FOUNTAINGROVE II DESIGN PROGRAM

DESIGN GUIDELINES
OPEN SPACE MANAGEMENT

FOUNTAINGROVE II DESIGN PROGRAM

Prepared For: Watt Homes of Northern California Dividend Fountaingrove Partners

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I. BACKGROUND

Prior to the planning and design of Fountaingrove II, an Environmental Assessment was prepared, under contract to the City of Santa Rosa, in order to identify planning/environmental constraints and design opportunities. Among its findings, that Assessment identified the occurrence of sensitive plants, high wildlife habitat potential, and high visual values, and identified as a principal opportunity, the potential to create a multifunctional open space system. Such a system should provide for native plant and wildlife habitat conservation, preservation of visual quality, preservation of natural drainage, erosion control, and recreation. Accordingly, and in response to the Environmental Assessment, the Development Plan and Policy Statement for Fountaingrove II were prepared with an open space system in mind, setting aside more than 200 acres of the site for such a system, and specifying policies calling for retention of major topographic and major tree mass characteristics of the site.

Although the 200+ acres of open space are identified in the Development Plan, the adopted Policy Statement (Section V (B)), requires the preparation of a Design Program to further specify (1) major landscape/open space design elements, (2) design guidelines for area-wide physical design elements, and (3) open space management. Further, the Environmental Impact Report (EIR) certified for Fountaingrove II included as mitigation (mitigation measure #7, page IV-45) the provision of a project design program.

This Design Program has been prepared in response to the requirements of the Policy Statement and EIR; it establishes a framework for the preservation and maintenance of the project open space system, and establishes design guidelines for areawide landscape/streetscape elements.

II. ORGANIZATION

This Design Program is divided into two major sections:

- o Design Guidelines (Section III)
- o Open Space Management Plan (Section IV)

Design Guidelines

The intent of these guidelines is to establish the major design theme/concepts for Fountaingrove II as called for in the adopted Policy Statement and certified EIR.

Open Space Management Plan

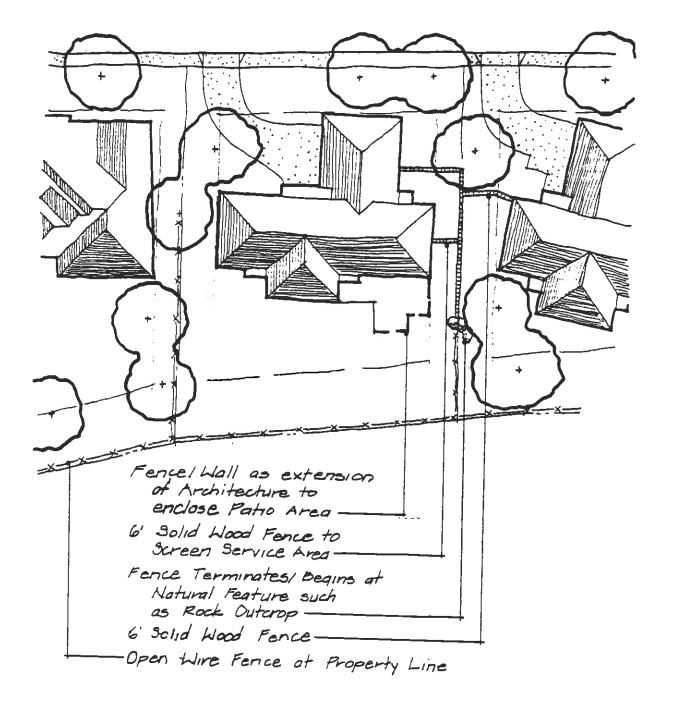
The intent of this plan is to establish a framework for the preservation and maintenance of the open space areas within Fountaingrove II including management of the "special interest plant species" and "special status habitats" identified in the Environmental Assessment and certified EIR.

III. DESIGN GUIDELINES

Recognizing that the relatively rich variety of native vegetation is one of the site's most appealing assets, the design concept for Fountaingrove II seeks to retain and enhance this natural character and to blend the development with the native landscape.

The Master Landscape Plan, located in a sleeve at the back of this document, illustrates the overall landscape concept for Fountaingrove II including the native woodland, grassland, and chaparral communities, the neighborhood parks, the trail system, and conceptual landscaping of common areas and streets including Fountaingrove Parkway and project entries.

The following pages illustrate various design elements such as Fountaingrove Parkway, project entries and fencing concepts in more detail. Also included are typical details of site and street furniture.



