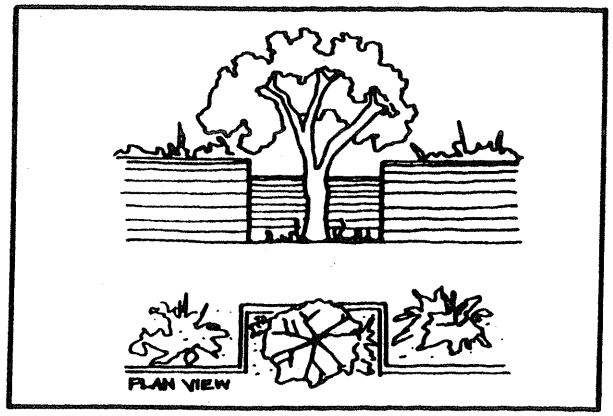

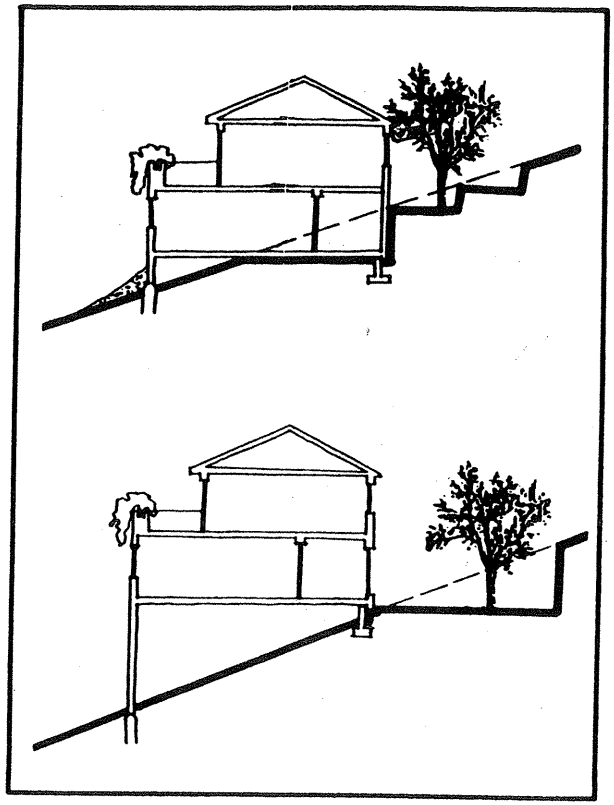

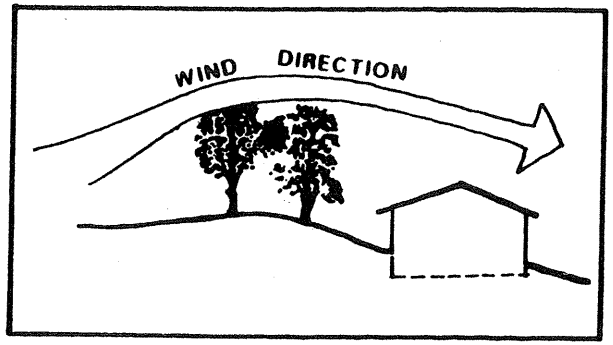

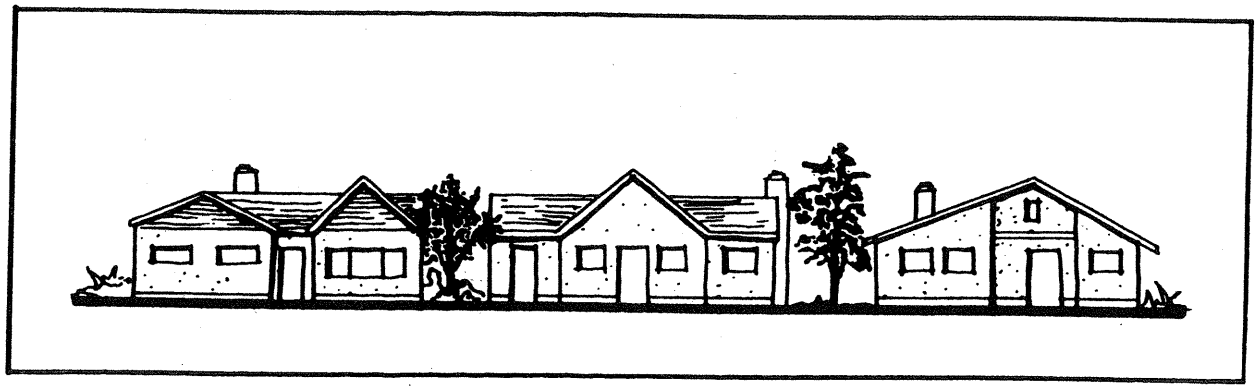

RESIDENTIAL DESIGN HANDBOOK

CITY OF SCOTTS VALLEY

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PREFACE

Scotts Valley is endowed with significant natural beauty in the hillsides, and continues to experience growth pressures because of its climate and location. The protection of views, both from the hillsides to the valley and from the valley floor to the hillsides, is an important part of Scotts Valley's physical development.

The General Plan recognizes the importance of blending development with the area's natural scenic qualities and promotes the development of a quality, small-town character in Scotts Valley. The goal of the General Plan is to create a community characterized as a park-like setting within which quality development, open space, extensive landscaping, and attractive streetscapes are provided. This goal is emphasized through adopted policies and programs in each of the General Plan Elements and through the regulations of the Zoning Ordinance. The specific regulations for development of the hillsides appear as Chapter 17.40 of the City Code. This Handbook has been prepared to assist in the implementation of those regulations.

The purpose of this Handbook is to guide the homeowner, architect, developer and builder in designing residential structures for the hillsides that will be harmonious with the existing fabric of Scotts Valley. The Handbook also serves as a guide for the City Council, Planning Commission and City staff in the review process. The design policies and implementation techniques set forth in the Handbook are not meant to discourage unique and inventive design solutions; rather, they embody the intent of the criteria that is used in reviewing hillside development, and serve as a basis on which decision-making bodies make their design-related decisions. All of the policies and implementation measures in this Handbook are interrelated. The repetition of certain key concepts emphasize their importance.

This Handbook is organized into two sections. The first section outlines the broad hillside residential design policies for Scotts Valley. Each policy is defined briefly, followed by design techniques that can be used to achieve the intent of the policy. Sketches and renderings are used throughout this section to illustrate the policies and techniques. The second section contains residential zoning standards relating to height, coverage and setbacks. This section also contains tree removal regulations.

POLICY #1: MINIMIZE PERCEPTION OF BULK

Techniques
1. Minimize changes to natural topography
2. Follow hillside contours
3. Use materials and colors to reduce bulk
4. Minimize building height
5. Design structure to fit with existing neighborhood
6. Use architectural features to break up massing

POLICY #2: INTEGRATE STRUCTURES WITH ENVIRONMENT

Techniques
1. Use natural materials and colors
2. Integrate with environmental texture and forms
3. Use landscaping to blend structure with environment
4. Integrate all structures on a single site
5. Blend roof and parking surfaces with environment
6. Integrate fences and walls with structures and setting

POLICY #3: AVOID INTERFERENCE WITH PRIVACY

Techniques
1. Control view to adjacent properties
2. Locate buildings to minimize privacy impact
3. Use landscaping to enhance privacy protection
4. Reduce noise impacts on adjacent dwellings
5. Control exterior light sources

POLICY #4: PRESERVE VIEWS AND ACCESS TO VIEWS

Techniques
1. Locate structure to minimize view blockage
2. Maximize view but avoid conflict with privacy
3. Locate structure to reduce height impact

POLICY #5: DESIGN FOR ENERGY EFFICIENCY

Techniques
1. Design for maximum benefit of sun and wind
2. Landscape to control exposure to sun and wind
3. Allow light, air and solar access to adjacent homes
4. Incorporate energy-saving devices into design

DESIGN POLICIES AND TECHNIQUES

POLICY 1

The bulk of a structure is related to its height, design and relationship to its surroundings. A structure is perceived to be bulky when these elements are combined in such a way as to create a residence that is out of scale, visually and structurally, with neighboring residences and its own natural setting. The residence then appears massive, blocky, and overwhelming to the eye. The purpose of this policy is to ensure the maximum integration of structures with their natural and built environments.

MINIMIZE PERCEPTION OF BULK

TECHNIQUE #1: Minimize changes to natural topography

DO'S -

Merge building into hillside

Balance cut and fill

Use underground spaces to reduce bulk

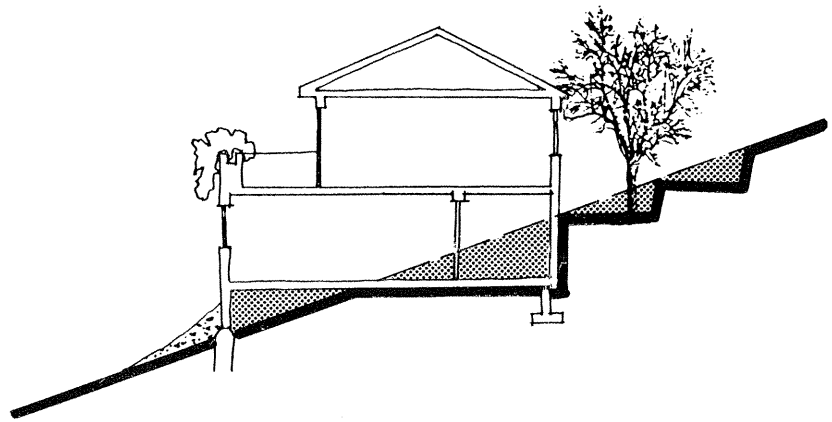
Screen foundations and underside of structures

DON'T'S -

Avoid exposed under-floor areas

Avoid excessive soil removal and fill

YES



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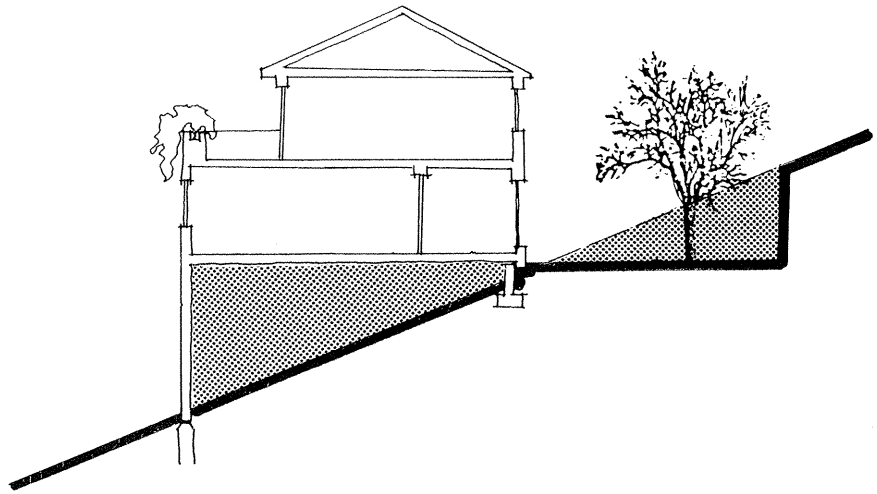


