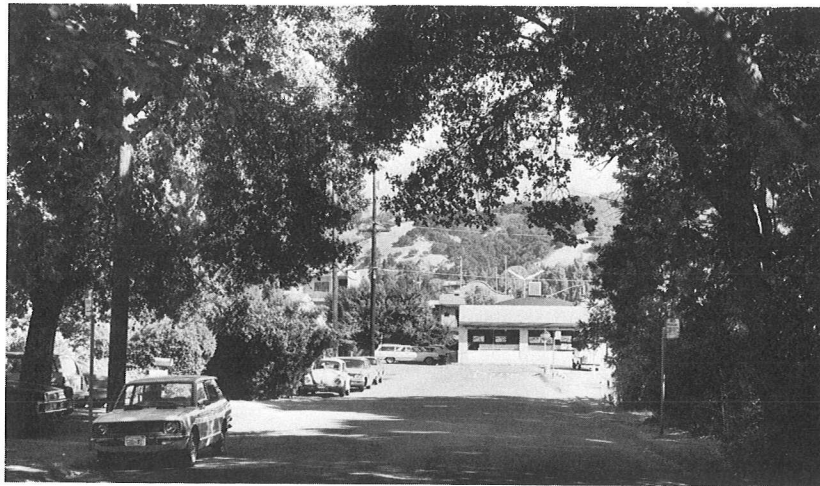


Commercial Zone

Lafayette's commercial area is a linear zone of retail and office buildings running almost the entire length of Mt. Diablo Boulevard. The central node occurs at Moraga Road around Plaza Park. The major arterials in addition to Mt. Diablo Boulevard are Oak Hill Road, Happy Valley Road and First Street from the north and Moraga Road from the south.

The linear form of the commercial area is reinforced at its north and south edges. Lafayette Creek, walled with trees, forms a distinct, green edge on the south. The freeway embankment forms the northern edge. Here a few large trees remain from the original highway. The young trees planted on this embankment have not yet grown sufficiently to provide a continuous green buffer. The aerial photograph included on page 18 of the Natural Landscape section shows these two edges clearly.

Additional planting on the EBMUD easement adjacent to the freeway would widen and strengthen this buffer between the downtown and the transportation corridor.



Tree canopy over First Street forms a strong buffer between the commercial zone and the residential area.

The downtown core is in a state of transition and expansion. The so-called BART Block may be redeveloped in future years. Other expansion for both retail and office space is likely in the next decade. New development affords an excellent opportunity for the comprehensive redesign of large portions of the commercial zone. Carefully developed tree planting schemes should become an integral part of any such plans.

Tree planting situations in the commercial zone of Lafayette fall into five broad categories:

- Street trees for the major boulevard and primary access roads.
- Street trees for secondary commercial streets.
- Trees for parks, plazas, pedestrian malls and walkways.
- Trees for parking areas.
- Trees for the buffer zone (EBMUD corridor).

Each situation has its own design determinants from which criteria for tree selection can be developed. The list of trees for each situation satisfies the established criteria.

Street Trees for the Major Boulevard & Primary Access Roads

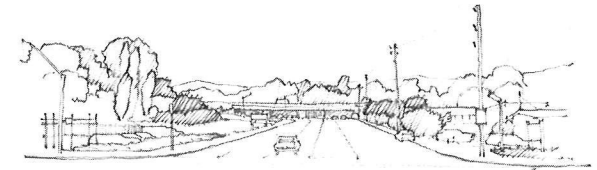
Mt. Diablo Boulevard, the "main street" of Lafayette, is essentially a seven lane boulevard (4 lanes of traffic, 1 lane median or turn-out, 2 lanes of parking). The principal design requirements for trees relate to scale, reinforcement of street unity, shade, and heat tolerance.

Because Mt. Diablo Boulevard is very wide and long, trees used should be large in scale. This means generally coarse textured trees that will attain a large size and occupy a large volume. Small scaled trees would not make a sufficient visual impact on such a large street. Trees placed closely together (25 to 35 feet) also unify the streetscape giving it both reinforced form and character. Broad-spreading trees provide a canopy over pavement which shades and cools sidewalks, traffic lanes and building interiors. This shading is particularly important on the north side of a street which is exposed to the sun for a long period during a summer day. Because of the intense heat reradiated from the hard-surfaced surroundings, the trees must withstand high summer temperatures.