No Scale

FENCING CONCEPTS

(SF1 & SF2 AREAS)

FOUNTAINGROVE II

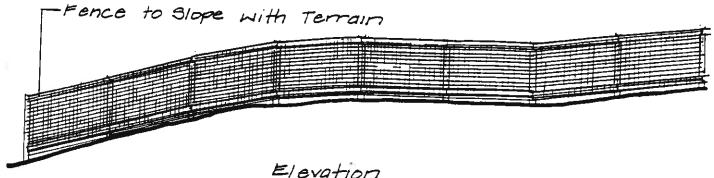
A PLANNED COMMUNITY

DESIGN PROGRAM

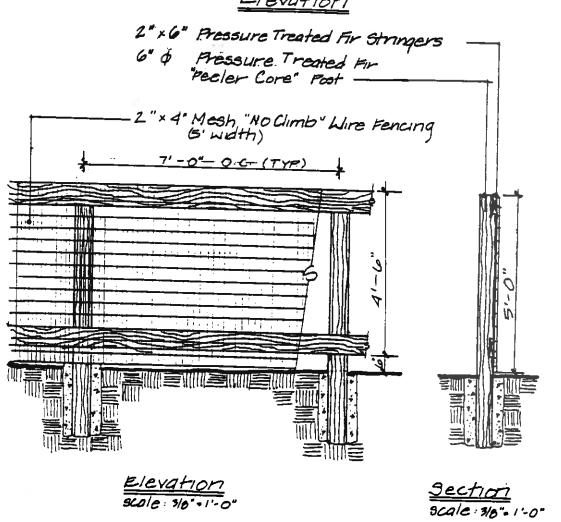


CARLILE / ASSOCIATES

CIVIL ENGINEERS - SURVEYORS - LAND PLANNERS



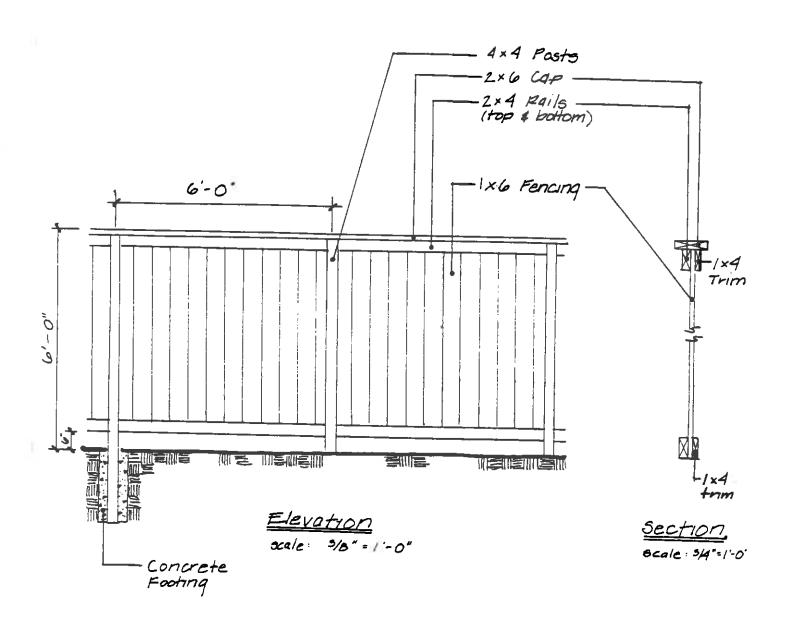
Elevation



OPEN WIRE FENCE

FOUNTAINGROVE II **DESIGN PROGRAM**

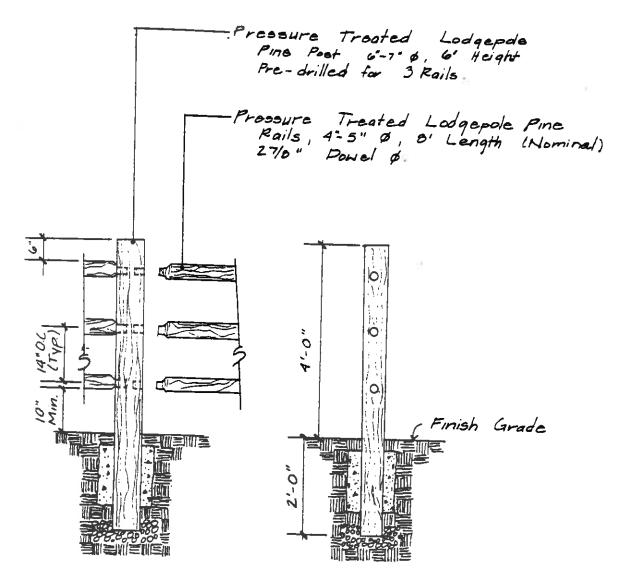




SOLID WOOD FENCE

FOUNTAINGROVE II A PLANNED COMMUNITY DESIGN PROGRAM





Section

Elevation

Scale: 1/2"= 1'-0"

Notes Post and Rail Fence By B.V.C.
or Approved Equal Fence Available
Through L and 5 Stakes Inc. Mountain
VIEW, CA (415) 961-5010

O.C. Diotance Between Posts Determined by Length of Rails.

