

# ORINDA

## Hillside & Ridgeline DESIGN GUIDELINES

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**ORINDA**  
**Hillside & Ridgeline**  
**DESIGN GUIDELINES**

Resolution No. 7-88

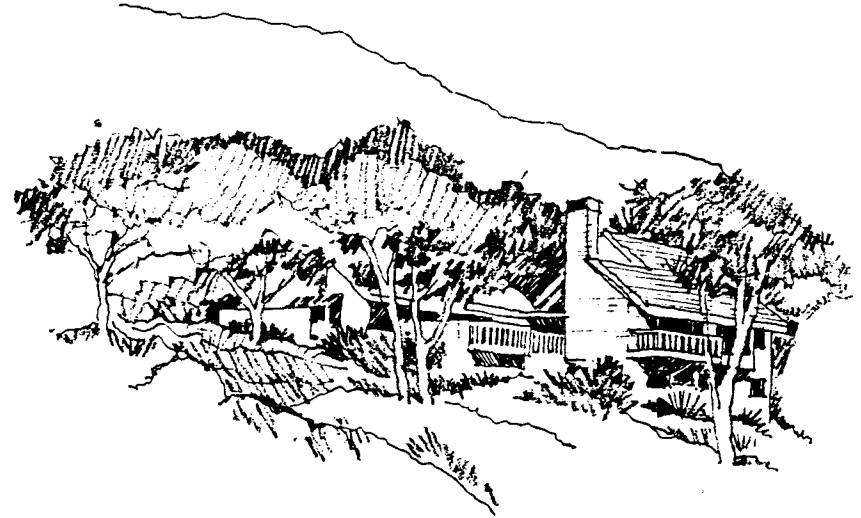
## INTRODUCTION:

Orinda is situated in an area of secluded valleys and hills surrounded by a distinctive backdrop of larger hills. A pronounced natural accent is created by heavy mature tree growth and open meadows on the hills, and relatively undisturbed creeks extending through the valleys. Beneath the cover of trees, large lot home sites served by rural streets have developed over the years. These primary identifying features blend to create a unique semi-rural small town atmosphere which the community desires to preserve and enhance.

## PURPOSE:

The purpose of this booklet is to communicate to future designers of hillside and ridgeline homes the kind of character and environmental sensitivity that the community wishes to achieve. In addition to being used by designers, the policies contained in this guide will be used by the City for evaluating projects. It is intended that this will improve communications between the community and designers to avoid the kind of misunderstandings that result in unnecessary plan modifications and time loss. Designs for additions to buildings and infrastructure in hillside and ridgeline areas should also conform to these guidelines.

The policies in this booklet are intended to guide safe, functional, attractive and environmentally sensitive development but not necessarily to regulate with the same effect as an ordinance. The policies are further intended to provide direction for "fitting" homes into the Orinda setting and not to act as specific engineering solutions.