TECHNIQUE #2: Follow hillside contours

DO'S -

Follow contours with horizontal elements

Terrace building floor levels

Follow natural ground with roof slopes

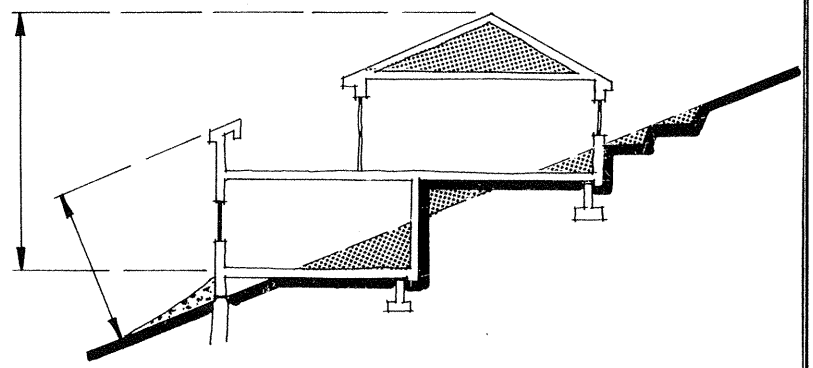
DON'T'S -

Avoid downhill cantilevers

Avoid large, single-form solutions

Avoid tall support poles for overhanging areas

YES



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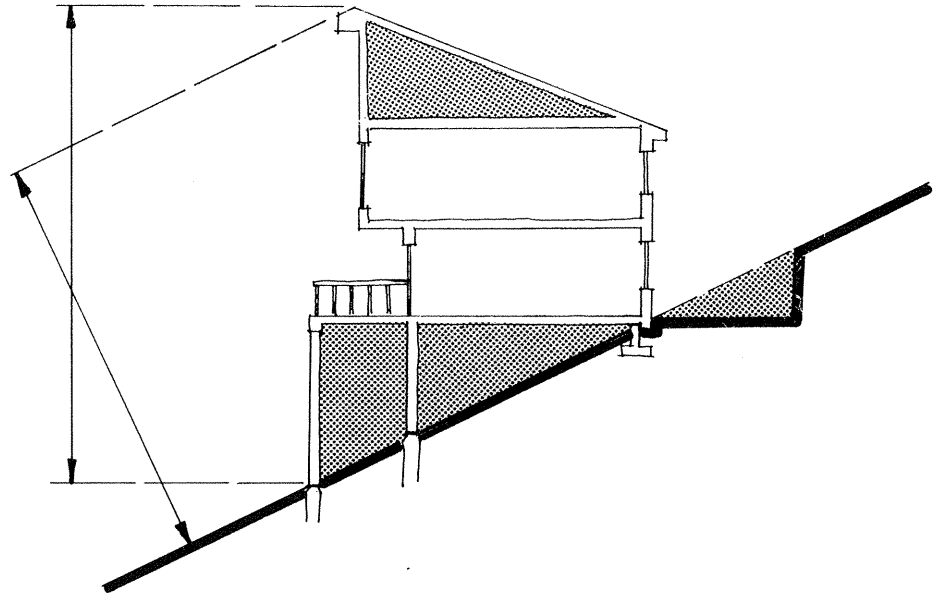


TECHNIQUE #3: Use materials and colors to reduce bulk

DO'S -

Soften elevations by using different materials

Use natural-color materials for foundation and lower portions of house

Use materials that create horizontal proportions

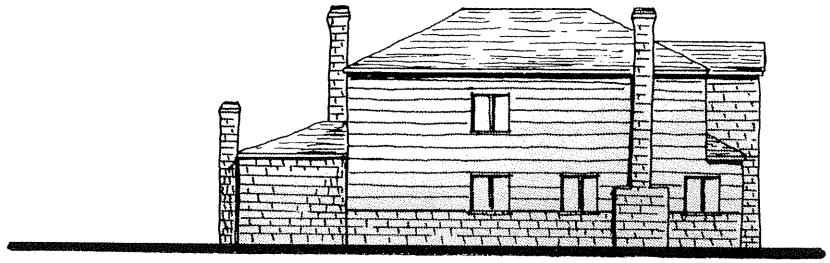
DON'T'S -

Avoid large expanses of single material

Avoid vertical orientation of materials on large areas

Don't rely on landscaping to reduce bulk

YES



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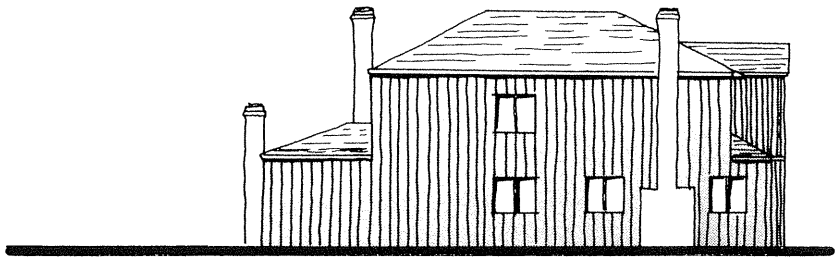

TECHNIQUE #4: Minimize building height

DO'S -

Minimize areas of maximum height

Vary height of roof elements

Set back higher portions of structure

DON'T'S -

Avoid large attic spaces

Avoid large underfloor areas and exposed foundations

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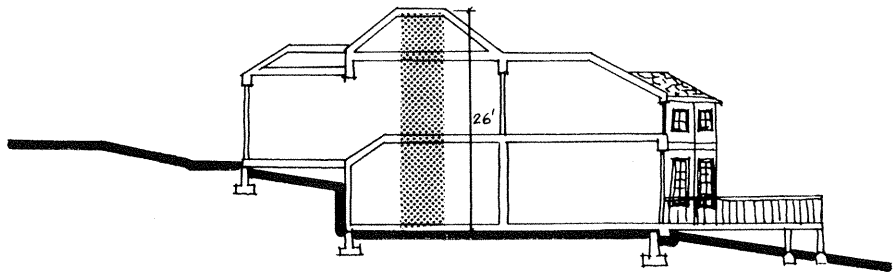

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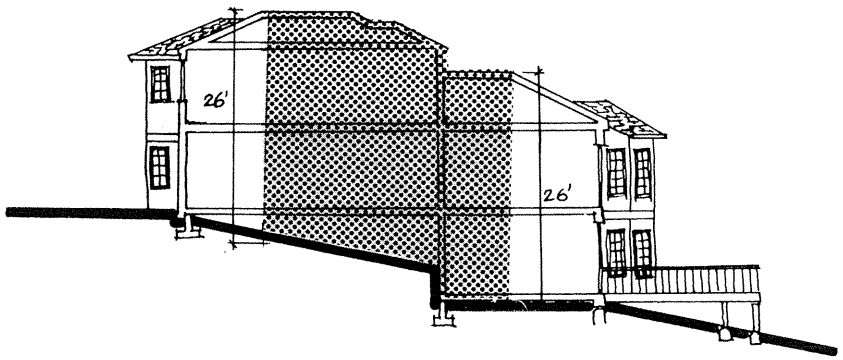


TECHNIQUE #5: Design structure to fit with existing neighborhood

DO'S -

Be compatible in terms of proportion, size, mass and height

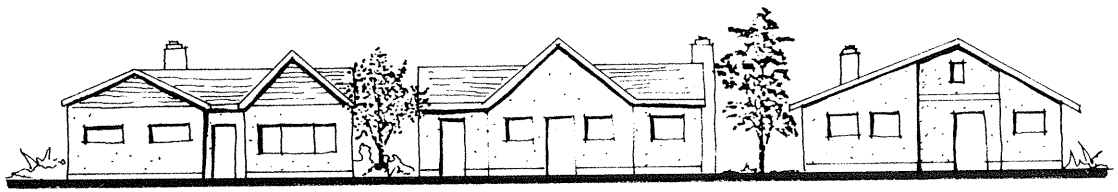
Architectural style is not restricted to existing pattern, but should be compatible

DON'T'S -

Avoid overwhelming existing residences

Do not design to attract attention or stand out

YES



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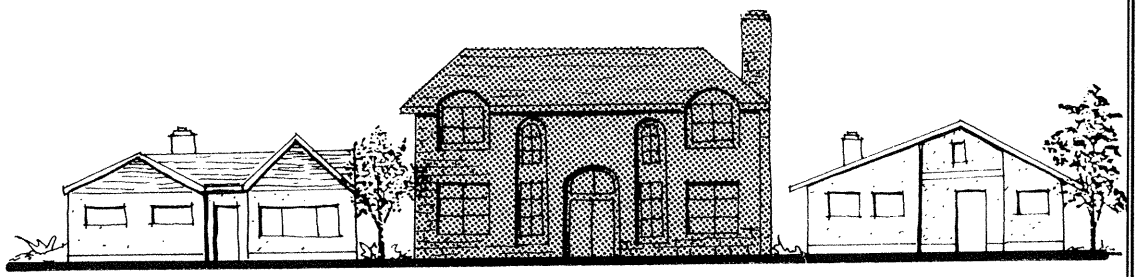


TECHNIQUE #6: Use architectural features to break up massing

DO'S -

Vary rooflines through changes in height and form

Punctuate large wall expanses with bay windows, chimneys and other features

Use a combination of vertical and horizontal articulations

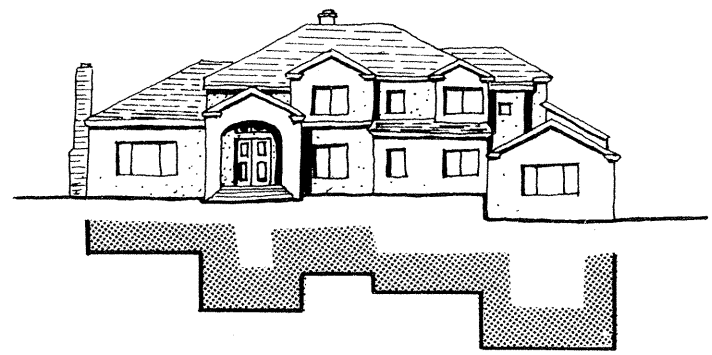
DON'T'S -

Avoid vertical features that add to the perception of height

Avoid long, single-ridge rooflines

Avoid large wall expanses without windows

YES



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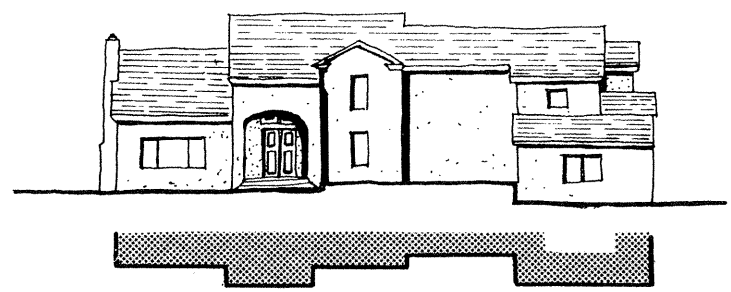


POLICY 2

Preservation of the natural landscape and environment is one of Scotts Valley's most important goals. When a structure is designed to follow natural topographic contours and retain existing vegetation and soil, its impact on the natural setting is minimized. This policy focuses on the protection of Scotts Valley's unique environmental qualities and the design of structures that respect their natural surrounding.