POST & RAIL FENCE

FOUNTAINGROVE II

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CIVIL ENGINEERS - SURVEYORS - LAND PLANNERS

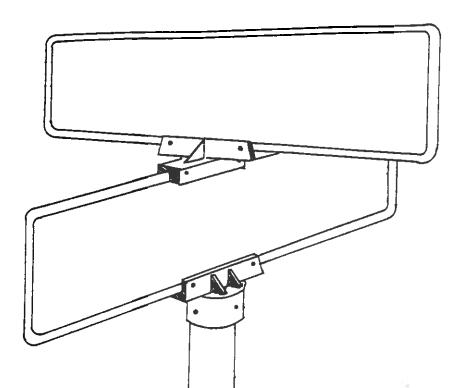
Note: Wood Pole Preferred. Aluminum Pole With Dark Forcet Green Ponder Paint Could Be Used As 36" -Single Luminaire Mounting An Alternate. from With All Mounting 1-21" Hardware For General Electric Luminaire. Provide Mounting For PE Receptacle Exterior To Luminaire. Pendant Mounted General Electric TC-100R Height 30' Center-Bored Wood Mounting Pole Shall Be Koppers 23'-0" Or Approved Equal Per PG & E Standard Dwg. No. 051767, Sheet 3 Fig. 6. Pole Shall Conform To City Standard No. 606. -RZG "No Parking Any Time" Install On No Parking Side 1,-0-Min Of Street Where Applicable Install Pole As Per City 2:0" 5td. Dwg Nos 600 \$ 606 No Scale

STREET LIGHT

FOUNTAINGROVE II

DESIGN PROGRAM





Street Sign per City of Santa Rosa Std. 705B.

Pole finish to be Dark Forest Green Powder Paint

No scale

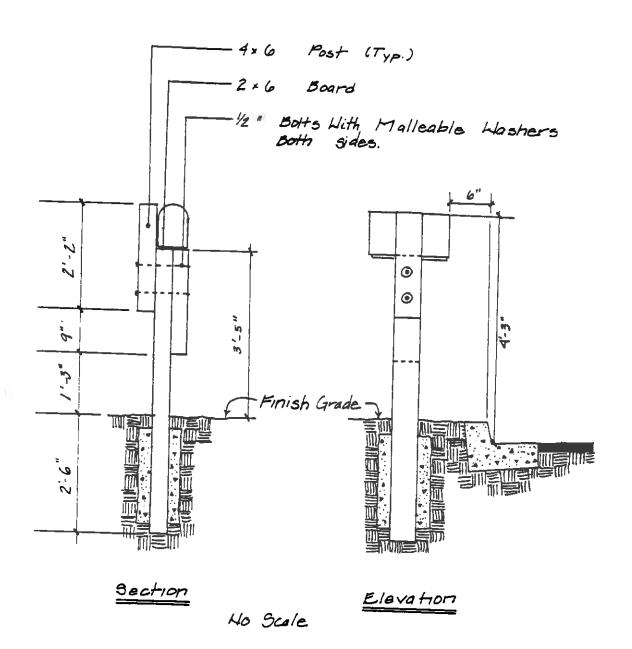
STREET SIGN

FOUNTAINGROVE II

DESIGN PROGRAM



Note: All Wood to be Con Hrt. Redwood.
Paint Mailbox Black



MAILBOX

FOUNTAINGROVE II







IV. OPEN SPACE MANAGEMENT PLAN

A. OBJECTIVES

The objectives of open space management for Fountaingrove II include the following:

- 1) To retain a maximum of the natural values embodied in the site's existing vegetation and associated wildlife.
- 2) To preserve existing resource features of concern and restore or enhance selected communities and habitats.
- 3) To preserve the visual quality of the natural landscape in open space areas considering views from offsite as well as onsite.
- 4) To minimize the potential fire hazard associated with the open space/development interface.
- 5) To control erosion in areas where it occurs currently and to minimize the potential for future erosion.
- 6) To provide for certain recreational uses such as hiking consistent with the other natural resource protection and management objectives.

B. OPEN SPACE CLASSIFICATIONS

There will be four classifications of open space at Fountaingrove II:

- o Neighborhood Parks
- o Common Open Space
- o Private Open Space
- o Open Space Easement

These classifications define the ownership, responsibility for maintenance, and permitted uses for these areas and are shown in Figure 1.