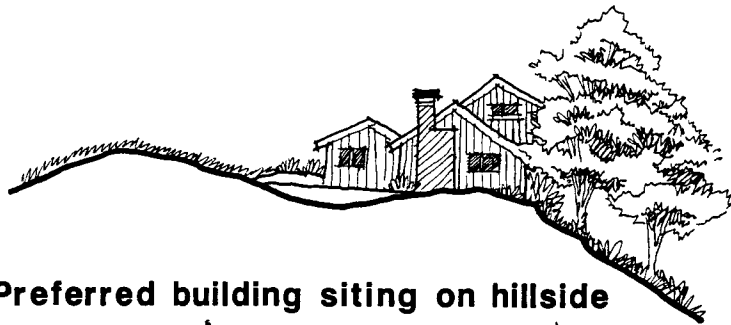


**Architecture well integrated into its hillside environment.**

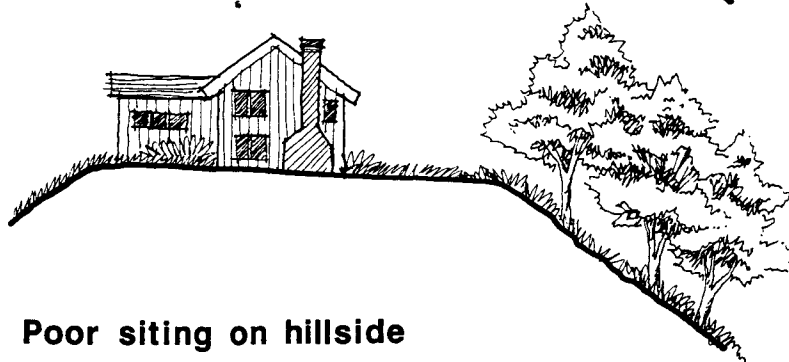
By applying these guidelines and approving development of private property, the City makes no representation regarding soils, drainage or other engineering solutions on a particular parcel. The City disclaims any liability for damage to property which results from development.

## BUILDING SITING:

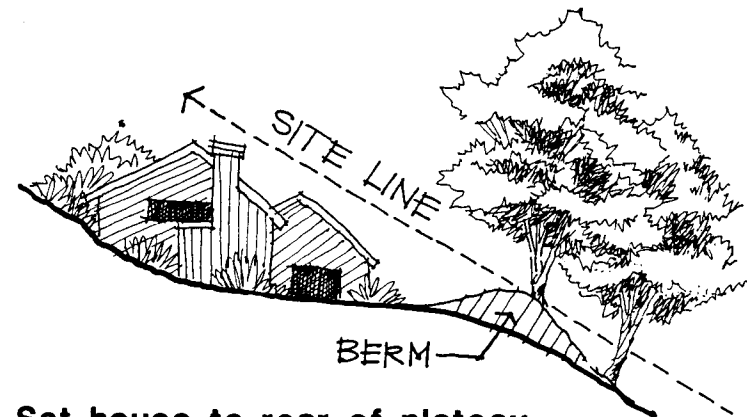
- Significant ridgelines and open hillsides should be retained in as near a natural state as practical.
- Buildings, roads, driveways and other improvements should be sited in locations which are the least visible from outlying areas in order to protect the existing natural scenic qualities of the community. Concrete paving used in visible areas should be tinted to diminish the visual impact.
- The visual prominence of development should be minimized by taking advantage of existing site features for screening such as tree clusters, depressions in topography, setback hillside plateau areas and other natural features.
- Improvements should be sited away from creeks to enhance safety and to protect existing drainage patterns, riparian vegetation and wildlife.
- House siting should pay careful consideration to preserving outlying views from existing neighboring residences.
- Satellite antenna dishes and other antennas and accessory structures should be substantially screened from outlying areas and should be limited in height. Where cable TV is available, television antennas are discouraged. Where applicable, antennas must comply with the Orinda Satellite Antenna Ordinance.
- Builders should meet with neighboring property owners in advance of developing site plans for the purpose of resolving potential concerns relative to soils, storm drainage, setbacks, building height, view preservation and other planning and engineering related matters.