INTEGRATE STRUCTURES WITH ENVIRONMENT

TECHNIQUE #1: Use natural materials and colors

DO'S -

Use materials that blend with natural environment

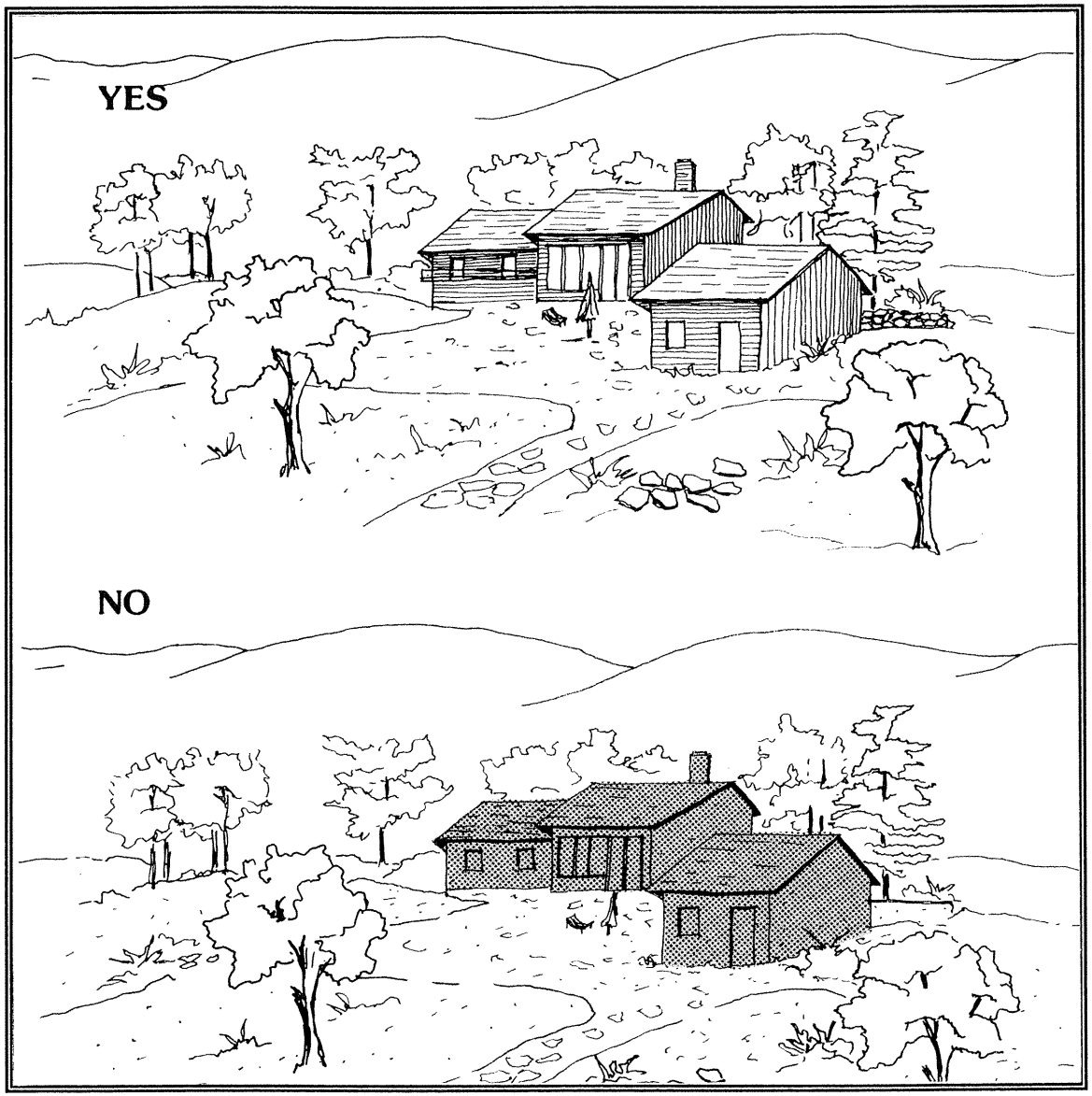
Use natural, earth-tone colors

Use a limited number of materials and colors on a single elevation

DON'T'S -

Avoid light, bright or reflective colors and materials

Avoid extreme contrasts in color between the structure and the terrain



TECHNIQUE #2: Integrate with environmental texture and forms

DO'S -

Use forms that integrate with natural shapes

Fit in with hillside topography and background

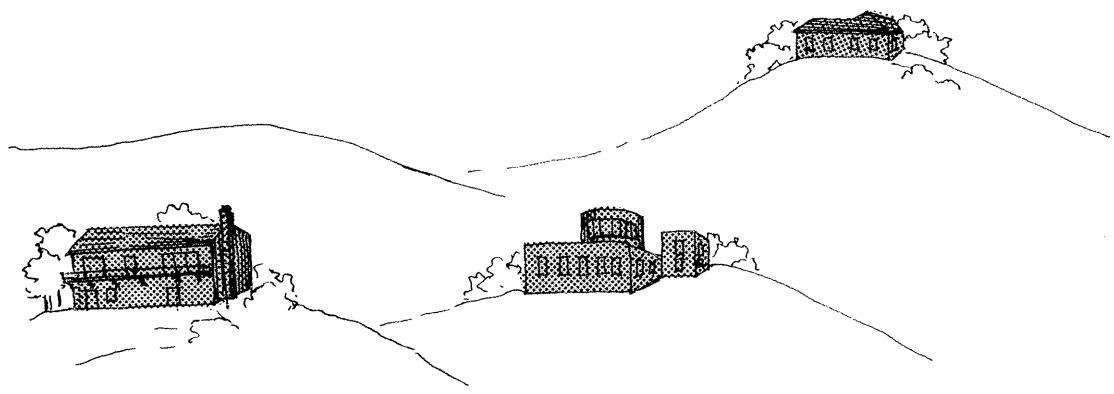
DON'T'S -

Avoid interference with ridgelines

Avoid large geometric shapes that appear as foreign objects in the setting

YES

NO



TECHNIQUE #3: Use landscaping to blend structure with environment

DO'S -

Use native vegetation

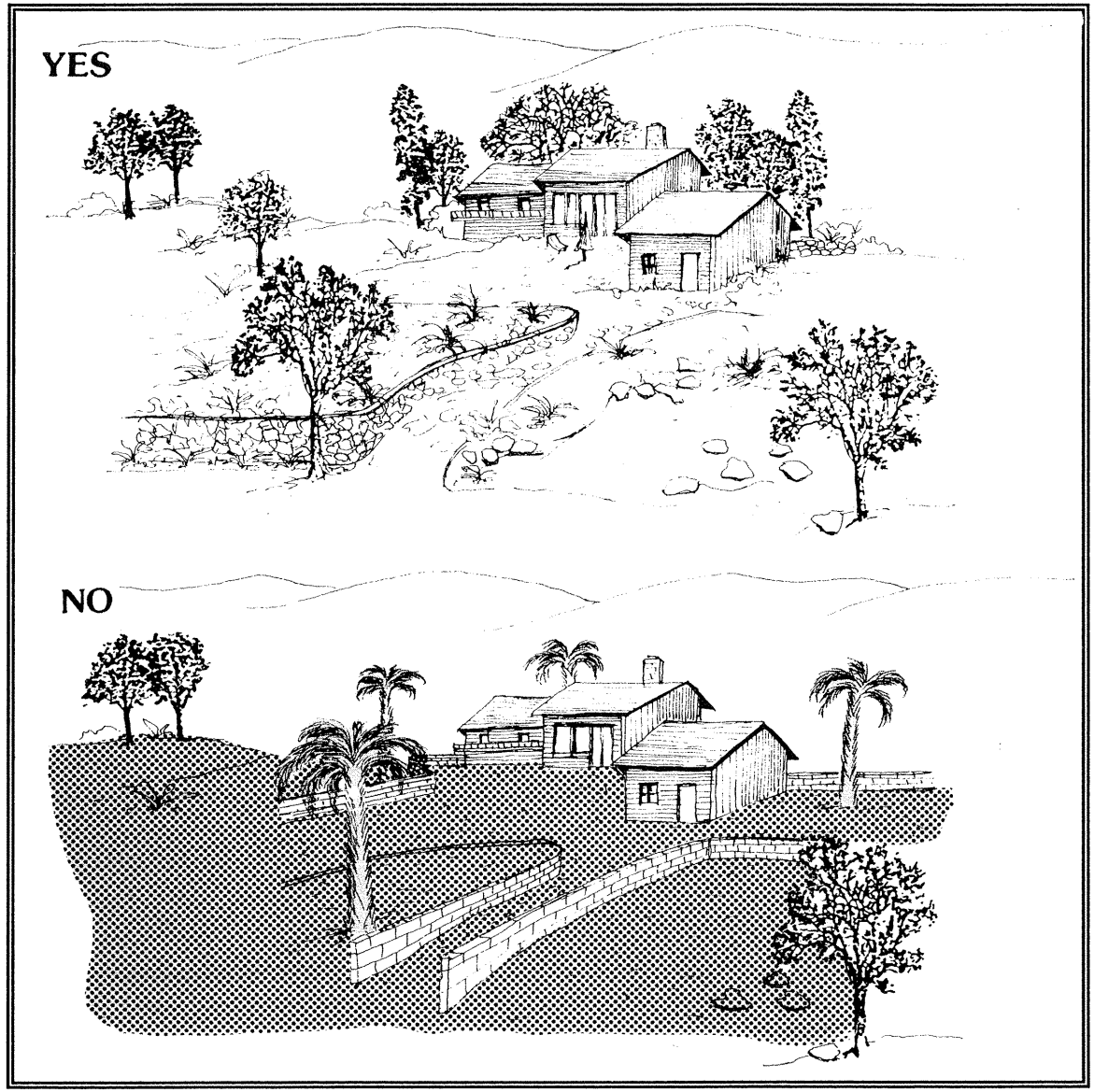
Preserve existing vegetation as much as possible

Use landscaping as a mitigation but not as a design solution

DON'T'S -

Don't use vegetation to correct design, privacy or bulk mistakes

Avoid unnecessary grading and soil removal



TECHNIQUE #4: Integrate all structures on a single site

DO'S -

Unite all structures by using a single architectural theme or design

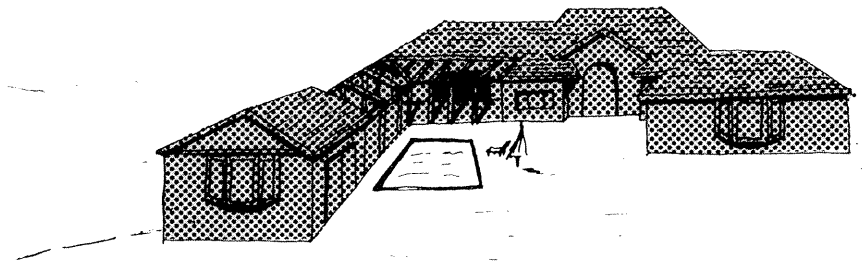
Interrelate multiple structures to create a complete form on the site

Use similar materials, colors and roof pitch on structures

DON'T'S -

Avoid a large number of detached accessory structures

YES



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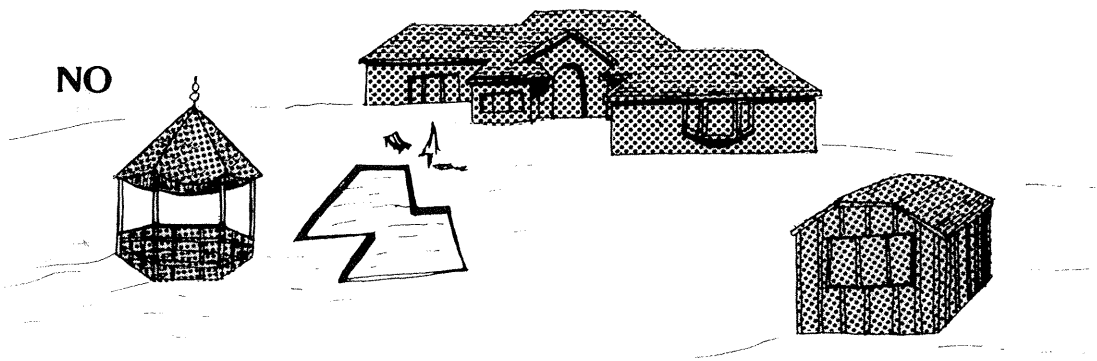


TECHNIQUE #5: Blend roof and parking structures with environment

DO'S -

Match materials and colors of roof to the natural surroundings

Screen mechanical equipment

Integrate solar panels into roof design

Use terraced roof and building lines

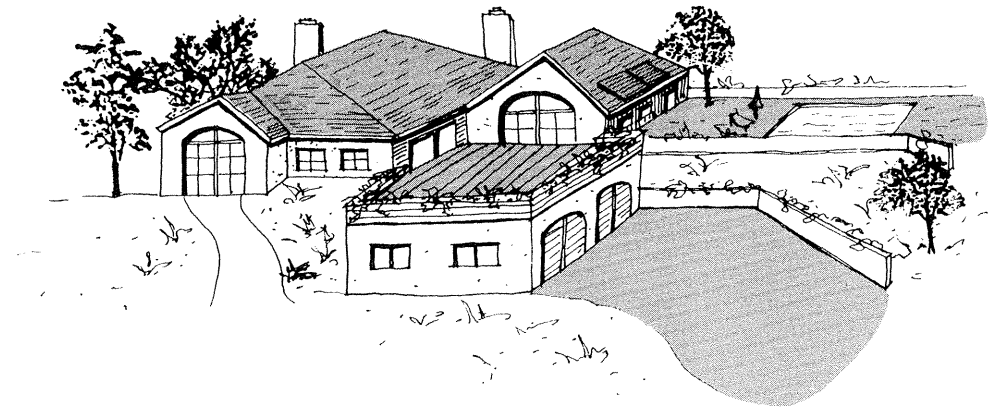
DON'T'S -

Avoid large, continuous paved areas

Avoid extensive, unbroken roof surfaces

Don't use highly reflective materials

YES



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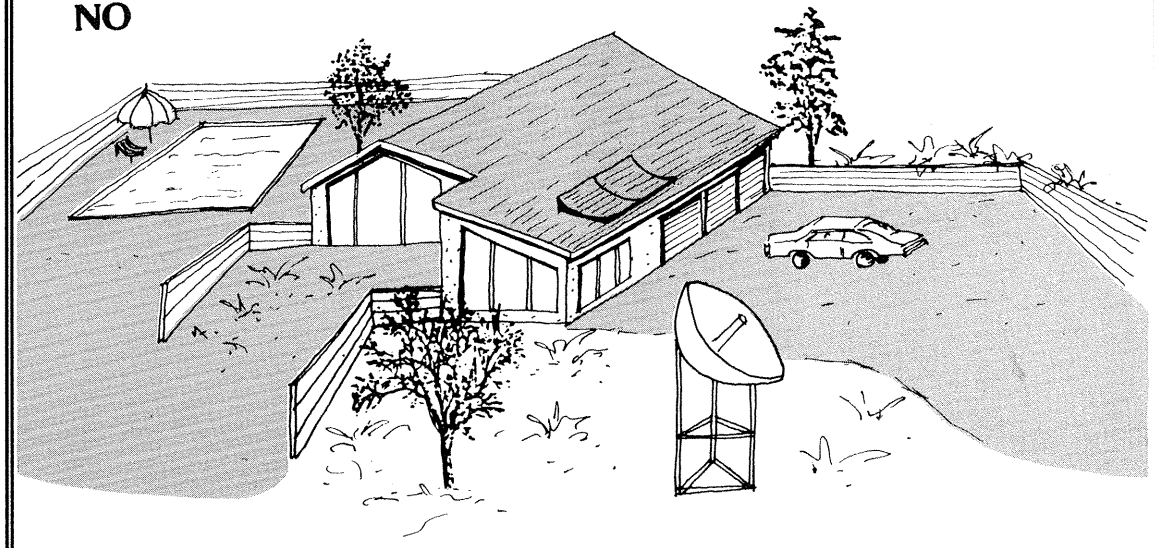
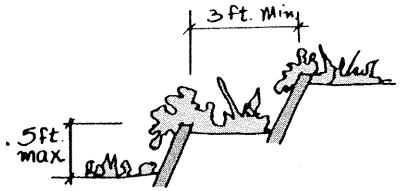
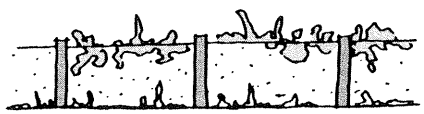


TECHNIQUE #6: Integrate fences and walls with structures and setting

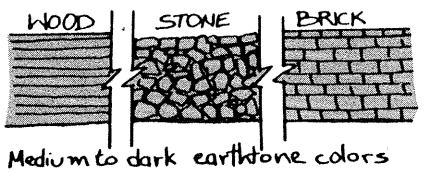
Minimize fence and wall heights. Break retaining walls into a few low segments.