Neighborhood Parks

The two proposed neighborhood parks will be owned and maintained by the City of Santa Rosa. Permitted uses will be determined by the City of Santa Rosa Recreation and Parks Department.

Common Open Space

Common Open Space shall be those open space areas owned and maintained by a Master Homeowners Association or a public entity such as a Lighting and Landscape Maintenance District. The majority of the open space at Fountaingrove II will be Common Open Space. Passive recreational uses including, but not limited to, hiking trails, picnic areas, and other uses which do not significantly injure or scar vegetation, promote erosion, or interfere with wildlife use of the area will be permitted.

Private Open Space

Private Open Space shall be those open space areas designated on private residential lots which will be owned and maintained by the owner. Passive recreational uses which do not substantially alter significant existing native vegetation will be permitted.

Open Space Easement

Open Space Easement shall be those easement areas designated over private residential lots which will be owned by the lot owner and maintained by the entity (Master Homeowners Association or Lighting and Landscape Maintenance District), which maintains the Common Open Space areas. Open Space Easements will typically be designated for specific purposes such as to provide landscape planting areas adjacent to streets and to provide wildlife corridors linking major open space areas. Passive recreational uses which do not significantly injure or scar vegetation, promote erosion, or otherwise interfere with the purpose of the Open Space Easement will be permitted.

C. APPROACH

Addressing the various objectives of open space management for Fountaingrove II primarily involves vegetation management actions designed to serve multiple purposes. For this reason, the plant communities currently existing within the open space areas form the basis for the plan. The plan acknowledges the northern oak woodland, mixed evergreen woodland, chaparral, and grassland plant communities. Within the chaparral plant community, the Rincon ceanothus (Ceanothus confusus) and Rincon manzanita, (Arctostaphylos stanfordiana var. repens) identified as "special interest" plant species in the Fountaingrove II EIR, exist in several areas. These plants have been addressed in project planning since 1989 resulting in project design modifications to enlarge preserve areas as well as a continuing propagation, taxonomic, and cultural research program. (See Appendix C) A major part of the Open Space Management Plan involves the protection and enhancement of habitat for these sensitive species.

The major open space management areas are shown in Figure 2. These include the following:

- O Sensitive Plant Management Area includes existing low/medium and high density sensitive plant preserve areas and chaparral areas where sensitive plant habitat enhancement is proposed
- Woodland Management Area includes northern oak woodland and mixed evergreen woodland recognizing that these two typically occur in a complex combination and have similar management needs
- O Grassland Management Area includes existing grasslands and areas to be converted to grassland
- o Chaparral Management Area includes chaparral areas not suitable as habitat for the sensitive plants

While vegetation management is the primary emphasis of the plan and incorporates provisions to address other important open space management topics, these topics are discussed separately in the sections on Exotic and Noxious Vegetation, Wildlife Management, Fire and Fuel Management, and Erosion and Sedimentation Control. Additionally, a list of native plants encouraged for use by homeowners and a list of unsuitable and/or invasive plants to be prohibited are included in Appendices A and B respectively.

D. PLAN ELEMENTS

SENSITIVE PLANT MANAGEMENT

Pursuant to mitigation measures recommended in the EIR, a detailed rare plant mitigation program has been initiated and is a major component of this Open Space Management Plan. The extent and significance of the locally endemic chaparral community are discussed in an appendix to the Fountaingrove II EIR, and are the focus of a major preservation and propagation effort. The goals of the rare plant mitigation effort are to avoid as much of the existing populations and their preferred habitat as possible, maintain a full genetic spectrum within the project area, and to compensate through propagation, planting, and habitat enhancement for the losses that cannot be avoided. Unfortunately, the endemic species present in the project area favor the gentler ridgetops and mesas, the most usable sites for development. Because of this, achieving adequate mitigation through avoidance alone is extremely difficult. There are, however, several factors which indicate that a reasonably high degree of success could be expected for a detailed habitat management and enhancement program, supplemented by significant propagation and planting.