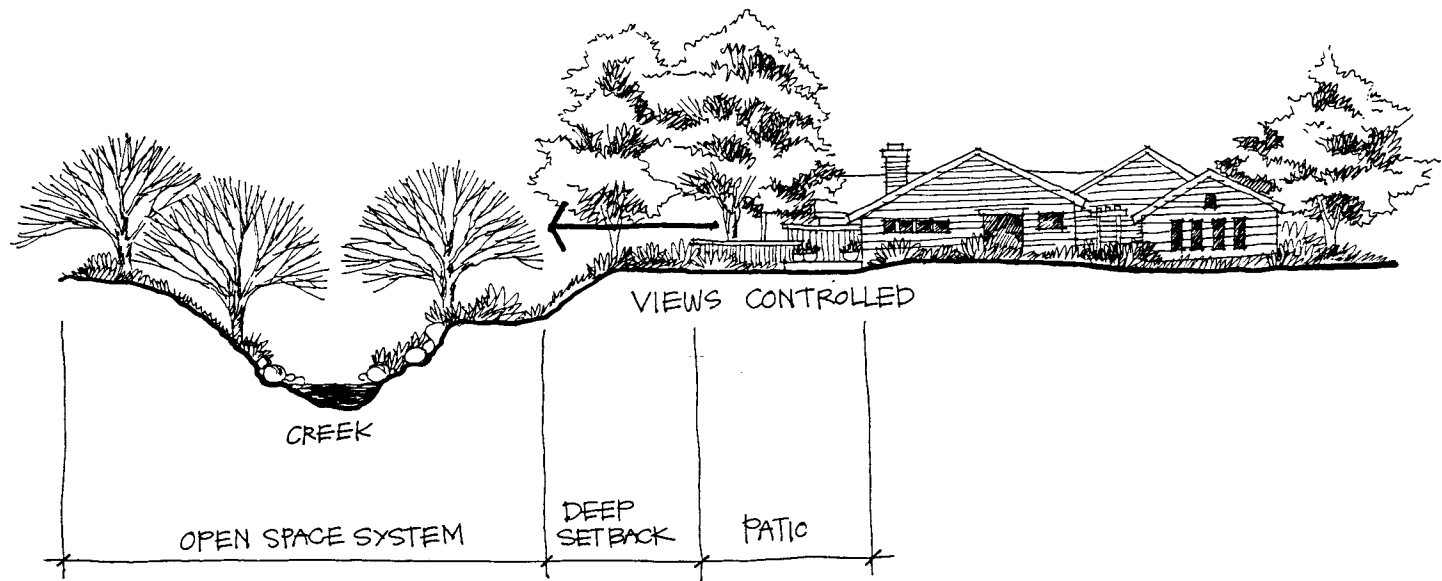
**Preferred building siting on hillside**



**Poor siting on hillside**



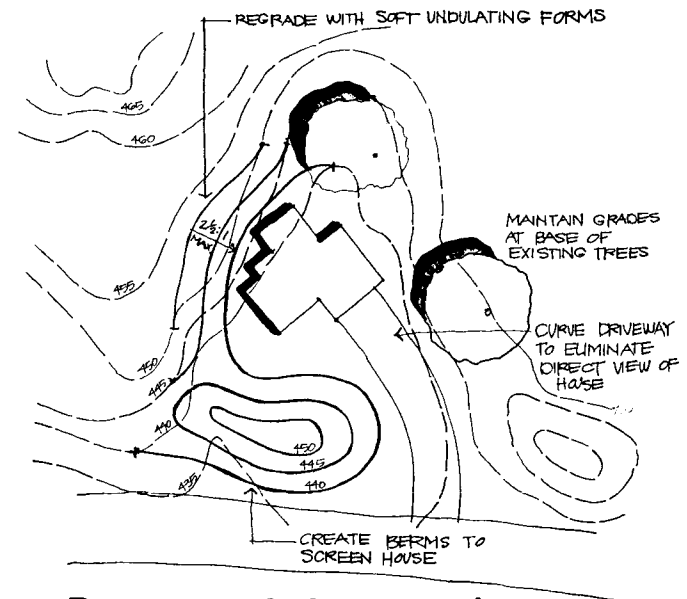
**Set house to rear of plateau,  
create berm to screen building.**



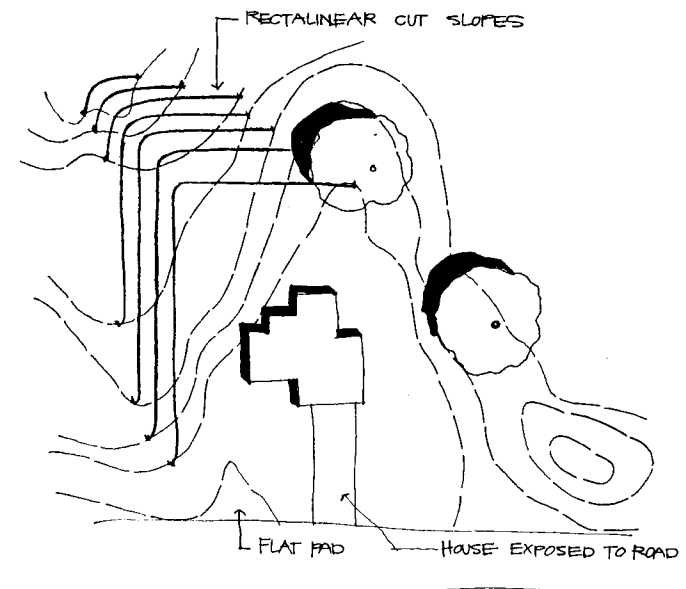
**Homes backing up to an open creek area.**