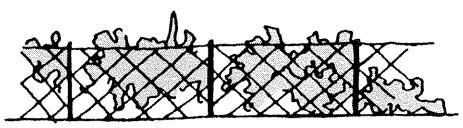
Integrate vegetation and landscaping with fence and wall design.



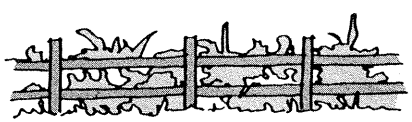
Use medium to dark earth-tone colors and native, natural materials.



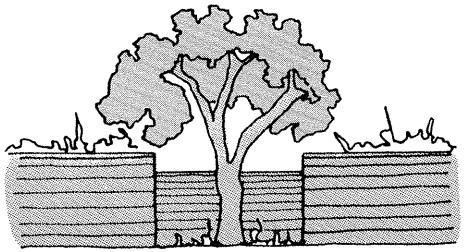
Wire fences should be softened with landscaping.

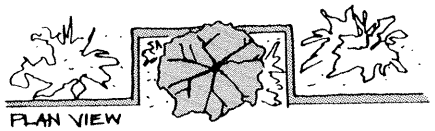


Use open rather than solid fence design to reduce visual and structural bulk.

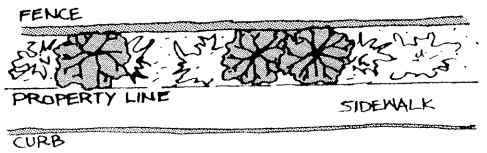


Break long, continuous sound walls by changes in height, setback and vegetation.

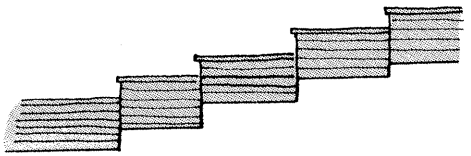




Set sound walls back from property line to allow space for landscaping.



Follow contour lines with fence and wall design. Minimize length of solid fences on hillsides.



Use horizontal lines and proportions to reduce perception of height and bulk.

POLICY 3

Residential privacy is an important consideration in the design of homes for Scotts Valley. Privacy problems and impacts should be resolved and addressed in the initial design stage, not with mitigation measures proposed as an afterthought. Particular attention should be given to privacy concerns on sub-standard, small and infill lots.

AVOID INTERFERENCE WITH PRIVACY

TECHNIQUE #1: Control view to adjacent properties

DO'S -

Minimize second-story windows facing close neighboring properties

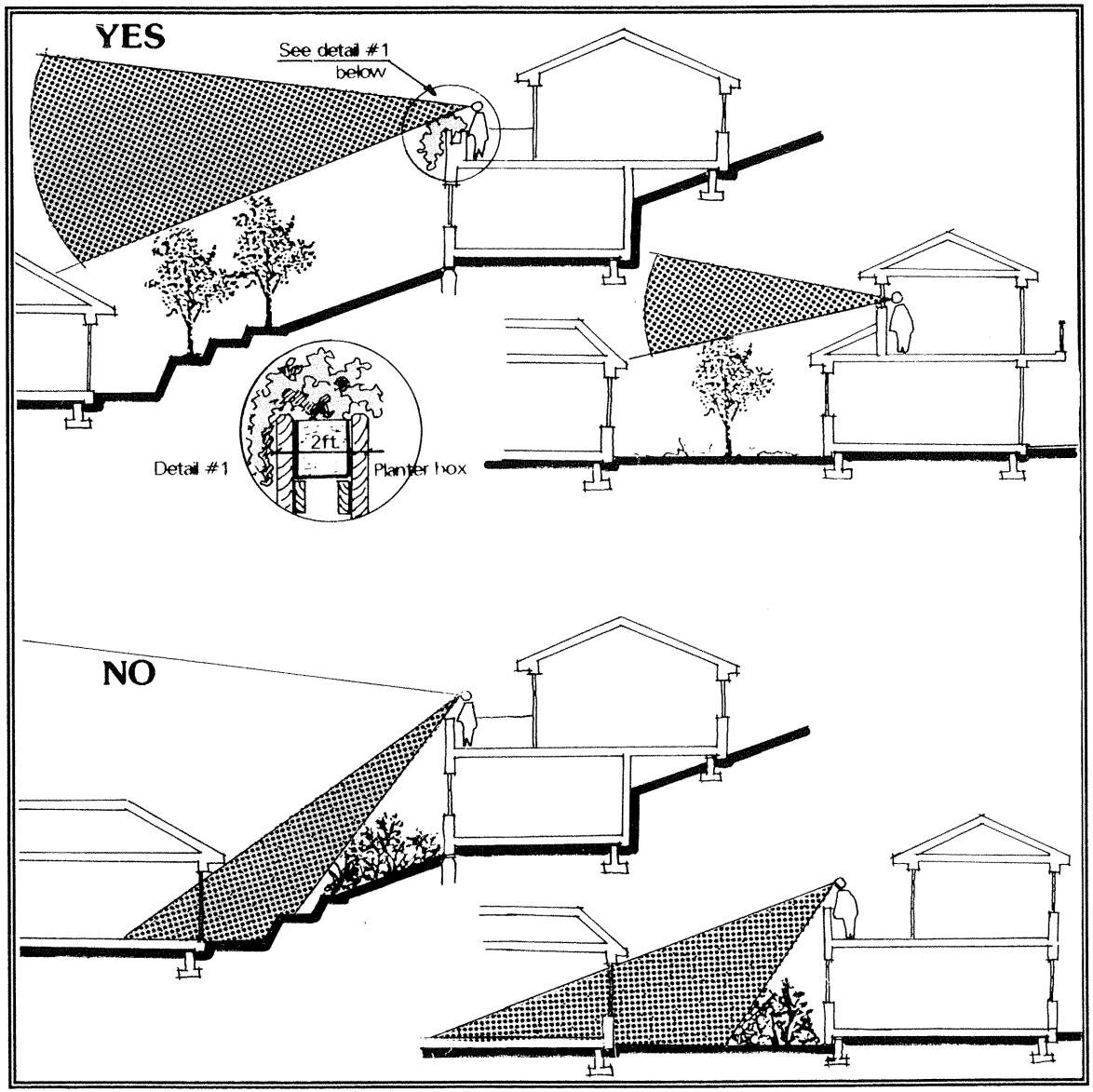
Orient upper floor balconies towards large yard areas

Use structural features to limit view angles to long rather than short distance view

DON'T'S -

Avoid window and balcony locations that impact privacy

Avoid reducing required setback distances



TECHNIQUE #2: Locate buildings to minimize privacy impact

DO'S -

Locate structure to increase visual distance between buildings

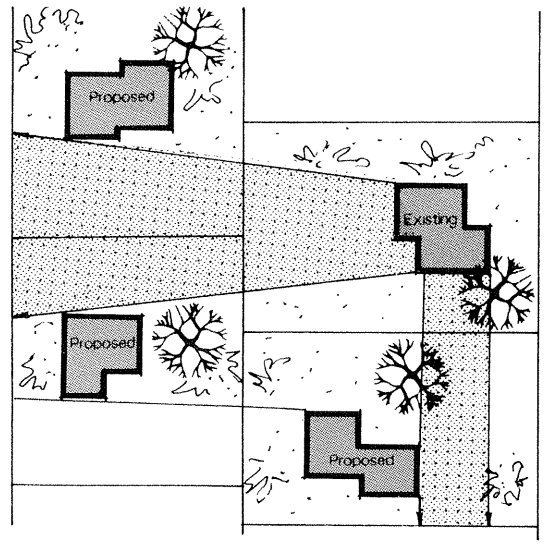
Increase setbacks for living areas that require more privacy

Set back second-story portions of structures

DON'T'S -

Avoid siting structures in direct line-of-sight to neighboring residences

YES



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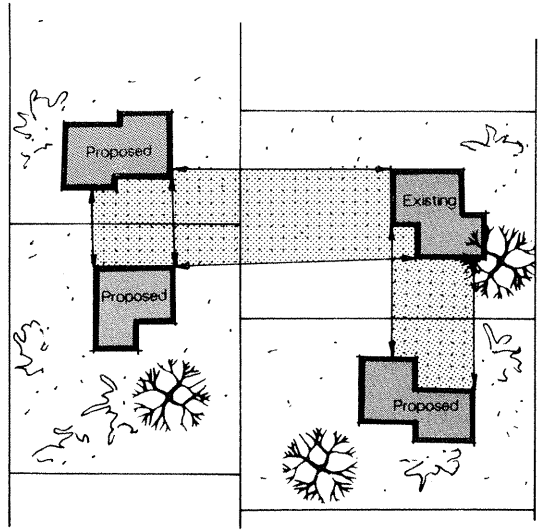


TECHNIQUE #3: Use landscaping to enhance privacy protection

DO'S -

Use evergreen trees and shrubs to provide year-round privacy

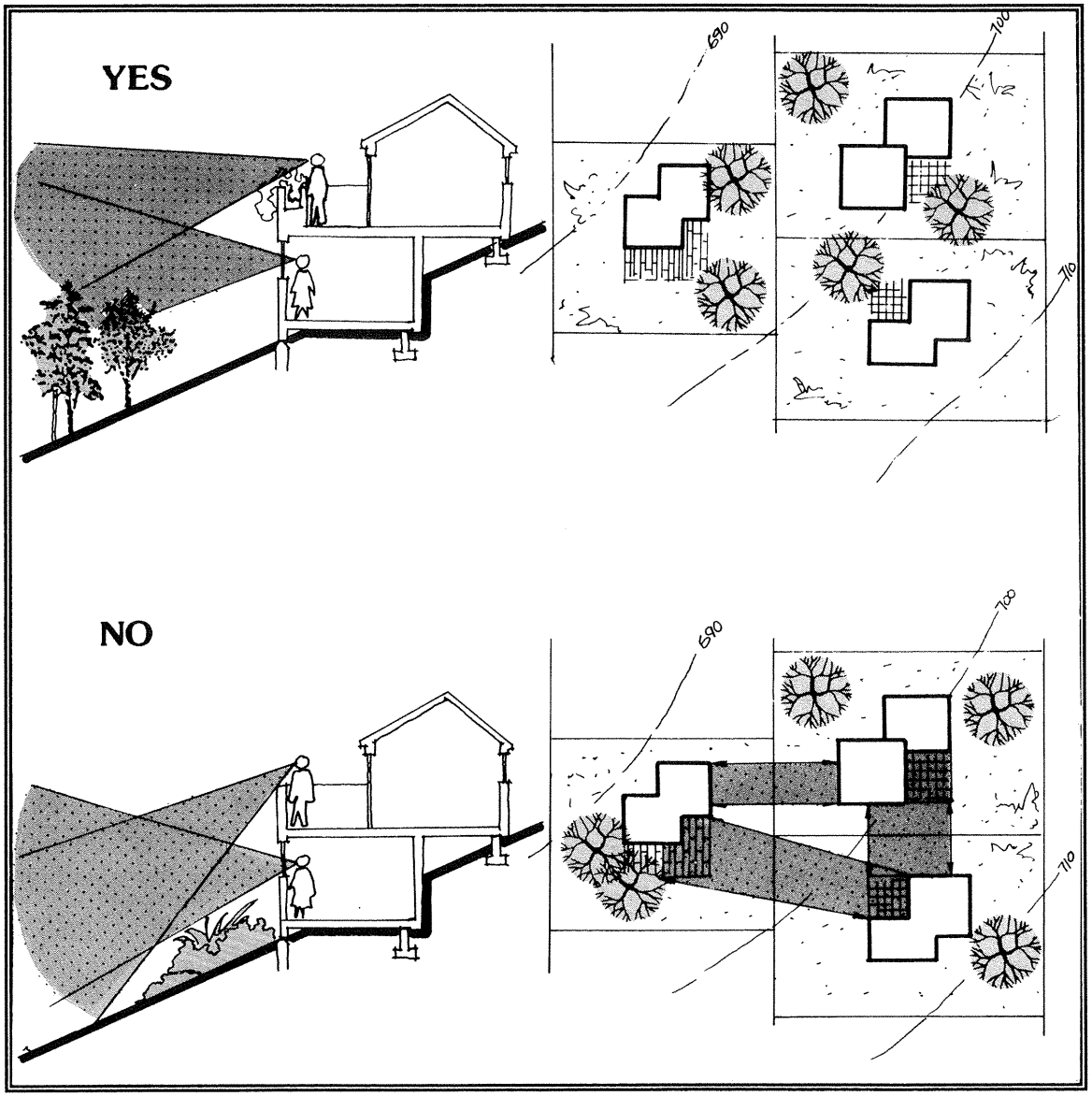
Use landscaping to screen living areas most sensitve to privacy