The major access streets to the commercial zone—Oak Hill Road, Happy Valley Road, First Street and Moraga Road—are similar in size to Mt. Diablo Boulevard. These streets deserve special treatment to reflect their importance as entries into the business district. Each street might be treated a little differently, but schemes adopted should echo the character of Mt. Diablo Boulevard. The design criteria for tree selection are nearly identical to those described for Mt. Diablo Boulevard. The wider streets should incorporate a planted median to reduce their widths and clearly delineate traffic lanes.



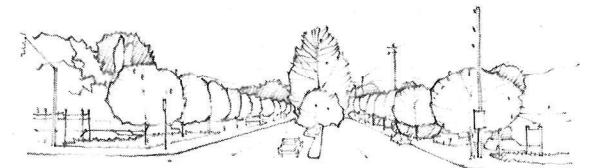
Mt. Diablo Boulevard looking west—1975.



Oak Hill Road looking north from Mt. Diablo Blvd.—1975.



Mt. Diablo Boulevard concept planting scheme.



Oak Hill Road concept planting scheme.

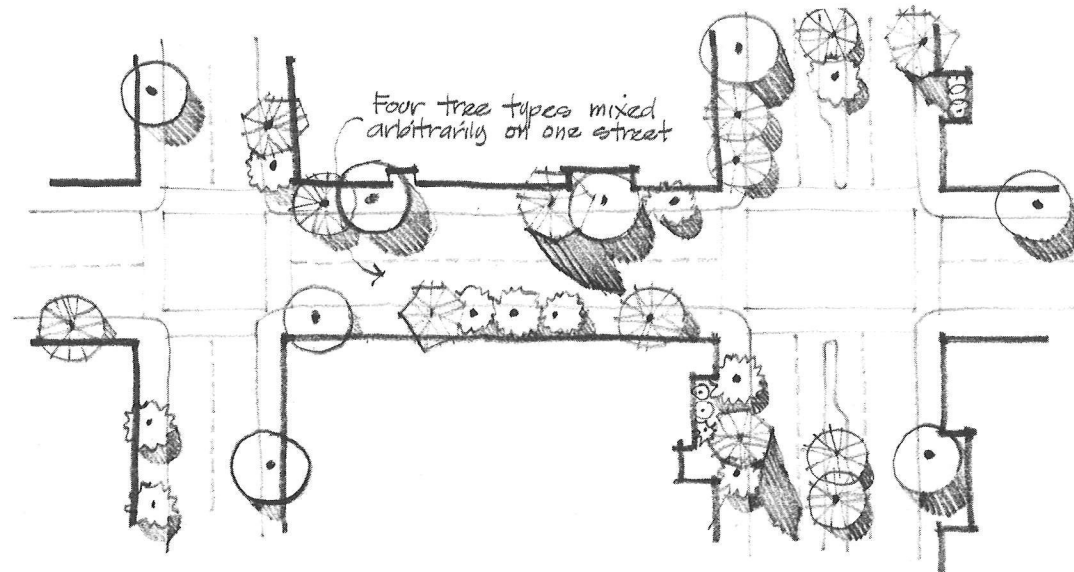
When street trees are to be planted the argument over uniform versus varied tree species inevitably arises. Many people favor alternating or varying tree selections along the street to avoid monotony. A section of Mt. Diablo Boulevard is an example of this concept—Liquidambar and Southern Magnolias have been interspersed. Another section of the Boulevard reflects the other point of view—uniformity of species, Tulip Trees in this case. Both arguments have validity making the issue difficult to resolve.

Rather than attempting to arbitrarily favor one concept or the other, let us look at the issue as a design problem with the city-wide effects in mind. A commercial street (and to a certain extent a residential street) is a linear composite of many architectural forms and styles. The resulting visual diversity can border on chaos. There is no single unifying element or theme to give harmony to the whole. Tree planting is able to counterbalance this diversity and provide a pleasingly harmonious character to the street.