## GRADING

- Every effort should be made to retain existing natural land features such as ridgelines, knolls, trees, shrubs, meadows, rock outcroppings, drainage courses, etc.
- Grading for houses, driveways, outdoor use areas, underground utilities, etc. should be compatible with existing topographic contours and minimized to preserve the natural topography of the site.
- The visual impact of grading should be minimized by avoiding flat graded planes and sharp angles of intersection. Graded slopes should be rounded and naturally contoured to blend with the existing topography.
- Cut slopes should generally occur behind the buildings where they will be screened.
- Graded slopes steeper than 2-1/2:1 are generally discouraged, except for roadways and driveways where slopes greater than 2:1 are discouraged.
- The use and height of retaining walls should be minimized.
- Where hilltop development cannot be avoided, mounding and tree planting around developed areas are generally encouraged to provide screening.
- Large flat pad grading for tennis courts, swimming pools and other recreation facilities on steep hillsides is discouraged.



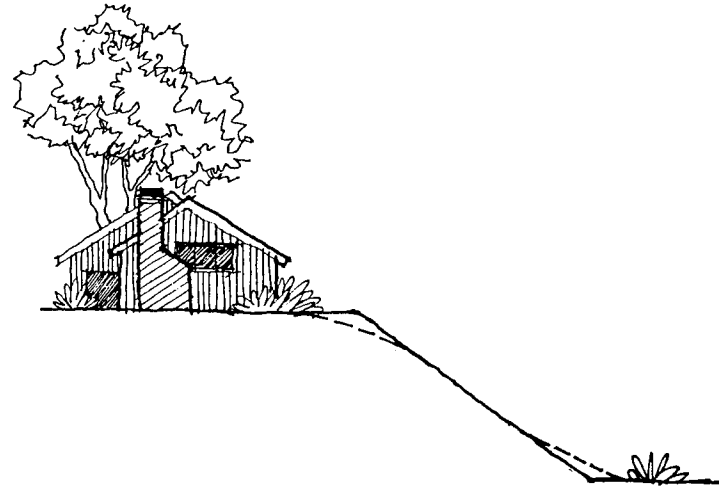
**Recommended approach**



**Avoid this treatment**

## **GEOLOGICAL HAZARDS:**

- Construction should not take place in geologic hazard areas identified as landslides, springs or earthquake fault zones.
- Risk of off-site geologic property damage should be minimized by locating development away from areas which are vulnerable to slope failure.
- Professional evaluation of soil conditions and potential geologic hazards should be completed for all new homes.



**Create rounded natural contours**

## **DRAINAGE:**

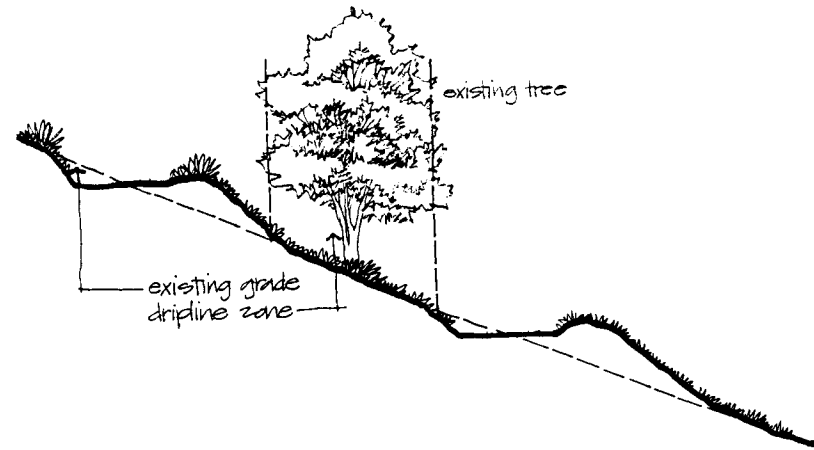
- Storm water should be collected and conveyed to off-site systems in a manner which will avoid erosion and damage to on-site and adjacent properties.
- Where storm drainage improvements are necessary, they should be designed to create a natural rather than man-made appearance.
- On-site areas of impervious surfaces should be minimized to reduce run-off.
- Storm water from building roofs should be collected and conveyed to a comprehensive site drainage system.
- When off-site storm drainage impacts are anticipated, hydrology plans should be developed with input from neighboring property owners and submitted to the City with the proposed site development plans.