Integrate landscaping into building design

DON'T'S -

Avoid using vegetation to solve design-related privacy problems

Don't remove vegetation that protects privacy



TECHNIQUE #4: Reduce noise impacts on adjacent dwellings

DO'S -

Screen and control noise sources such as parking and outdoor activites

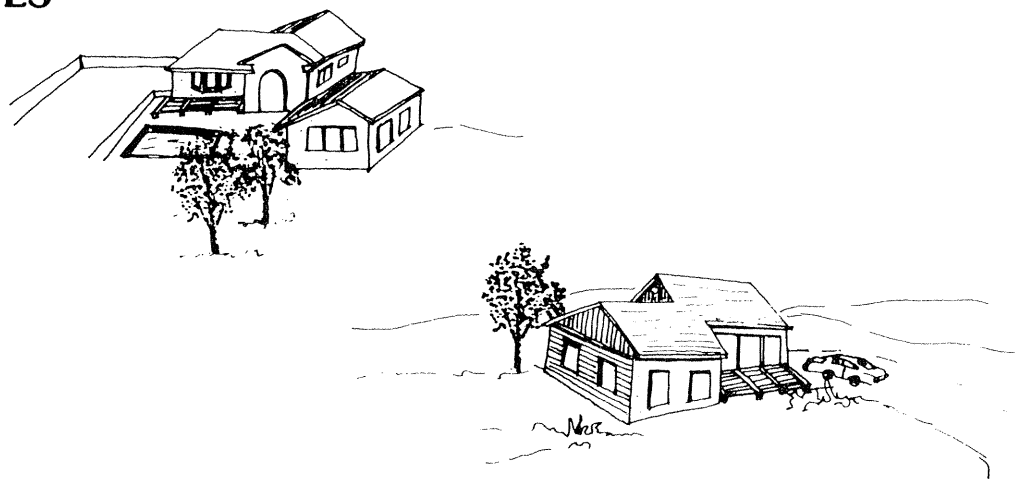
Increase setbacks for noise sources from adjacent dwellings

DON'T'S -

Avoid siting noise sources at sides of small lots

Don't remove fences, walls or landscaping that serve as noise buffers

YES



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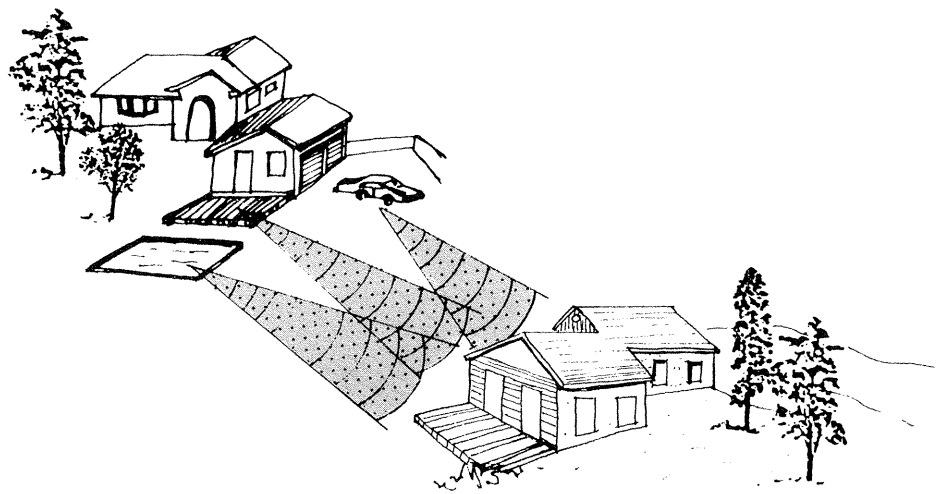


TECHNIQUE #5: Control exterior light sources

DO'S -

Limit number and intensity of light sources

Screen light sources from neighboring properties

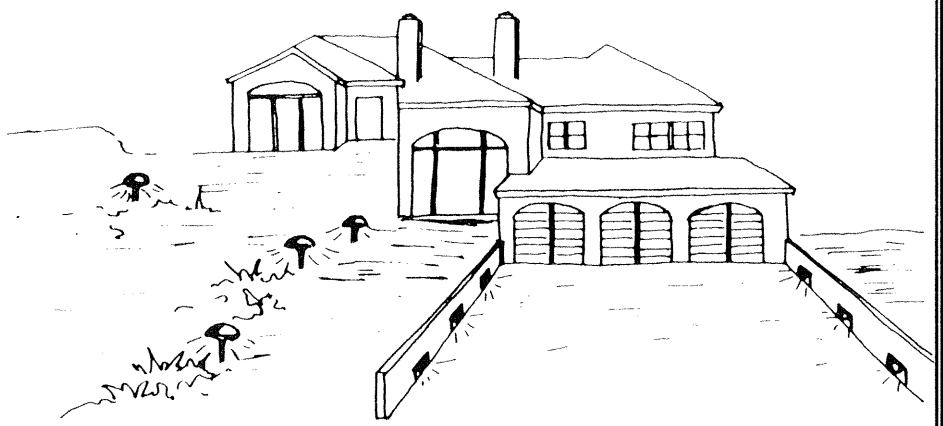
Locate light sources at ground level

DON'T'S -

Avoid light sources that may be seen at a distance

Avoid light, bright or reflective colors and materials, particularly in hillside areas

YES



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POLICY 4

Structures should be designed to blend in with the hillsides, not project above ridgelines and hilltops, and to respect the view from neighboring or higher residences.

PRESERVE VIEWS AND ACCESS TO VIEWS

TECHNIQUE #1: Locate structure to minimize view blockage

DO'S -

Protect the view from the major living areas

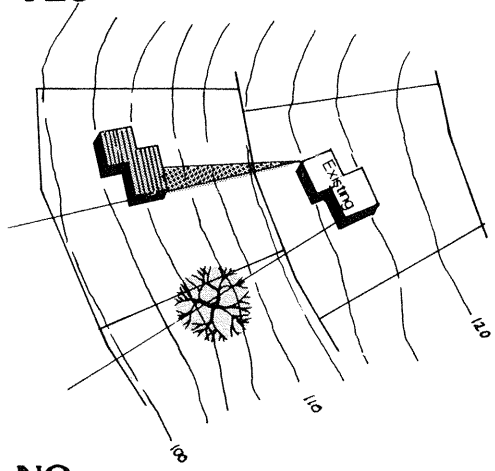
Protect the high-quality views

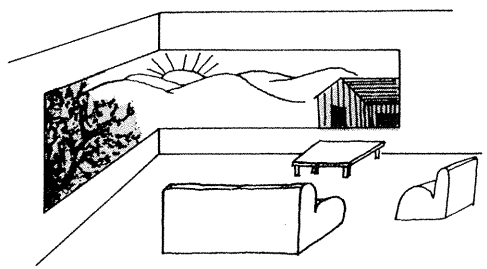
DON'T'S -

Do not block view with structures or tall landscaping

Avoid using site plans that will create view problems

YES





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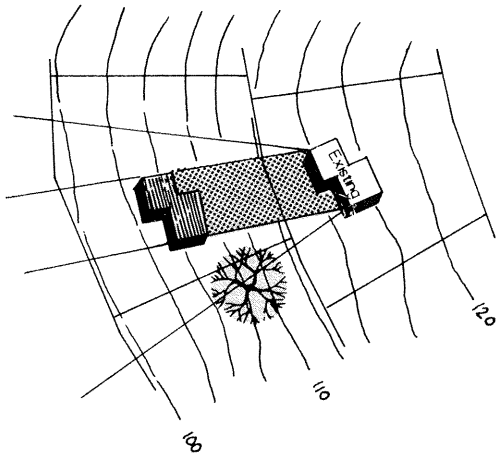
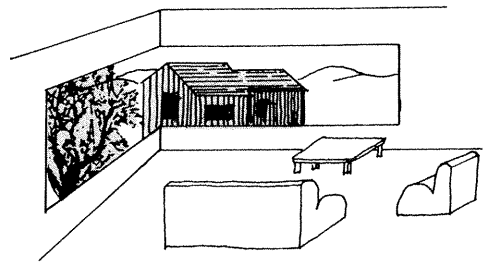




TECHNIQUE #2: Maximize view but avoid conflict with privacy

DO'S -

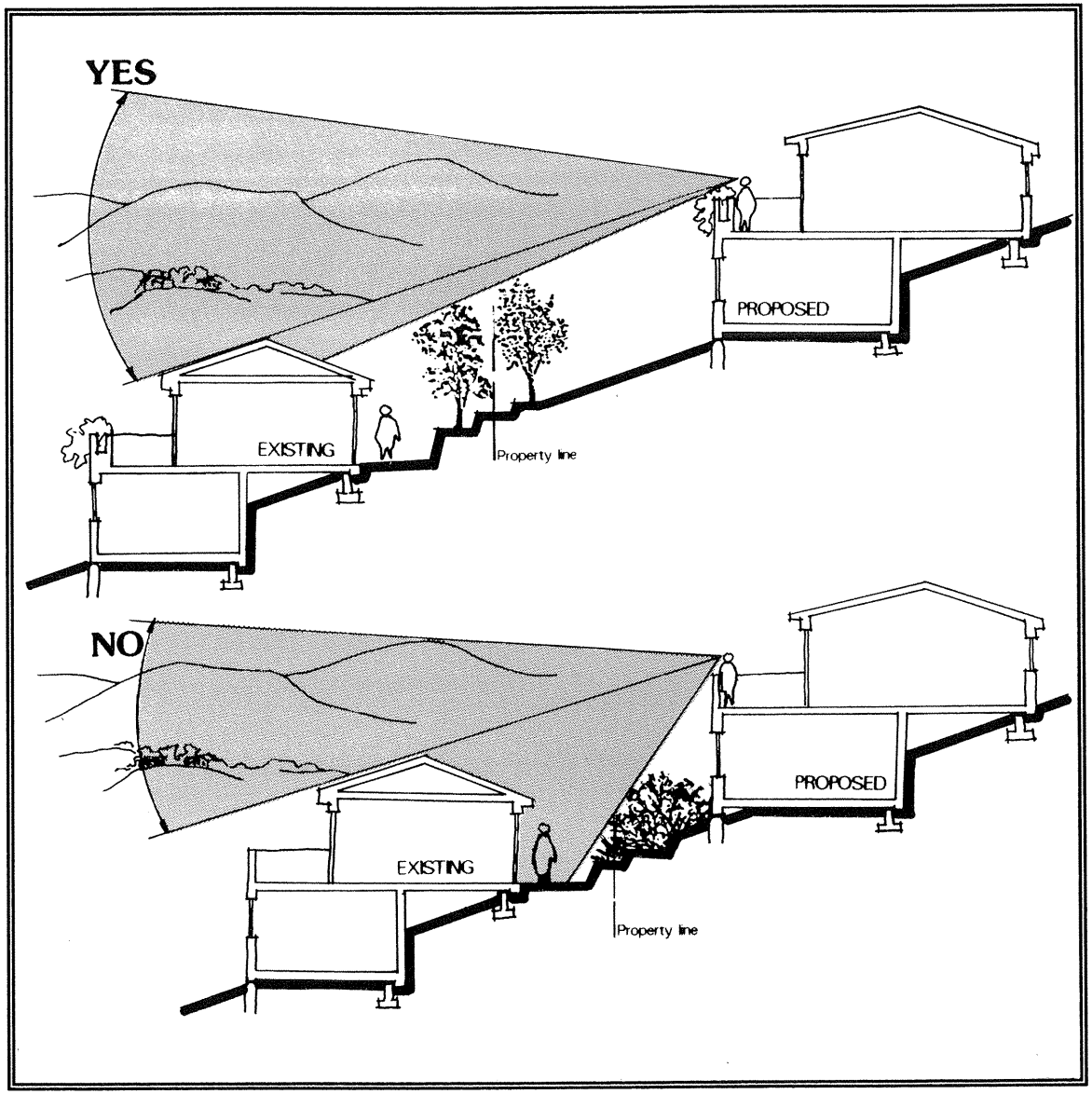
Protect neighbor's privacy by proper site planning and appropriate landscaping