The following are the specific actions being undertaken as part of this effort:

Preservation

Five separate preserves, protecting about 15 acres of the current total extent of the manzanita and ceanothus have been designed into the Open Space Management Plan. These cover the full range of geographic and site conditions found in the area. They have been selected as the highest quality sites (habitats and populations) in the overall project area. In addition, the overall open space designation totals over 200 acres, much of which is also potentially suitable habitat

for the sensitive plants. This potential habitat contains soils similar to those in the existing communities, but currently supports tall mature chaparral of scrub oak, chamise, chaparral pea, and other manzanitas, plus a few areas of annual grassland and oak woodland. Preservation of existing high quality sites (the northernmost in particular) forms the primary basis of the project's sensitive plant mitigation efforts. The initial project design was substantially modified in response to comments by and meetings with local representatives from the California Department of Fish and Game (CDFG), the California Native Plan Society (CNPS), and other botanical experts. The main goal of this was to include as much of the existing high quality habitat as possible in the open space designations, to include the full geographic and microclimatic conditions, and to maximize the benefits to be gained at each preserve, such as striving for a larger area-to-perimeter ratio and utilizing local features and opportunities. Preserved areas will be closely managed to provide physical protection, colony monitoring, supplemental thinning and planting, and any other remedial work as is needed to assure the continued survival of the endemic shrubs.

Propagation and Salvage

Over 1000 cuttings of the Rincon Ridge ceanothus and manzanita have been successfully propagated and potted and are showing vigorous new growth. Test plantings will be made this winter as weather permits and additional cuttings will continue to be taken to provide adequate planting stock for future open space restoration and landscaping. The goal in propagation is to assure that the numbers of plants that cannot be avoided by the development are replaced by new young plants taken from the full spectrum of sub-forms and habitats. Since there is an abundance of potentially suitable habitat conditions in the open space areas (as well as in certain parts of the landscape and revegetation areas), there is the potential to increase substantially the number of each species in the final project configuration. With perhaps 2000 ceanothus currently in the study area and roughly 4000 to 5000 manzanita, a significant start has been made to assure no net loss in the numbers and general extent of these species.

Habitat Enhancement

Selected areas of mature chaparral will be mechanically cleared to create new habitat for the rare ceanothus and manzanita. No areas currently supporting the sensitive plants are being cleared. Some of these areas will be seeded or planted with propagated stock, while others will be untreated and monitored for natural seed dispersal and establishment. Other areas of tall mature brush will be hand thinned to open the canopy in an attempt to stimulate ceanothus and manzanita seed germination. Limited brush burning may be explored as an additional management tool. Eventually, clearing of currently mature brush will be conducted in a number of areas to create considerable new openings on suitable soil for the manzanita and ceanothus. This will both reduce the existing fuel load and provide for new habitat for the rare shrubs. Since these shrubs are low and generally quite green, their establishment will also contribute toward lower overall fire hazard and will be useful in creating fuelbreaks adjacent to development areas.

Revegetation and Landscaping

Landscaping within the development will emphasize the use of native trees (oaks, madrone, redwood, Douglas fir) and shrubs (indigenous ceanothus and manzanitas, coffeeberry, monkeyflower, toyon, and many others). Revegetation of roadsides, cuts, fills, etc. will utilize the local endemic ceanothus and manzanita in combination with other native plantings. The two rare sub-shrubs prefer open disturbed (bare) soil, form low spreading mats and mounds, are extremely drought tolerant, and are presumably somewhat fire-resistant (because of their low habit, bare surroundings, and high ratio of live growth to total volume).

Management, Monitoring, and Funding

The sensitive plant management areas will be managed conservatively, with low level recreational use that is compatible with natural resource protection and enhancement. Specific management guidelines and techniques will be refined during the implementation stages. Long term management will involve ongoing commitment by the administrative entity to actively monitor and protect the sensitive plan management areas. The open space areas, including the sensitive plant management areas, will be owned and managed by a local homeowner's association or some public entity such as a Lighting and Landscape District administered by the City of Santa Rosa.

Research and Reporting

Annual progress reports will be prepared detailing the open space management efforts' yearly results. These reports will discuss the efforts undertaken and their results, any problems encountered and how they are to be resolved, and projected tasks for the next year. Opportunities for research will be encouraged.