**Appropriate lot grading on ridge**

## EROSION CONTROL:

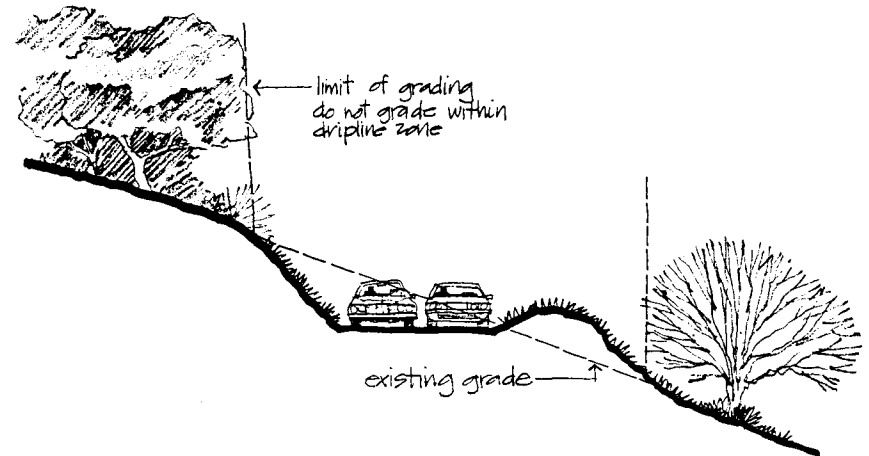
- Where applicable, grading plans should include erosion control and revegetation programs. Where erosion potential exists, hydro-seeding, silt traps, or other engineering solutions may be required.
- The timing of grading and construction should be controlled to avoid failure during construction. Detention basins and other storm and erosion control facilities may be required.



## ROADS AND DRIVEWAYS:

- Hillside street design should reflect rural rather than urban street standards.
- All private drives and parking areas should be surfaced with City approved asphaltic/concrete or concrete paving.
- Whenever possible, roads and driveways should be constructed parallel to existing topographic contours and, if necessary, split in order to reduce the area of cut on hillsides or to preserve trees or other significant features.
- Street lighting is generally discouraged, as it is throughout the City. Exterior residential lighting in hillside and ridgeline areas should be unobtrusive and designed to reflect the natural surroundings.

**Split roadways on hillsides where appropriate.**



**Roadway development on hillsides.**



## UTILITIES:

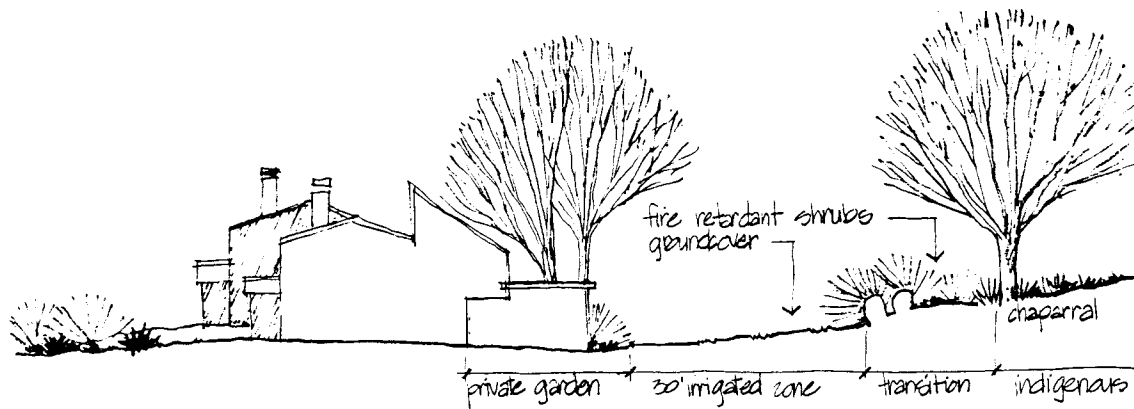
- All new utility lines should be installed underground.
- Utility trench locations should be carefully studied to avoid damage to existing trees and other vegetation, drainage patterns and topography. Boring under existing roads rather than excavating is strongly encouraged.
- The Sanitary District's policy is to locate proposed public sewers in streets if at all possible. Additional procedures and design standards for sanitary sewers located in hillside and creek areas are available from the Contra Costa Sanitary District.

