coated and wrapped after assembly.
 - After assembly, all metallic parts such as rods, nuts, bolts, washers, clamps, and other restraining devices, except thrust blocks, shall be cleaned and thoroughly coated with bituminous or other acceptable corrosion-retarding material.
- 5) Where above ground piping passes through an area subject to freezing, it shall be protected by a reliable means to maintain the temperature of the water in the piping between 40° F and 120° F.
- 6) Depth of cover shall be not less than 2 feet to prevent mechanical damage. Pipe under driveways shall be buried a minimum of 3 feet and under railroad tracks a minimum of 4 feet.
- 7) Any piping system with a head-pressure of 50 PSI or greater shall be provided with thrust blocks. Basically, any tank located 100' or more above the hydrant outlet will result in 50 psi or greater head-pressure at the hydrant. (0.5 psi per foot of elevation change).
- 8) A flexible connector shall be installed between the tank and the suction line. A flexible connector shall also be installed between tanks when more than one tank is connected together.

F. Vegetation, Snow and other obstructions shall be kept clear of fire apparatus access.

5. PLANS

- A. The size and location of the hydrant outlet, piping and storage tank shall be approved by the Fire District prior to installation.
- B. A minimum of two sealed site plans, including plan and profile view, shall be submitted to and approved by the Fire District. The plans shall include:
 - All structures; indicate square footage of each
 - Access roads; indicate width
 - Proposed tank size and location
 - Elevation view of the tank indicating point of connections to the tank relative to the structure to be protected
 - Proposed outlet size and location
 - Type, size and location of piping

- If the hydrant outlet is remote from the tank, the elevations (feet) of the tank and hydrant outlet shall be indicated. Tanks located 100 feet or more above the hydrant outlet will require thrust blocks for the piping.
- If plastic tanks are used, they must be UV rated and the manufactures listing specifications must be provided.

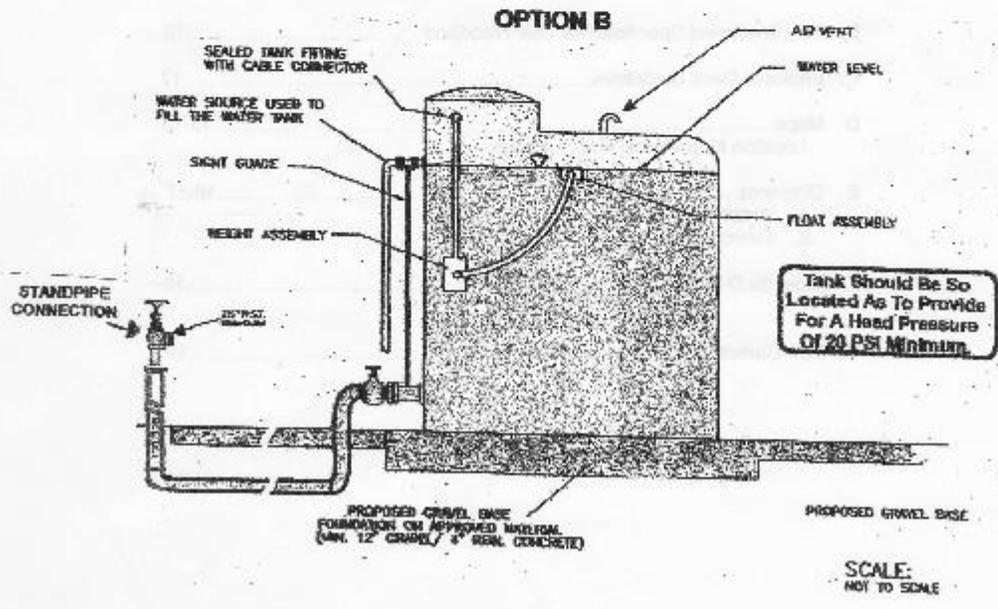
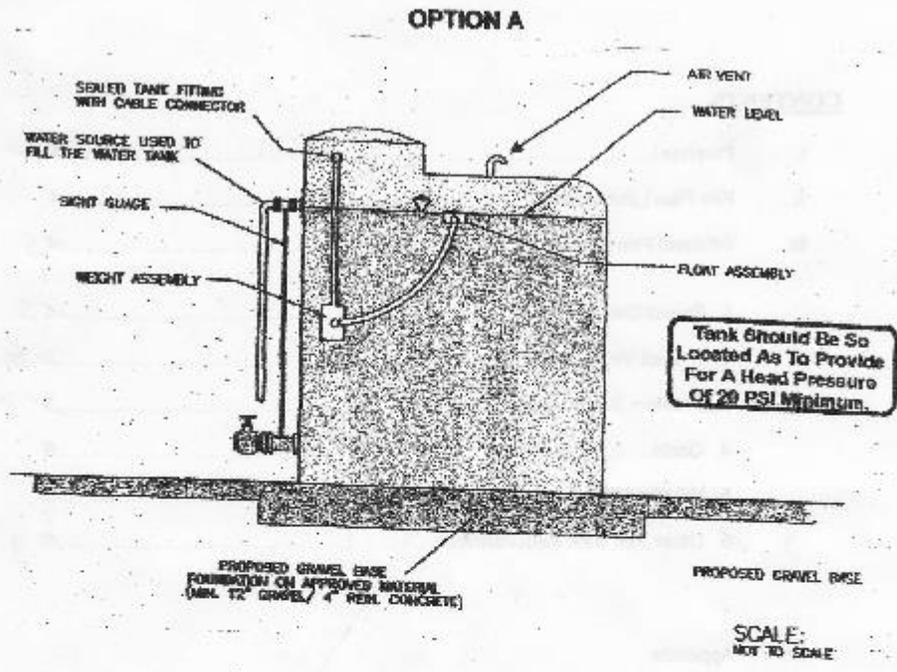
6. INSPECTIONS