Because each species of tree has its own visual characteristics (form, color, texture, etc.), a mixture of different species of trees tends to dilute the strength of unity possible with one dominant tree. A planting scheme which accomplishes maximum harmony but allows some diversity is possible. A dominant tree can be selected for the entire street and planted uniformly throughout. Supplemental trees such as those on the accompanying list then can be used at various points along the street — buildings, plazas, bus stops, ends of median islands or other elements.

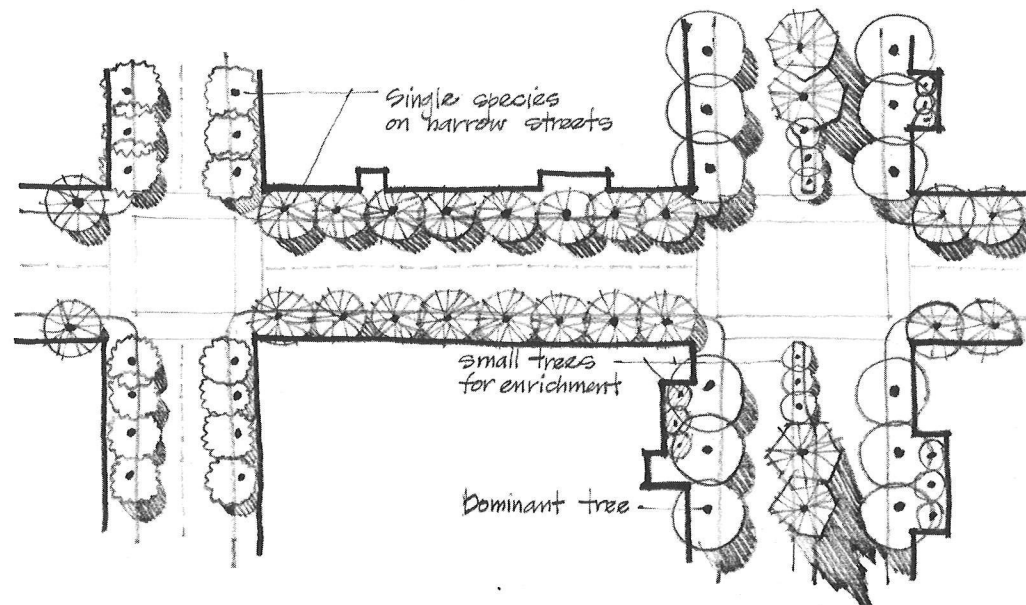
Diversity is achieved within a unified whole. The dominant tree, selected for its scale, form, size and color carries the theme while the supplemental trees add enrichment without disrupting the unity by visual competition. This type of planting is obviously most appropriate on wide streets where maximum planting space is available.

The planting of a single, appropriate species along other major streets can reflect the importance of such streets. Major collector streets can be made obvious by the planting of one dominant species along the sides. Those streets will “read” as important thoroughfares in the city as a whole. Diversity is achieved by the variation of trees among the different streets. Diversity becomes a city-wide factor rather than an issue of a single street. For example, some streets might be planted with appropriately selected trees that give a splendid display of fall color. Other streets could be planted with spring flowering trees. Each would give a brilliant display, undiluted with variations. These effects are not suggested to supplant the other criteria for tree selection—form, size, etc. They are suggested as a means of developing strength and richness through city-wide tree selection.



Excessive, unplanned variety along commercial streets.

Trees used without purpose or function



Variety within a unified planting scheme along commercial streets.

Multiple tree selection on wide streets

DOMINANT TREES RECOMMENDED FOR THE MAJOR BOULEVARD & PRIMARY ACCESS ROADS

Plant Name	Form	Deciduous/ Broadleaf Evergreen	Needs 8' Min. Root Space
Celtis australis— European Hackberry	round globe	deciduous	
Cinnamomun camphora— Camphor	round globe	broadleaf	•
Fraxinus holotricha 'Moraine'— Moraine Ash	round globe	deciduous	
F. uhdei— Shamel Ash	erect, ovoid	deciduous	•
Ginkgo biloba 'Autumn Gold'— Maidenhair Tree	ovoid	deciduous	
Gleditsia triacanthos inermis 'Moraine'— Moraine Honeylocust	broad globe	deciduous	
Liriodendron tulipifera— Tulip Tree	erect, ovoid	deciduous	•
Pistacia chinensis— Chinese Pistache	broad globe	deciduous	
Platanus acerifolia— London Plane Tree	ovoid	deciduous	•
Quercus coccinea— Scarlet Oak	round globe	deciduous	
Q. ilex Holly Oak	round globe	broadleaf	
Tilia cordata Little-leaf Linden	dense, pyramidal	deciduous	•
Zelkova serrata Japanese Zelkova	broad globe	deciduous	