## FIRE HAZARDS:

- In areas of extreme fire hazard, development should be served with paved access roads and nearby turn-around space adequate for safe and convenient emergency vehicle maneuvering, sufficient fire fighting water supply and pressure, fire retardant roofing, indoor fire sprinklers and setbacks or clear zones to allow for fire breaks.
- Stilt construction and unenclosed eaves and attic vents should be avoided in fire hazard areas.

## ENVIRONMENTAL PRESERVATION:

- Consideration should be given to the application of scenic easements where appropriate when construction of a new residence is involved.



Typical fire control section.

## ARCHITECTURE:

- Building form should be designed to conform to the site topography. This should be accomplished by stepping the building down the hillside instead of designing flatland homes for hillside settings.
- Pier and grade beam foundations are often encouraged to minimize disturbance to the natural grade and avoid retaining walls.
- Building height, bulk and size should respond to parcel size, site terrain and site constraints. Buildings should be designed to minimize visual height and bulk. Wall recesses and projections, roof overhangs, decks and other features which enhance the play of light and shadows are encouraged to reduce bulk and add interest.
- Building feature proportions (i.e., doors, windows, entries, roof structure, wall massing, etc.) should be carefully balanced.
- Multi-story homes are generally not considered appropriate for ridge lots.
- The first floor level height above natural grade should be minimized to reduce the overall building height.
- Roof forms and roof lines should be broken by a series of levels and pitches to reflect the irregular forms of the surrounding natural features. Long linear unbroken roof lines are discouraged.
- Vertical building lines should generally be minimized to reduce visual height. Horizontal wood lap siding is encouraged.