- A. The following inspections by the Fire District are required:
- 1) Any below ground piping shall have a visual inspection prior to being covered.
 - 2) Installation shall be inspected prior to filling the tank
 - 3) Final installation shall include testing of the auto-fill

TABLE A

BUILDING SQUARE FOOTAGE	MINIMUM WATER SUPPLY REQUIRED (HOSE STREAM+SPRINKLERS +DOMESTIC) (GALLONS)	RESERVED FOR HOSE (GALLONS)	AUTO FILL LEVEL (GALLONS)*
Up to 2,800	4,250	2,000	3,500
2,800 – 3,500	4,750	2,500	4,000
3,501 – 4,200	5,250	3,000	4,500
4,201 – 4,900	5,750	3,500	5,000
4,901 – 5,600	6,250	4,000	5,500
5,601 – 6,300	6,750	4,500	6,000
6,301 – 7,000	7,250	5,000	6,500
7,001 – 7,700	7,750	5,500	7,000
7,701 – 8,400	8,250	6,000	7,500
8,401 – 9,100	8,750	6,500	8,000
9,101 – 10,000	9,250	7,000	8,500
10,001 – 10,500	9,750	7,500	9,000
10,501 – 11,200	10,250	8,000	9,500
11,201 – 11,900	10,750	8,500	10,000
11,901 – 12,100	11,250	9,000	10,500
12,101 – 12,800	11,750	9,500	11,000
12,801 – 13,500	12,250	10,000	11,500
13,501 – 14,200	12,750	10,500	12,000
14,201 – 14,900	13,250	11,000	12,500
14,901 – 15,600	13,750	11,500	13,000
15,601 – 16,300	14,250	12,000	13,500
16,301 – 17,000	14,750	12,500	14,000
17,001 – 17,700	15,250	13,000	14,500
17,701 – 18,400	15,750	13,500	15,000
18,401 – 19,100	16,250	14,000	15,500
19,101 – 19,800	16,750	14,500	16,000

* Auto fill shall be set so the amount of water indicated in this table is always available.





Rescue Fire Protection District

• P.O. Box 201 Rescue, CA 95672 • Phone: (530) 677-1868 • Fax: (530) 677-9609
www.rescuefiredepartment.org