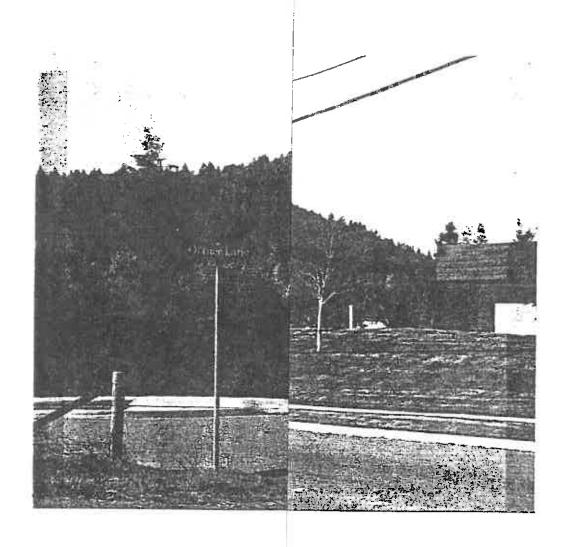
2. TREE PRESERVATION/VISUAL SCREENING FROM VALLEY FLOOR

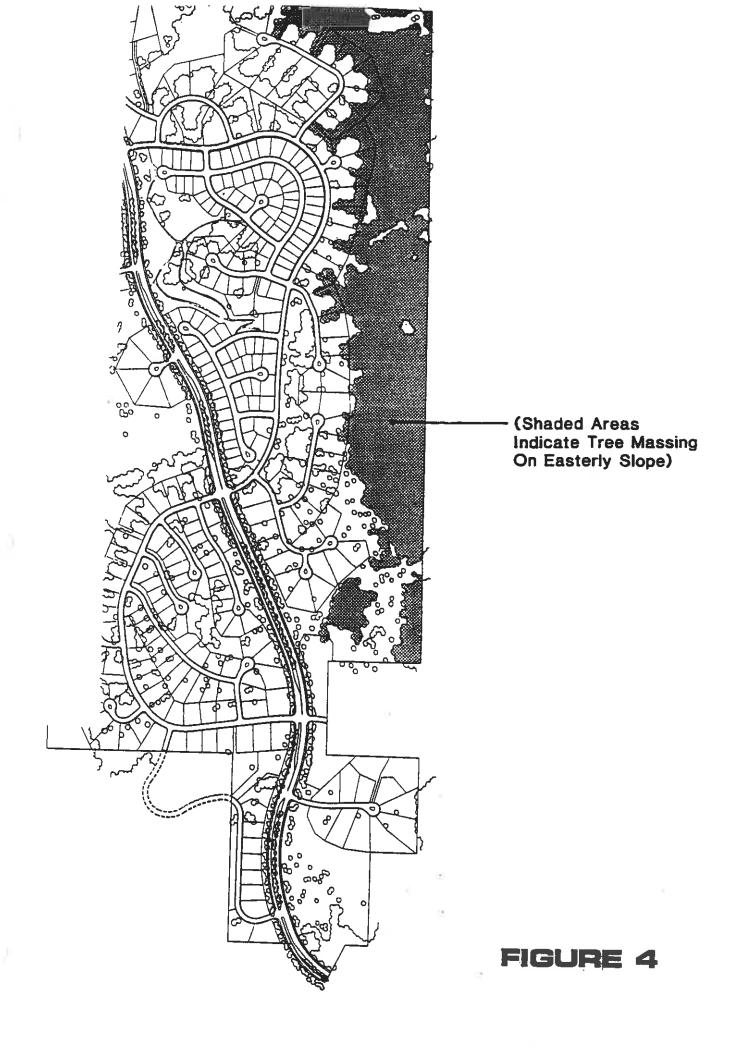
The EIR identified that the east-facing, tree-covered slope, along the easterly portion of the property provides a visual "backdrop" to Rincon Valley. Subsequent visual analysis confirmed that, but in addition, demonstrated that about 2/3 of the backdrop — the lower portion of the hillside— is off the Fountaingrove II site (see Fig. 3). That lower, dominant portion of the hillside currently contains developed, developing, and underdeveloped parcels, and would not be affected in any way by development of Fountaingrove II.