Orient living areas towards the high-quality view

DON'T'S -

Do not sacrifice neighbor's privacy by insisting on the complete view

Avoid hillside locations and designs that interfere with privacy



TECHNIQUE #3: Locate structure to reduce height impact

DO'S -

Reduce height to minimize view blockage

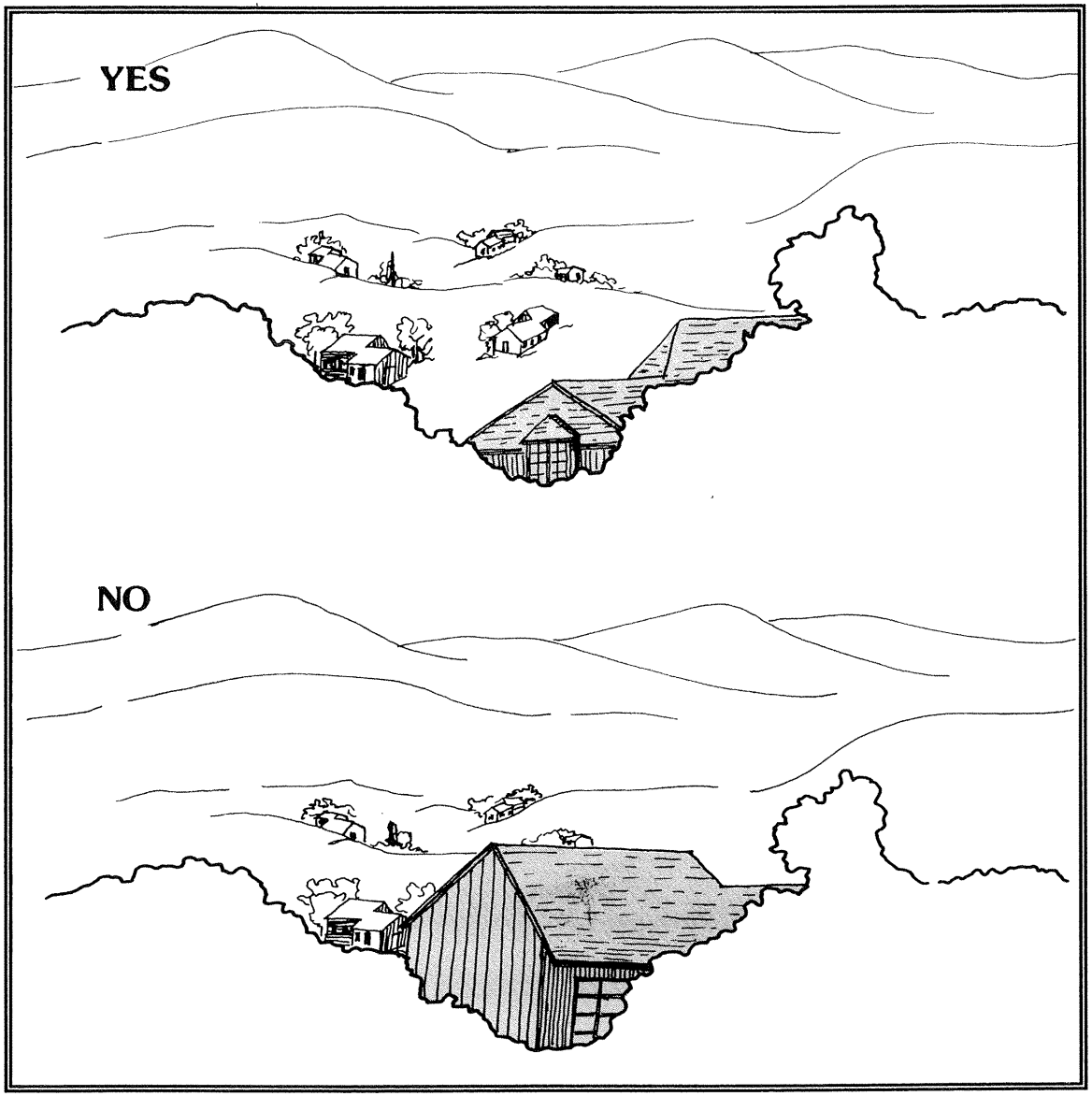
Locate higher portions of structure to avoid view interference

Locate structures on lower portions of hillside lots

DON'T'S -

Do not block view by excessively high and bulky structures

Avoid roof forms and ridgelines that impact view



POLICY 5

Scotts Valley is blessed with a climate that is very conducive to the incorporation of energy-saving techniques into residential design. The purpose of this policy is to promote the use of such techniques to maximize energy efficiency and conservation in Scotts Valley. The techniques should be considered in initial design stage, and must meet the State energy guidelines.

DESIGN FOR ENERGY EFFICIENCY

TECHNIQUE #1: Design for maximum benefit of sun and wind

Locate main living areas along south elevations

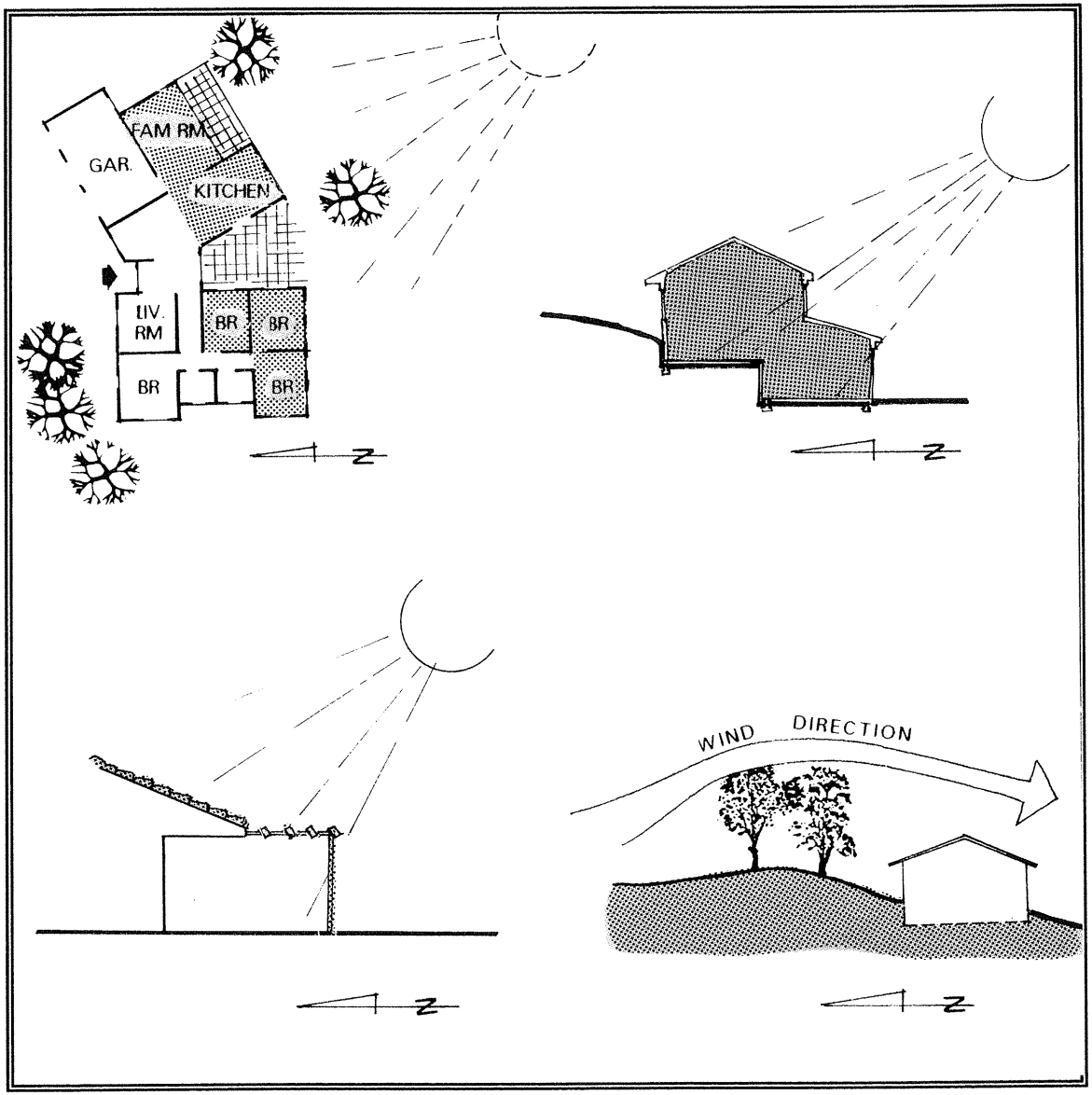
Place garages and storage areas on north elevations

Fit structure into the grade to reduce wall exposure and provide wind protection

Provide shade to openings by the use of trellises or roof overhangs

Use horizontal and vertical articulation to gain shade, exposure or ventilation

Locate the majority of windows on the south elevations; minimize openings and walls on the east and west



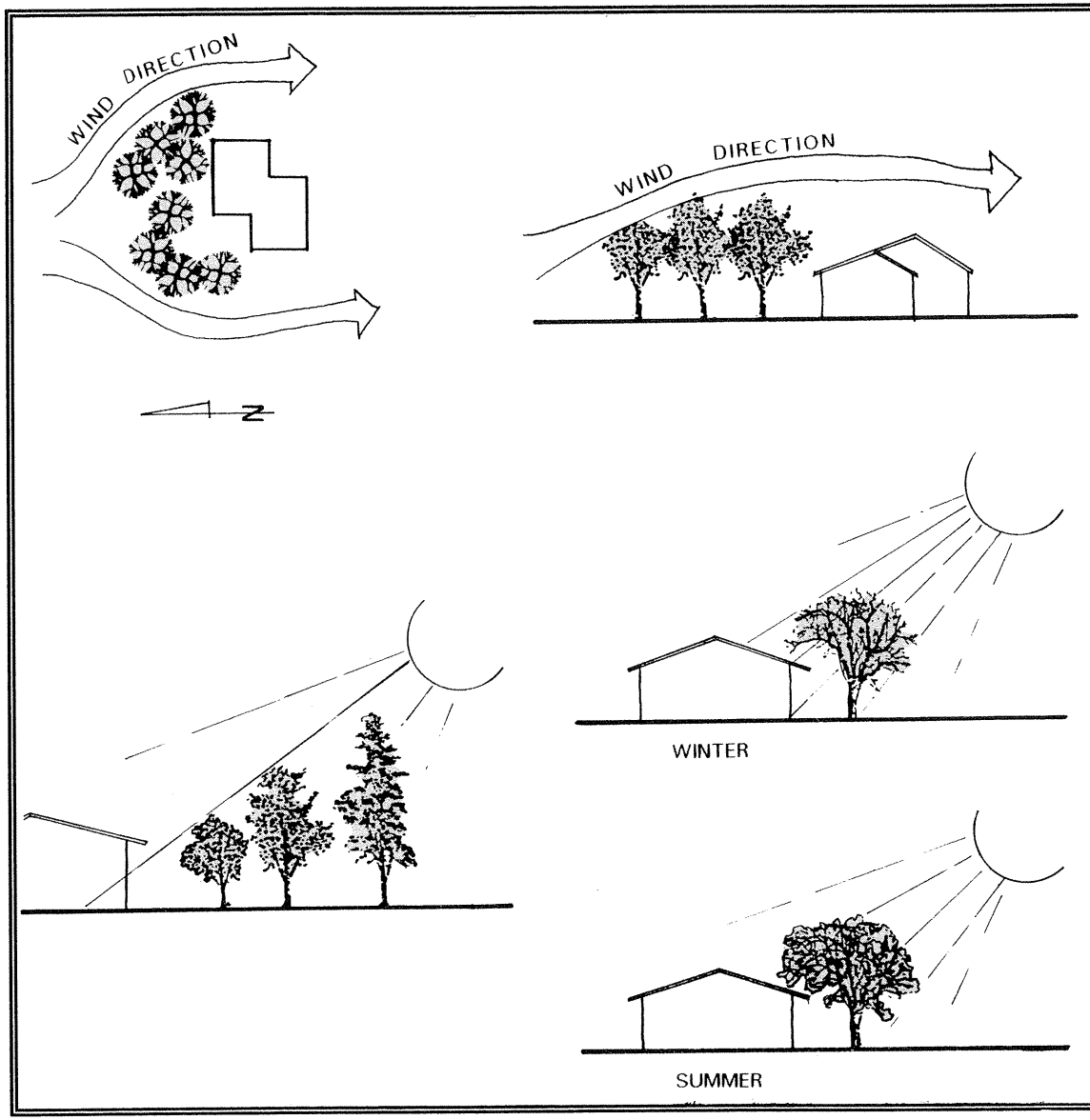
TECHNIQUE #2: Landscape to control exposure to sun and wind