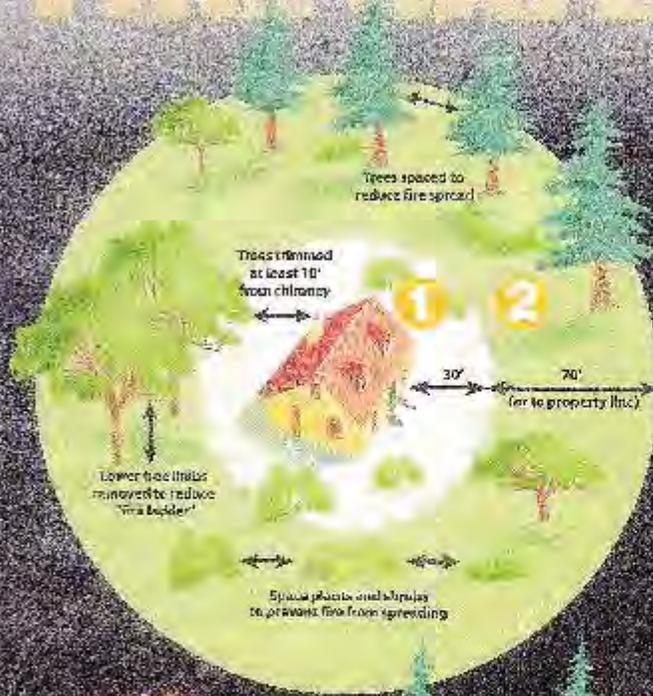
The Rescue Fire Protection District has adopted a policy regarding the installation and maintenance of driveway gates. We have put together a list of items that you must consider prior to any installation.

- All driveways must meet all current fire code requirements.
 - Gates shall be two feet wider than the required 12' driveway.
 - All automatic gates shall be equipped with a "Knox" key switch.*
 - All manual gates shall have a "Knox" padlock in series with the homeowner's lock.*
 - All automatic gates shall also be equipped with a receiver and transmitter with a minimum 25' range.
 - All automatic gates shall be equipped with a mechanical release.
 - A loop system shall be provided to keep the gate open as long as traffic is passing through the gate.
 - All automatic gates must reach the fully open position within a total time not to exceed one second for each one foot of width.
 - All automatic gates shall be designed to automatically open and remain in a fully opened position during power failures.
 - Gates creating a dead-end driveway in excess of 150' shall provide provisions for turning around fire apparatus.
 - No device may be used which will delay or prohibit either ingress or egress of emergency responders including, but not limited to, fixed tire spikes and speed bumps.
 - The total number of vehicle access control gates or systems through which emergency equipment must pass to reach any address shall not exceed one.
 - It is the homeowner's responsibility to check with the county planning department for any needed permits.
 - One set of plans for the installation of gates and fire department access shall be submitted and approved by the Rescue Fire Protection District prior to installation.
 - Gates and access control equipment shall not be placed into service prior to being inspected and tested by the Rescue Fire Protection District.
- * Applications for Knox key switches and padlocks can be obtained from the Fire District.

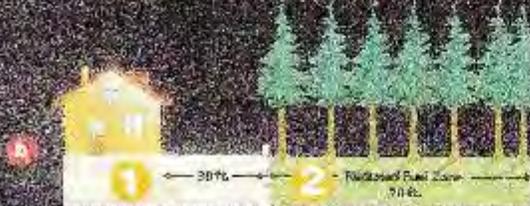
We are here to assist you with your project. If you have any questions, please feel free to contact our office.

CAL FIRE GUIDELINE

100' DEFENSIBLE SPACE MAKE YOUR HOME FIRE SAFE



or



Consult your local fire department for more information on fire safe landscaping.

www.fire.ca.gov

Why 100 Feet?

Following these guidelines can dramatically improve the chance of your home surviving a wildfire.

A Defensible Space of 100 feet around your home is required by law.¹ The goal is to protect your home while providing a safe area for firefighters.

1. Clear an area of 30 feet

Clearing an area of 30 feet immediately surrounding your home is critical. This area inspires the greatest reduction in flammable vegetation.

2. Clear an area of 70 feet

The fuel reduction over the remaining 70 feet (to property line) will depend on the steepness of your property and the vegetation.

Spacing between plants improves the chance of stopping a wildfire before it destroys your home. You have two options in this area:

1. Create horizontal and vertical spacing between plants. The amount of space will depend on how steep the slope is and the size of the plants.

2. Large trees do not have to be cut and removed as long as all of the plants below them are removed. This eliminates a vertical "fire ladder."

When cleaning vegetation, use care when operating equipment² such as lawnmowers. One stray spark may start a fire; a string trimmer is much safer.

Harvest all kind – up of needles and leaves from your roof and gutters. Keep tree limbs trimmed at least 10 feet from any chimneys and remove dead limbs that hang over your home or garage. The law also requires a screen over your chimney as tall as not more than 1/2 inch apart.