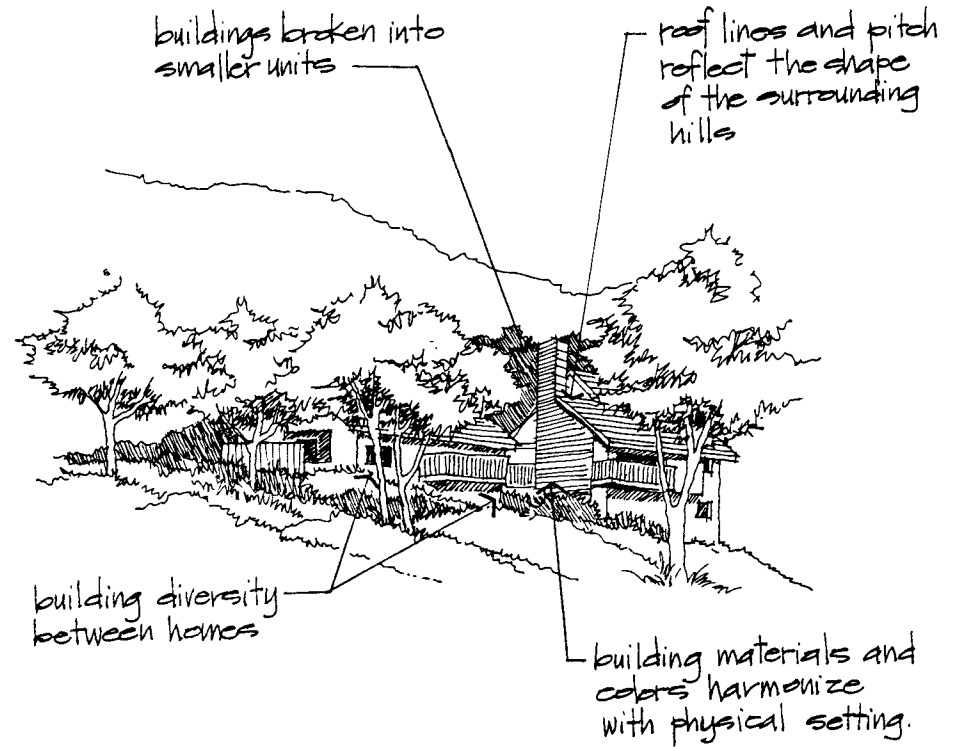


**Step building to conform to site topography**



**Break roof lines and forms to reflect the irregular forms of the surroundings.**

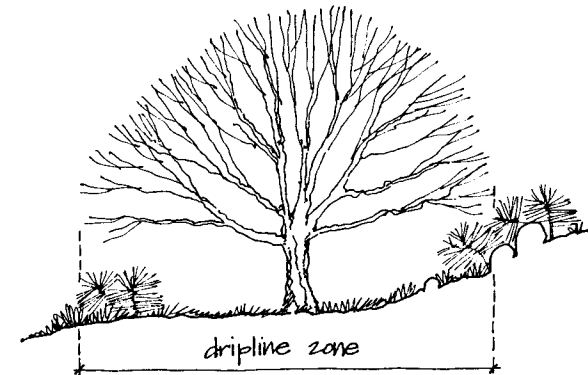
- The use of building siding should be consistent on all exterior building walls. Side and rear wall siding should match the front wall.
- Natural, not simulated, building siding should be used to compliment the natural environment. Hardboard siding (e.g., composition board siding) is discouraged.
- Medium earthtone building colors are encouraged which compliment the surrounding natural setting. Roof colors should tend toward darker earthtones. Dark colors will generally be less conspicuous when viewed from a distance.



## LANDSCAPING:

- Existing trees should be preserved whenever feasible. Grading under tree driplines (including trenching for utilities) should be avoided whenever possible.
- Drainage patterns around existing trees should remain undisturbed in order to ensure preservation of the trees.
- Existing native vegetation (including grassy open spaces) should be preserved and the planting of new native materials is encouraged. Non-native plant materials should be compatible with the natural setting and confined to the immediate vicinity of the home.
- Fifteen gallon minimum sized staked trees should be planted to screen the view of hillside developments from outlying areas.
- Trees should be planted in random clusters, not in rows, to compliment the natural pattern of tree placement. Row planting of trees along property lines, roads, etc. is discouraged.
- Solid board screening fences are encouraged only when located in close proximity to the residence. Site perimeter and other outlying fencing should remain visually open (i.e., split rail or wire) in order to minimize the visual "ribbon-like" effect of fencing on the hillsides. Chain-link fencing in residential areas is discouraged, except for tennis court fencing.
- Landscaping should be adequately installed and distributed around structures to provide screening from substantial off-site views.

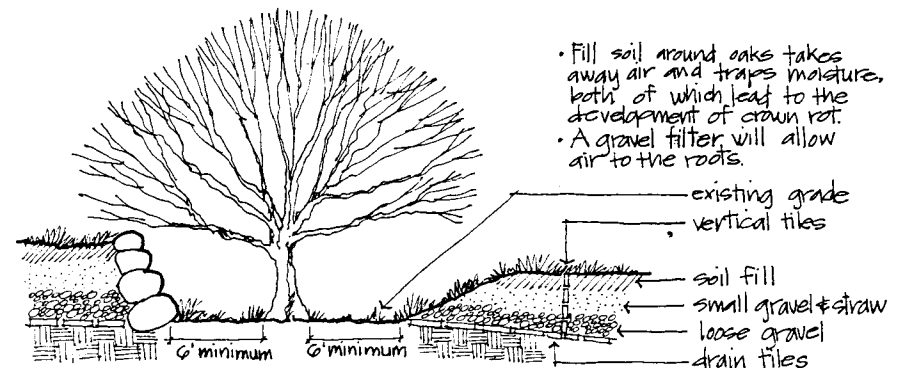
- Spacing of plant material should be adequate to provide infill within 18 months.