Use landscaping as a buffer from wind

Plant parallel rows of trees for added wind protection

Choose appropriate species of trees in relation to seasonal change, path of sun and wind direction

Plant trees to control winter and summer exposure to sun



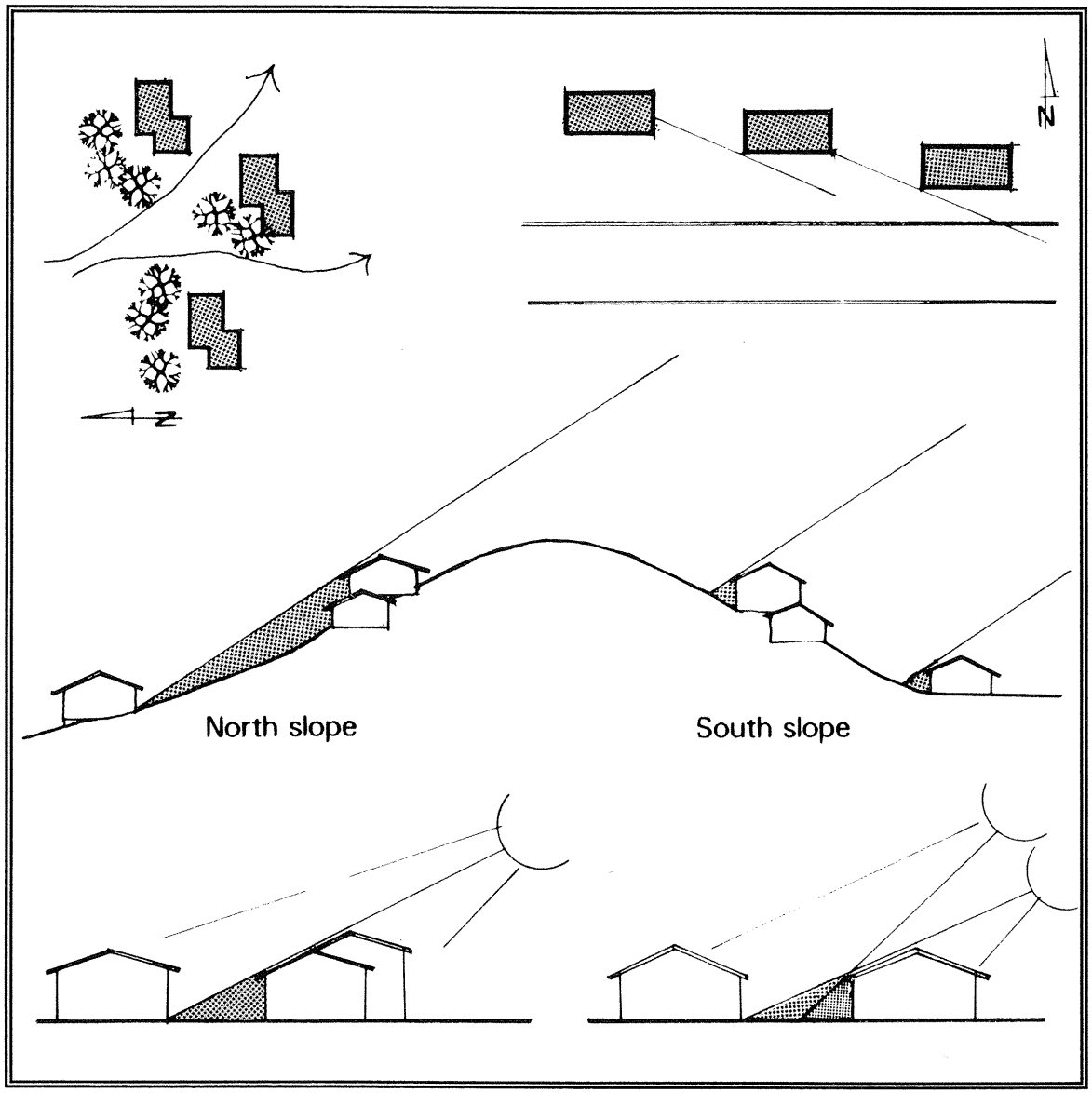
TECHNIQUE #3: Allow light, air and solar access to adjacent homes

Offset structures to increase exposure to sun and allow for ventilation

Increase distance between structures on north facing slopes to improve solar access

Relate the height of a structure to the sun's angle and direction

Relate the height of a structure to its distance from adjacent structures



TECHNIQUE #4: Incorporate energy-saving devices into the design

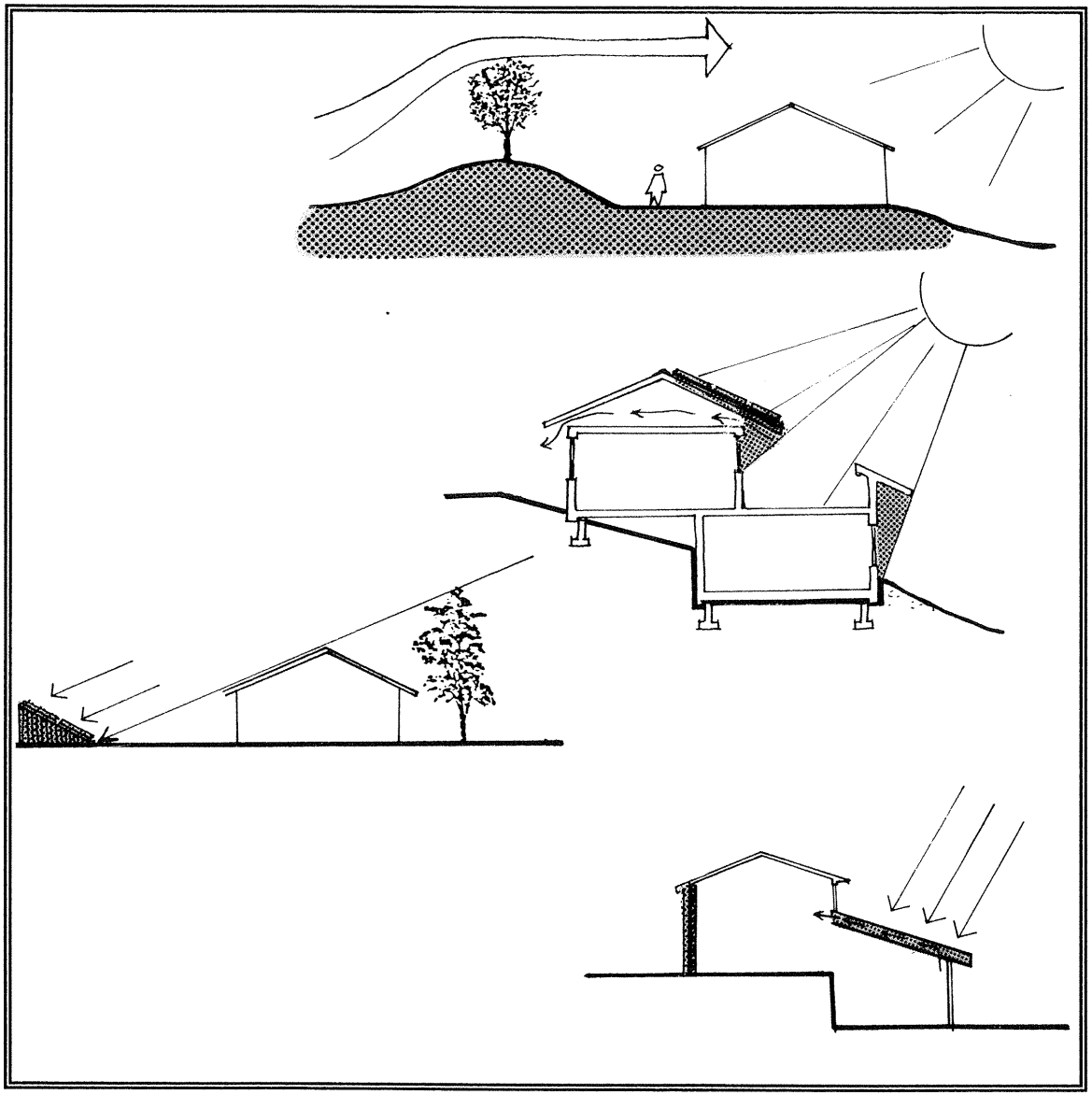
Use earth berms to shade walls and provide shelter from wind

Use roof-mounted solar collectors if possible

Use detached solar collectors where there is excessive shading on the lot

Use thermal insulation techniques:

- *thermo-syphoning roof*
- *massive walls*
- *roof/wall insulation*



Each single-family residential zoning district in Scotts Valley maintains development standards that relate to setbacks from property lines, site coverage and height of structures. These standards have been developed to ensure that residential construction conforms with the General Plan goals of maintaining the quality, small town character of the City and reducing environmental impacts.

All new single-family residences and additions or remodels to existing residences must comply with these standards before approval can be granted. Although the Planning Commission has the authority to grant variances from these standards, applicants are encouraged to resolve design-related problems rather than request a variance. Variances can be granted only when there is an extreme or unnecessary hardship that results from the physical conditions of the site, such as lot size, lot shape, topography, hydrology and vegetations.

This section of the Handbook provides information on each residential zoning standard, as follows:

1. Height Limit
2. Setbacks
3. Impervious Coverage

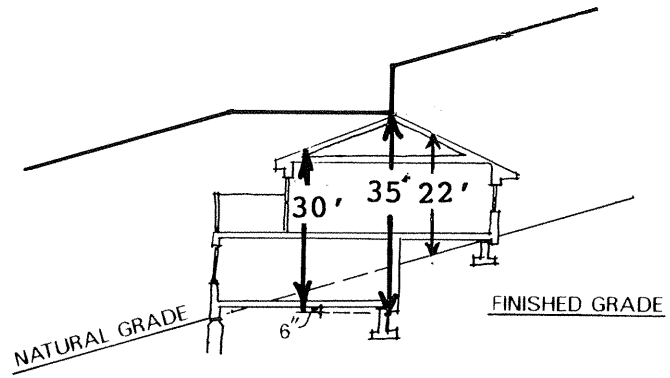
It also contains information on the City's tree removal and fence regulations.

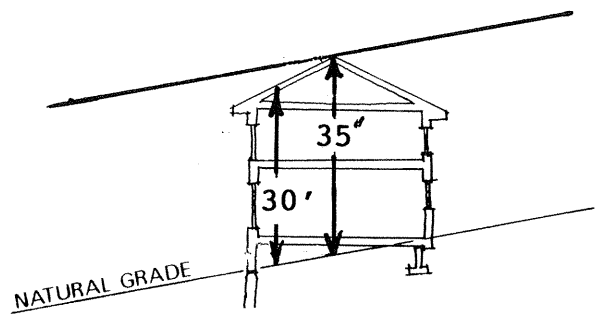
RESIDENTIAL ZONING STANDARDS

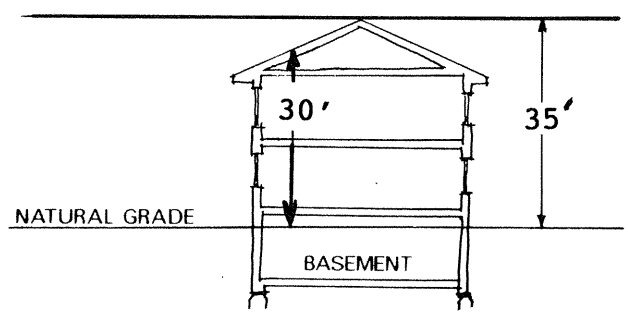
HEIGHT LIMIT

The height limit for single-family residences in Scotts Valley is 35 feet. The height limit for accessory structures is 15 feet. The height limits apply to <u>all</u> single-family residential zoning districts.