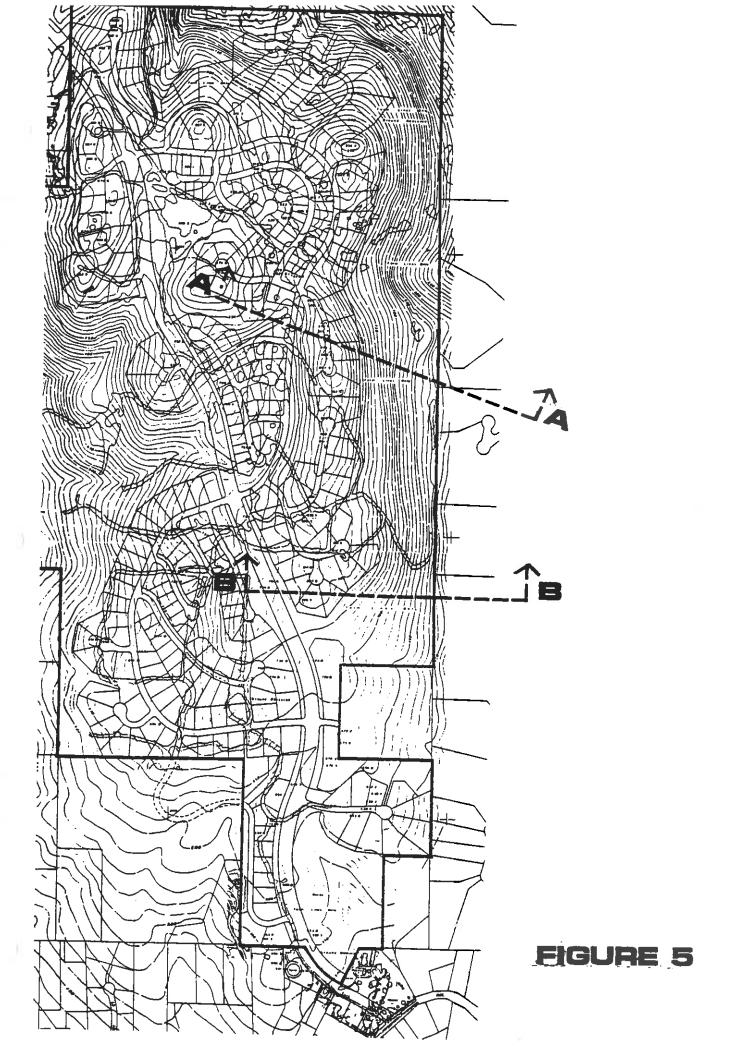
Existing trees to be removed are indicated on the Tentative Map; it is clear that only a very few of the existing trees would be removed. The tree masses to remain on the Fountaingrove II site were plotted from aerial photographs onto the site plan (see Fig. 4). That demonstrates that nearly all of the existing (and remaining) tree masses are outside of the proposed lots and building site areas. The primary tree types are fir and oak, with the fir trees creating a dense tree cover at least 70 feet tall.

Two partial site sections -- through the easterly slope area -- were drawn from the Badger Road/Wallace Road area (EIR vantage point - photo 4) (see Figs. 5-7). These sections demonstrate that retention of the dominant tree mass would screen potential development and would protect existing viewsheds from the valley floor into the project area.

In order to insure tree preservation, all portions of the east-facing slope, outside of the (SF1) lots, are included within the common open space area, which would prohibit development/tree removal, and which would be maintained/preserved in perpetuity by a Master Homeowners Association, Lighting and Landscape Maintenance District, or other legal entity.







Proposed 8F1 -35' Max. Bldg. Hght. Fountaingrove View Angle From EIR Vantage Point - Photo 4 eti2-n0 Hill/Tree Backdop

90alo: 17-800'

Scale: 1", 100'

3. WOODLAND MANAGEMENT

The woodland management areas shown on Figure 2 include areas of the northern oak woodland and mixed evergreen woodland communities. The primary species within these areas are Oregon oak, California black oak, Coast live oak, Douglas fir, California bay, and Madrone. The woodland areas are the most vegetatively complex of the site's plant communities with a greater variety of plant species and vegetative layers providing habitat for a greater variety of wildlife species. The woodland areas are also important visually, especially the east facing slopes which are visually prominent from Rincon Valley.

The goals with respect to woodland management include retaining the existing woodland to the greatest extent possible, improving overall conditions by thinning the understory and removing invasive exotics, and restoring certain sites to woodland cover.

Existing trees, including snags, will be preserved. Some areas will be supplementally planted, primarily with oaks in northern oak woodland areas and Douglas fir in mixed evergreen woodland areas, although California bay and madrone will also be used. Protection for new plantings from wildlife browsing will be provided and may include the use of fencing, screening, or cages.

Woodland understory will be actively managed by periodically removing dense understory seedlings and brush, at least to the extent needed to provide a more fire-safe environment adjacent to residential development areas. The more remote woodland stands may be allowed to become more heavily vegetated to foster higher overall productivity and to benefit wildlife. Understory thinning will be conducted largely through hand methods, but some prescribed burning may be pursued in coordination with regional agencies. Specific hazard areas will be identified and subject to hand thinning with the removed material being piled and burned locally if possible. Some material may be left in piles in strategic places as cover for wildlife (quail, etc.) while some material may be chipped and spread over the ground surface. The thinning operations will improve fire safety by reducing

the fuel volume, will improve visual quality by eliminating unsightly thickets and by opening up new views, and will improve wildlife habitat by providing better groundcover growth and creating new edge habitats.

4. GRASSLAND MANAGEMENT

The grassland management areas shown on Figure 2 include current grasslands and suitable adjacent areas proposed to be converted to grassland. The existing grasslands include both the non-native annual type (Avena, Bromus, Cynosurus, Brassica, Centaurea) and scattered pockets of native perennials (Stipa pulchra and lepida, Elymus, Melica, Sitanion, Festuca). The native needlegrass grassland (Stipa) is of special interest because it has experienced a severe reduction in both distribution and abundance statewide.