TREES RECOMMENDED TO SUPPLEMENT PLANTING OF THE MAJOR BOULEVARD & PRIMARY ACCESS ROADS

Plant Name	Form	Deciduous/ Broadleaf Evergreen
Crataegus 'Autumn Glory'— Hawthorn Variety	round globe	deciduous
Fraxinus oxycarpa 'Raywoodii'— Raywood Ash	round globe	deciduous
Lagerstroemia indica— Crape Myrtle	vase-shaped	deciduous
Liquidambar styraciflua— American Sweetgum	conical	deciduous
Ligustrum lucidum— Glossy Privet	round globe	broadleaf
Magnolia grandiflora 'Samuel Sommer'— Southern Magnolia Variety	round globe	broadleaf
Malus floribunda— Japanese Flowering Crabapple	round globe	deciduous
Photinia fraseri— Photinia	round	broadleaf
Prunus cerasifera 'Atropurpurea'— Purpleleaf Plum	round globe	deciduous
Pyrus calleryana 'Bradford'— Bradford Pear	ovoid pyramidal	deciduous
Pyrus kawakami— Evergreen Pear	irregular round globe	semi- deciduous

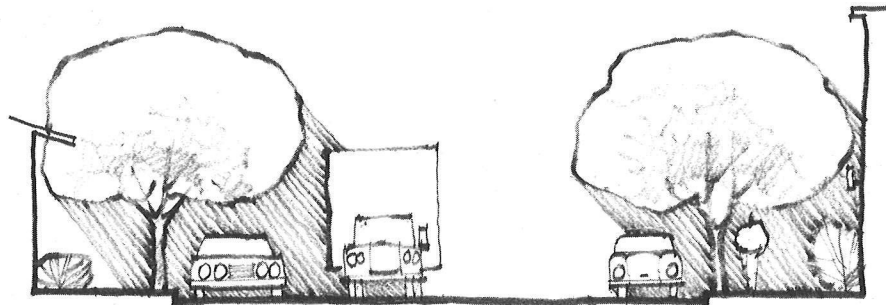
Street Trees for Secondary Commercial Streets

Secondary commercial streets include Oakland Avenue, First and Second Streets south of Mt. Diablo Boulevard and Golden Gate Way. These streets are narrower and less important as access streets to the business district. They have a greater pedestrian orientation. Some already have sidewalks and the beginnings of street tree plantings.

The design criteria for these streets include small scale, narrow planting spaces, short street length, shade over pedestrian walks and, in some cases, presence of natural creek vegetation. Each street might be planted with a single species of a small to medium sized canopy tree with a fine to medium texture.

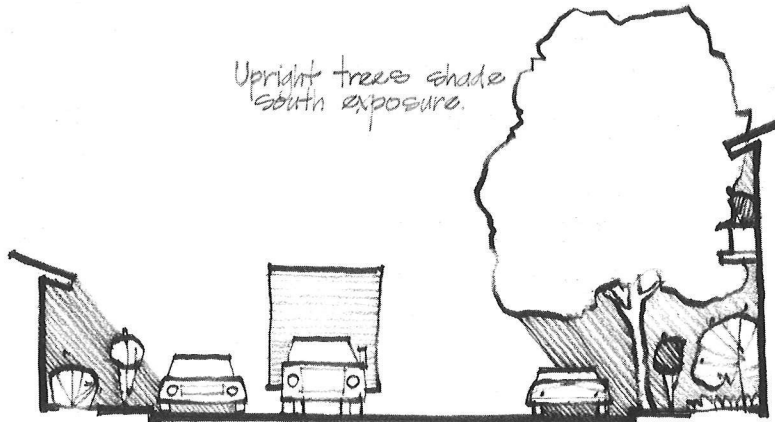
When space permits, both sides of the street may be planted. Erect, oval-shaped trees are suitable for the narrowest spaces. Uniform planting on both sides of these streets is of less importance because street width is already scaled down. North facing buildings need little extra shade protection. For effective street shading, planting should be concentrated on south and west facing building facades and walks. Seasonal interest such as spring flower or fall foliage color may be desirable because of the village-like scale of these streets—a sharp contrast to the wider access streets. New streets in future redevelopment areas are likely to be of this type and scale.