The "height" of a structure is measured as the vertical distance from all points of a structure to either the natural grade or the finished grade of the structure pad, whichever is lower. Basements and crawl spaces that are located completely below grade level are not included in the height measurement, nor are chimneys, flag poles, and radio/television aerials.







SETBACKS

A "setback" is the distance a structure must be located away from the front, rear and side property lines. All residences and accessory structures in Scotts Valley must be located on the lot so as to meet the required setbacks of the zoning district in which the lot is located (see Diagram 1). The setback requirements for corner lots are different than those for interior lots, and the setback requirements for accessory structures are different that those for main residential structures. Table 1 indicates the setback requirements for main residential structures on interior and corner lots.

TABLE 1 - Setback Requirements for Main Residential Structures

INTERIOR LOTS

Zoning Dist.	Front	Side	Rear
R-H	20'	5-10'*	15-25'*
R-M-6	20'	10% width-6'	15'
R-M-8	20'	10% width-8'	15'
R-1-10	20'	10% width-10'	15'
R-1-20	30'	10% width-10'	15'
R-1-40	30'	10% width-10'	20'
R-R-2.5	40'	15'	20'
R-MT-5	40'	20'	25'

CORNER LOTS

Zoning Dist.	Front	Side		Rear
		Ext.	Int.	
R-H	20'	20%width* 8-20'	10%width* 5-10'	20%depth* 15-25'
R-M-6	20'	10'	10%width 6' max	15'
R-M-8	20'	10'	10%width 8' max	15'
R-1-10	20'	10'	10%width 10' max	15'
R-1-20	30'	10'	10%width 10' max	15'
R-1-40	30'	10'	10'	20'
R-R-2.5	40'	10'	15'	20'
R-MT-5	40'	10'	20'	25'

*See section 17.10.040(2) for additional setbacks based upon height of the structure. See section 17.10.040(2-b) for setbacks for conditional uses.

DIAGRAM 1 - SETBACKS

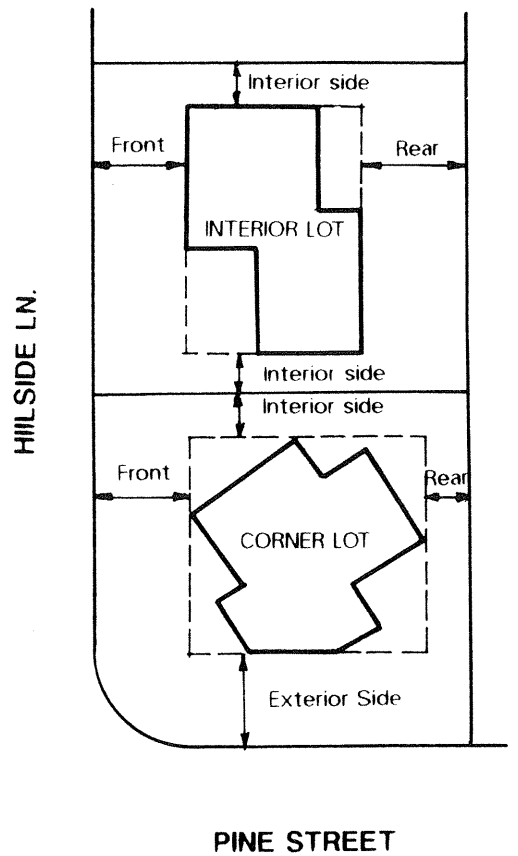
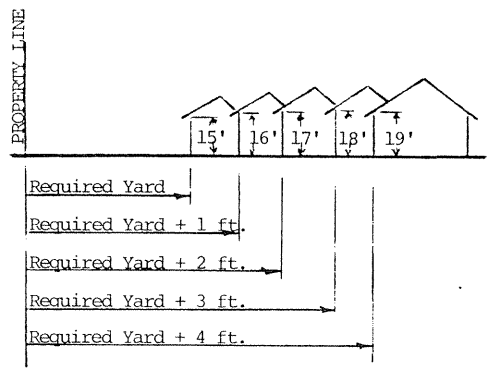
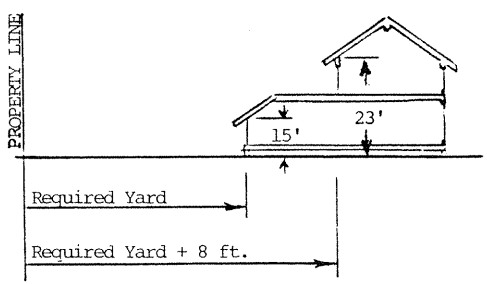


DIAGRAM 2

ADDITIONAL SETBACK REQUIREMENTS FOR HILLSIDE LOTS



EXAMPLE



In addition to the setbacks shown in Table 1, there is an <u>extra</u> setback requirement for residential structures on a *hillside lot with a top plate line that exceeds 15 feet in height (see Diagram 2). In those cases, the required setback from each side property line of the site must be <u>increased</u> by one foot for each foot of height in excess of 15 feet. The increased setback applies only to that portion of the new structure or addition that exceeds 15 feet in height, measured at the top plate line.

*A hillside lot is a lot having an average slope of 10% or greater, determined by the following formula:

$$S = \frac{.00229\ IL}{A}$$

Where: S = Average slope in percent, rounded to the nearest whole percentage

I = Contour interval in feet

L = Combined length of contour lines in scale feet

A = Gross site area in acres

IMPERVIOUS COVERAGE

To prevent the excessive covering of residential lots with structures and paving, the City has adopted standards for the allowable amount of impervious coverage (Table 2). "Impervious surface" means any structure or hard surface which substantially impairs the natural permeability of the soil, including (but not limited to) solid surface decks and patios, accessory structures, swimming pools, recreational courts, paved driveways and parking areas, and surfaces comprised of clay, bricks with sand or cement with gravel. The allowable amount of impervious coverage is expressed as a percentage of the total lot area.

	IMPERVIOUS COVERAGE
1	Main structure
2	Accessory structure
3	Deck
4	Driveway
5	Swimming pool
6	Paved paths

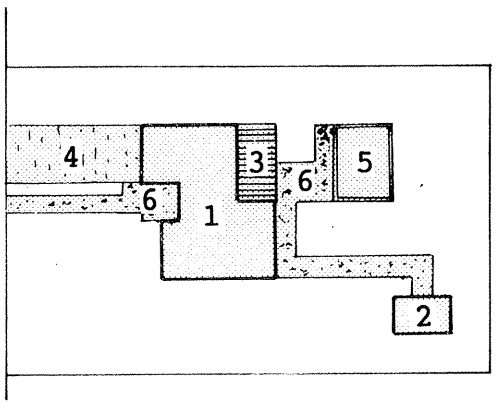


TABLE 2 - COVERAGE STANDARDS

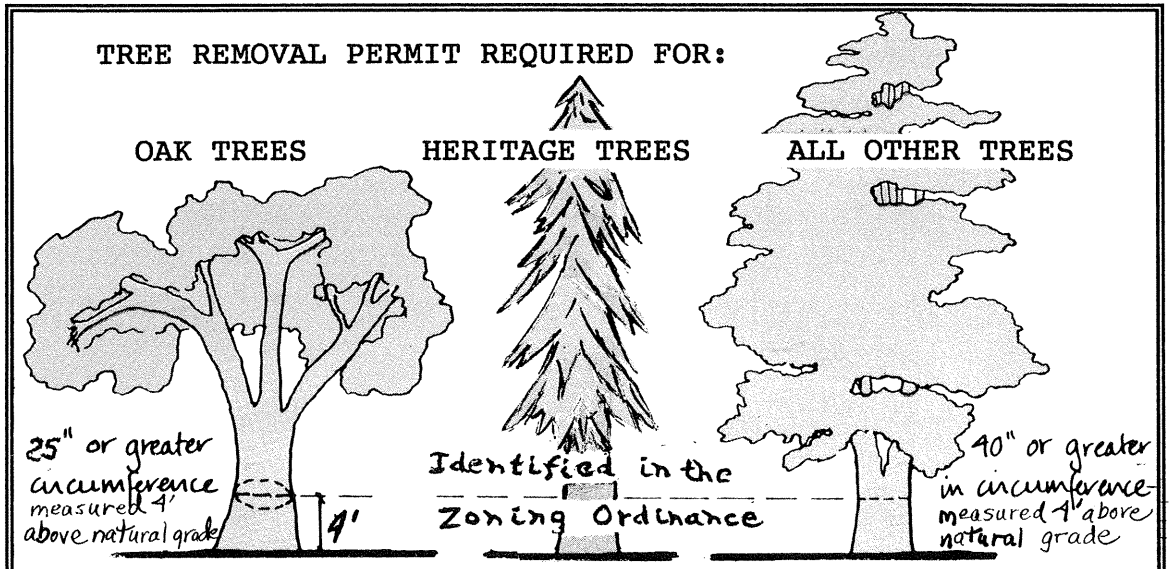
Zoning District	Total Impervious Coverage
R-H	55%
R-M-6	55%
R-M-8	55%
R-1-10	50%
R-1-20	50%
R-1-40	50%
R-R-2.5	35%
R-MT-5	35%

TREE REMOVAL REGULATIONS

Much of the attractiveness of Scotts Valley is attributable to the wooded hillsides and the native and ornamental trees scattered throughout the City. The preservation of these trees is necessary for the health, safety and welfare of the residents of the City in order to preserve scenic beauty, prevent erosion of topsoil, protect against flood hazards and the risk of landslides, counteract pollutants in the air, maintain the climatic balance and decrease wind velocities. To this end, the City has adopted tree regulations for the removal of trees within the City (Section 17.44.080 of the Municipal Code).

A Tree Removal Permit, issued by the Planning Commission, is required for the removal of trees over a certain size. All permit applications are reviewed and determined according to specific criteria. Neighboring properties will be notified of the application, and the decision of the Planning Commission may be appealed to the City Council. The City may require that a replacement tree be planted as a condition of the permit approval.

TREE REMOVAL PERMIT REQUIRED FOR:



APPLICATIONS ARE REVIEWED AND DETERMINED ON THE BASIS OF THE FOLLOWING CRITERIA:

1) The condition of the tree with respect to disease, imminent danger of falling, proximity to existing or proposed structures and interference with utility services.
2) The necessity to remove the tree for economic or other enjoyment of the property.
3) The topography of the land and the effect of the tree removal upon erosion, soil retention and the diversion or increased flow of surface waters.
4) The number, species, size and location of existing trees in the area and the effect the removal would have upon shade, privacy impact, scenic beauty, property values, and any established standards of the area.

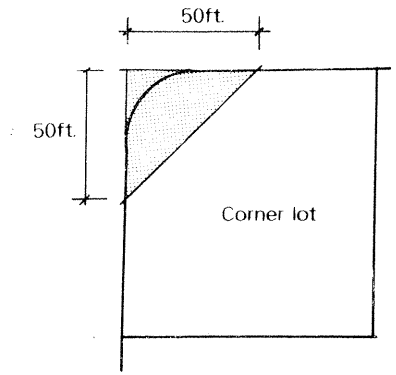
FENCE REGULATIONS

HEIGHT RESTRICTIONS FOR FENCES, WALLS, AND HEDGES LOCATED WITHIN REQUIRED YARDS

Fence Location	Front Yard	Rear Yard	Exterior Side Yard	Interior Side Yard
Any Lot	3′ *	6′	3′ *	6′

*Fences, walls, or compact hedge at the sight distance across street intersection shall not exceed 3′ in height.

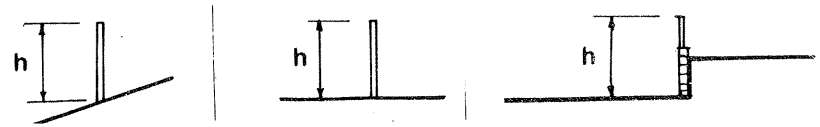
SIGHT DISTANCE



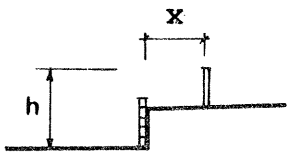
Area of 3ft. height restriction

HEIGHT MEASUREMENT

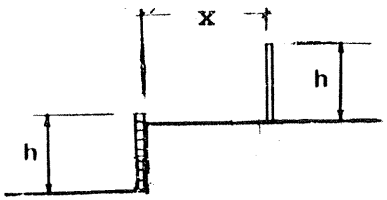
The height of a fence, wall or hedge is measured by a vertical line from the highest point to a point directly below at either the natural or finished grade, whichever is lower.



Parallel fences and walls shall be separated by a horizontal distance of not less than five feet.



X is less than 5′



X is 5′ or more