¹ These regulations apply to all of the grasslands and timber-covered watersheds in the State. Specific regulations or standards may have additional requirements. Some additional requirements may be required. Also, some additional requirements may be required for 100-foot and 30-foot zones. For more information, see the California Fire Safe Council website. ² For more information, see the California Fire Safe Council website. ³ For more information, see the California Fire Safe Council website. ⁴ For more information, see the California Fire Safe Council website. ⁵ For more information, see the California Fire Safe Council website.





State of California
Department of Forestry and Fire Protection

NOTICE OF 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 Not Home:	Refused Inspection:	For Questions, Contact Inspector at: ()		Battalion #:	
1 st Attempt: / /	2 nd Attempt: / /	Inspection: / /				
Roof Construction Combustible/Non-Combustible	Exterior Siding Combustible/Non-Combustible	Window Panes Single Pane/Double Pane	Flames Enclosed/Unenclosed	Decks or Porches Masonry/Composite/Wood	Location of Structure Flat Ground/Slope/Ridge Top	

- Violations:**
- Defensible Space Zone (within 30 feet of all structures or to property line):**
- 2 3 A. Remove leaves, needles or other vegetation on roofs, gutters, decks, porches and stairways etc. PRC §4291(a)(6)
 - 2 3 B. Remove all dead trees, shrubs or other plants adjacent to or overhanging buildings. PRC §4291(a)(5)
 - 2 3 C. Remove all dead or dying branches and stumps from trees, shrubs or other plants adjacent to or overhanging buildings. PRC §4291(a)(5)
 - 2 3 D. Remove all branches within 10 feet of any stovepipe or chimney outlet. PRC §4291(a)(4)
 - 2 3 E. Remove all dead or dying grass, leaves, needles or other vegetation. PRC §4291(a)(f)
 - 2 3 F. Remove or isolate live flammable ground cover and shrubs (i.e. Bear Clover, Mountain Misery, Juniper etc.). PRC §4291(a)(1)
- Reduced Fuel Zone (within 30 - 100 feet of all structures or to property line):**
- 2 3 G. Mow dead or dying grass to a maximum of 4 inches in height. Trimmings may remain on the ground. PRC §4291(a)(1)
 - 2 3 H. Live flammable ground cover less than 18 inches in height (i.e. Mountain Misery, Bear Clover etc.) may remain, but overhanging and adjacent trees must be pruned up to 15 feet. PRC §4291(a)(1)
 - 2 3 I. Reduce fuels in accordance with the Continuous Tree Canopy Standard (see back). PRC §4291(a)(1)
 - 2 3 J. Reduce fuels in accordance with the Horizontal Spacing Standard (see back). PRC §4291(a)(1)
- Defensible and Reduced Fuel Zone (within 100 feet of all structures or to property line):**
- 2 3 K. Logs or stumps embedded in the soil must be removed or isolated from structures and other vegetation. PRC §4291(a)(1)
 - 2 3 L. Remove all dead or dying brush, trees and branches within 15 feet of the ground. PRC §4291(a)(1)
- Other Requirements:**
- 2 3 M. Clear dead, dying or flammable vegetation within 10 feet around and above propane tanks. CFC §3807.3
 - 2 3 N. Address numbers shall be displayed in contrasting colors (4" Min. Size) and readable from the street or access road. CFC §505.1
- Other Recommendations:**
- Cover all chimney or stovepipe openings with a metal screen having openings no larger than 1/2 inch.
 - Clear 10 feet around and 15 feet above fuels (i.e. Woodpiles, lumber, scrap etc.). Move woodpiles as far as possible from structures.
 - Remove flammable materials stored under decks and similar overhangs of structures.
 - Clear vegetation 10 feet from sides and 15 feet above all driveways and turnaround areas.
- Comments:**
-
-
-
-
-
-
-
-
-
-

Additional Information on Back

Complete only if occupant contacted

1. Inspector: _____	Date: / /	A re-inspection will occur on/after: / /
2. Inspector: _____	Date: / /	A re-inspection will occur on/after: / /
3. Inspector: _____	Date: / /	

AEU 02/09

(White-Inspector, Canary-1st to Occupant, Pink-2nd to Occupant, Gold-3rd to Occupant)