The goals with respect to grassland management are to restore the existing grassland areas to dominance by the native perennial bunchgrasses (including the needlegrasses in particular), to improve conditions for the native grasses by removing invasive exotics, to expand existing grasslands by converting suitable adjacent areas currently dominated by coyote brush, and to prevent future encroachments into the grassland.

Areas of disturbed ground and sparse grassland will be restored to more natural bunchgrass stands and meadow. The large open valley in the north-central part of the site at the head of Paulin Creek is a prime area for grassland restoration since this area now supports extensive coyote brush and the exotic Harding grass. This area will be restored to bunchgrasses and scattered oaks. Other small areas of meadow and bunchgrass prairie will be supplementally planted with additional native grasses. Selected areas will be subject to intense local weed removal and grass planting from locally collected seed and live plugs.

Scattered oak planting within the grassland will be made utilizing locally collected materials and will be protected from wildlife browsing through the use of fencing, screening, or cages. Long term maintenance will involve periodic monitoring and spot problem corrections (erosion, weeds, browse damage).

5. CHAPARRAL MANAGEMENT

The chaparral management areas shown on Figure 2 include chaparral areas not suitable as habitat for the sensitive plants (Rincon ceanothus and Rincon manzanita). The primary species within these areas are Eastwood manzanita, common manzanita, coyote brush, toyon, chaparral-pea, coffeeberry, sticky monkeyflower, chamise, and wavy leaf ceanothus. The chaparral community tends to occupy hot and dry south and east facing slopes of the site. Chaparral areas considered as potentially suitable habitat for the sensitive plants are designated sensitive plant management areas and are discussed under the section of this plan entitled "Sensitive Plant Management."

The goals with respect to chaparral management include maintaining the ecological integrity of the chaparral areas for their wildlife habitat value while managing the potential fire hazard they represent.

Chaparral areas will be actively monitored and periodically thinned out to improve fire safety be reducing fuel volume, improve visual quality by eliminating unsightly thickets, and improve wildlife habitat by providing better groundcover growth and new edge habitats. Thinning will be conducted largely by hand methods, but some prescribed burning may be pursued in coordination with regional agencies. Specific hazard areas will be identified through annual monitoring and subject to hand thinning. Removed material will be piled and burned locally if possible or chipped and spread over the ground surface.

6. EXOTIC AND NOXIOUS VEGETATION

Exotic vegetation used as landscaping may impact the native vegetation through hybridizing with the native flora or through direct competition for available water and nutrients. Some exotic plants are extremely invasive and may take over large areas to the exclusion of the native flora. While overall a relatively minor influence currently, some exotic vegetation already exists on the site. Harding grass has made significant inroads into the grassland. French and Scotch broom and Pampas grass are also present.

The goal with respect to exotic and noxious vegetation is to minimize the impacts of this vegetation on the native flora.

The principal means to minimize the impacts associated with exotic vegetation will be to prevent such from spreading by prohibiting the use of plants included in Appendix B - Unsuitable/Invasive Plant List. This list includes known invasive plants and plants with the potential to hybridize with the Rincon ceanothus or the Rincon manzanita. Additionally, use of plants included in Appendix A - Native Plant List will be encouraged.

Control of existing exotics will involve removal utilizing both mechanical and chemical methods. It is anticipated that the majority of this effort will be directly initially at disturbed grassland areas to prepare them for restoration planting. Annual monitoring will assess the presence and/or spread of exotics and will provide recommendations for treatment.

7. WILDLIFE MANAGEMENT

Many wildlife species depend on more than one plant community or vegetation type. Thus, the edge between two communities is considered valuable for wildlife habitat. The complex intermixing of the site's plant communities creates a significant amount of edge, and therefore, the potential for high wildlife habitat value. A number of reptiles, amphibians, birds, and mammals are found on the site. Also found on the site are snags and rock outcrops identified in the EIR as "special interest habitats". A number of these are included within the common open space area for preservation as shown on Figure 8.

The goal with respect to wildlife management is to provide a meaningful environment for a relatively natural wildlife community by creating and maintaining a rich mosaic of native vegetation including features of benefit to wildlife.

Vegetation management actions will be designed with consideration for wildlife values by seeking to maintain a large amount of edge and timing such actions to avoid conflicts with nesting wildlife to the greatest extent possible. Snags and rock outcrops will be preserved. Efforts will be made to control domestic animals by enforcing leash laws and educating residents regarding protection of wildlife. Minor water impoundments will be created in the Paulin Creek ravine to enhance this seasonal water source for wildlife. Corridors linking major open space areas will be provided to facilitate wildlife circulation.