The oak tree is very intolerant of any disturbance to its root system.

- maintain existing drainage
- avoid compaction within dripline zone
- plant only drought tolerant species within dripline

### Typical oak tree preservation.



An appropriate response when fill is necessary in the dripline zone of an oak.

- The following varieties of plant materials are encouraged:

### **Native Trees:**

Quercus Lobata/Valley Oak  
 Quercus Kelloggii/California Black Oak  
 Quercus Douglasii/Blue Oak  
 Aesculus Californica/California Buckeye  
 Acer Macrophyllum/Big Leaf Maple  
 Acer Negundo/Box Elder  
 Platanus Racemosa/California Sycamore

### **Suggested Compatible Trees:**

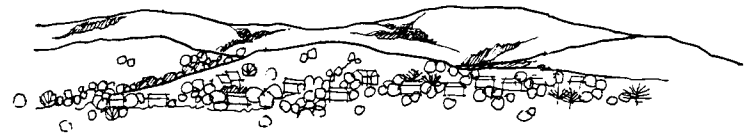
Quercus Species/Oak Species  
 Pyrus Kawakamii/Evergreen Pear  
 Pyrus Calleryana/Bradford Pear  
 Cercis Occidentalis/Western Redbud  
 Alnus Rhombifolia/White Alder  
 Alnus Cordata/Italian Alder  
 Celtis Sinensis/Chinese Hackberry  
 Pistacia Chinensis/Chinese Pistachio  
 Platanus Acerifolia/London Plane Tree  
 Fraxinus Species/Ash  
 Sequoia Sempervierns/Redwood

### **Native Shrubs:**

Baccharis Pilularis/Coyote Brush  
 Arctostaphylos Species/Manzanita Species  
 Ceanothus Species/Wild Lilac  
 Cistus Species/Rock Rose  
 Rhamnus Californica/Coffeeberry  
 Heteromeles Arbutifolia/Toyon  
 Cercis Canadensis/Eastern Redbud  
 Ribes Sanguineum/Red Flowering Currant  
 Myrica Californica/Pacific Wax Myrtle  
 Rhus Integrifolia/Lemonade Berry  
 Rhus Ovata/Sugar Bush  
 Mahonia Species



**Boundary and road edge tree planting conflicts with topography and native vegetation.**



**Random planting or rounded tree forms arranged in groupings reflect topography and native tree patterns.**

### **Suggested Compatible Shrubs:**

Erica Species/Heather  
Nerium Oleander/Oleander  
Salvia/Artemisia/Sage  
Euryops Pectinatus/Euryops  
Pittosporum Species/Mock Orange  
Lantana Species/Lantana  
Ligustrum Japonicum/Japanese Privet  
Myrtus Communis/True Myrtle  
Pittosporum Tobira/Tobira  
Spiraea Species/Spiraea  
Viburnum Species/Viburnum  
Westringia Rosmariniformis/Westringia  
Photinia Fraseri/Photinia

- The following varieties of fire-retardant ground cover are encouraged in fire hazard areas:

Baccharis Pilularis, Prostratus/Prostrate  
Coyote Bush  
Hedera Helix/English Ivy  
Helianthemum Nummularium/Sunrose  
Rosmarinus Officinalis, Prostratus/Dwarf  
Rosemary

- The following varieties of riparian plant materials are encouraged in riparian areas:

### **Suggested Riparian Trees:**

Acer Macrophyllum/Big Leaf Maple  
Alnus Cordata/Italian Alder  
Aesculus Californica/Buckeye

### **Suggested Riparian Shrubs:**

Acer Circinatum/Vine Maple  
Ribes Sanguineum/Winter Currant  
Geijera Parviflora/Australian Willow

### **Suggested Riparian Groundcovers:**

Wild Flowers  
Parthenocissus Tricuspidata/Boston Ivy  
Vinca Major/Periwinkle  
Hedera Helix "Hahn's"/Hahn's Ivy  
Vinca Minor/Dwarf Periwinkle