Small canopy trees on both sides shade walkways and building facades.



Typical planting of a wide commercial street.

Upright trees shade south exposure.



Typical planting of a narrow commercial street.

TREES RECOMMENDED FOR SECONDARY COMMERCIAL STREETS

Plant Name	Form	Deciduous/ Broadleaf Evergreen
Crataegus 'Autumn Glory'— Hawthorn Variety	round globe	deciduous
Fraxinus oxycarpa 'Raywoodii'— Raywood Ash	round globe	deciduous
Ginkgo biloba 'Fairmount'— Maidenhair Tree	conical	deciduous
Gleditsia triacanthos inermis 'Shademaster'— Shademaster Honeylocust	erect, ovoid	deciduous
Lagerstroemia indica— Crape Myrtle	vase-shaped	deciduous
Ligustrum lucidum— Glossy Privet	round globe	broadleaf
Liquidambar styraciflua— American Sweetgum	conical	deciduous
Prunus cerasifera 'Atropurpurea'— Purpleleaf Plum	round globe	deciduous
P. lyonii— Catalina Cherry	round globe	broadleaf
Pyrus calleryana 'Bradford'— Bradford Pear	ovoid, pyramidal	deciduous
Quercus ilex— Holly Oak	round globe	broadleaf
Robinia pseudoacacia 'Decaisneana'— Pink Locust	ovoid	deciduous
Tilia cordata Little-leaf Linden	conical	deciduous

TREES RECOMMENDED FOR PLAZAS, MALLS & PEDESTRIAN WALKWAYS

Plant Name	Form	Deciduous/ Broadleaf Evergreen
Acer buergerianum Trident Maple	round globe	deciduous
A. campestre Hedge Maple	round globe	deciduous
A. palmatum Japanese Maple	round globe	deciduous
Crataegus 'Autumn Glory'— Hawthorn cultivar	round globe	deciduous
C. lavallei— Carriere Hawthorn	dense round globe	deciduous
Crinodendron patagua— Lily-of-the-Valley Tree	dense round globe	broadleaf
Eucalyptus polyanthemos— Silver Dollar Gum	ovoid	broadleaf
Ginkgo biloba 'Fairmount'— Maidenhair Tree	pyramidal	deciduous
Gleditsia triacanthos inermis 'Shademaster'— Shademaster Honeylocust	ovoid	deciduous
Lagerstroemia indica— Crape Myrtle	vase-shaped	deciduous
Laurus nobilis— Grecian Laurel	dense round globe	broadleaf
Ligustrum lucidum— Glossy Privet	dense round globe	broadleaf
Liquidambar styraciflua— American Sweetgum	pyramidal	deciduous
Olea europaea 'Swan Hill' — Swan Hill Olive	round globe	broadleaf
Prunus cerasifera 'Krauter Vesuvius'— Flowering Plum cultivar	round globe	deciduous
Pyrus calleryana 'Bradford'— Bradford Pear	ovoid	deciduous
Quercus ilex— Holly Oak	round globe	broadleaf
Q. suber— Cork Oak	round globe	broadleaf
Robinia pseudoacacia 'Decaisneana'— Pink Locust	ovoid	deciduous

When selecting trees for streets or paved areas several general considerations are important. The form and size of the tree should allow freedom of movement for both cars and pedestrians. The lowest permanent branches eventually must be able to clear 8 feet over sidewalks and 13 feet or more over streets, depending upon proximity of truck traffic. Multi-trunked or small low branching trees should never be used. Conifers are inappropriate street trees because of their branching habit.

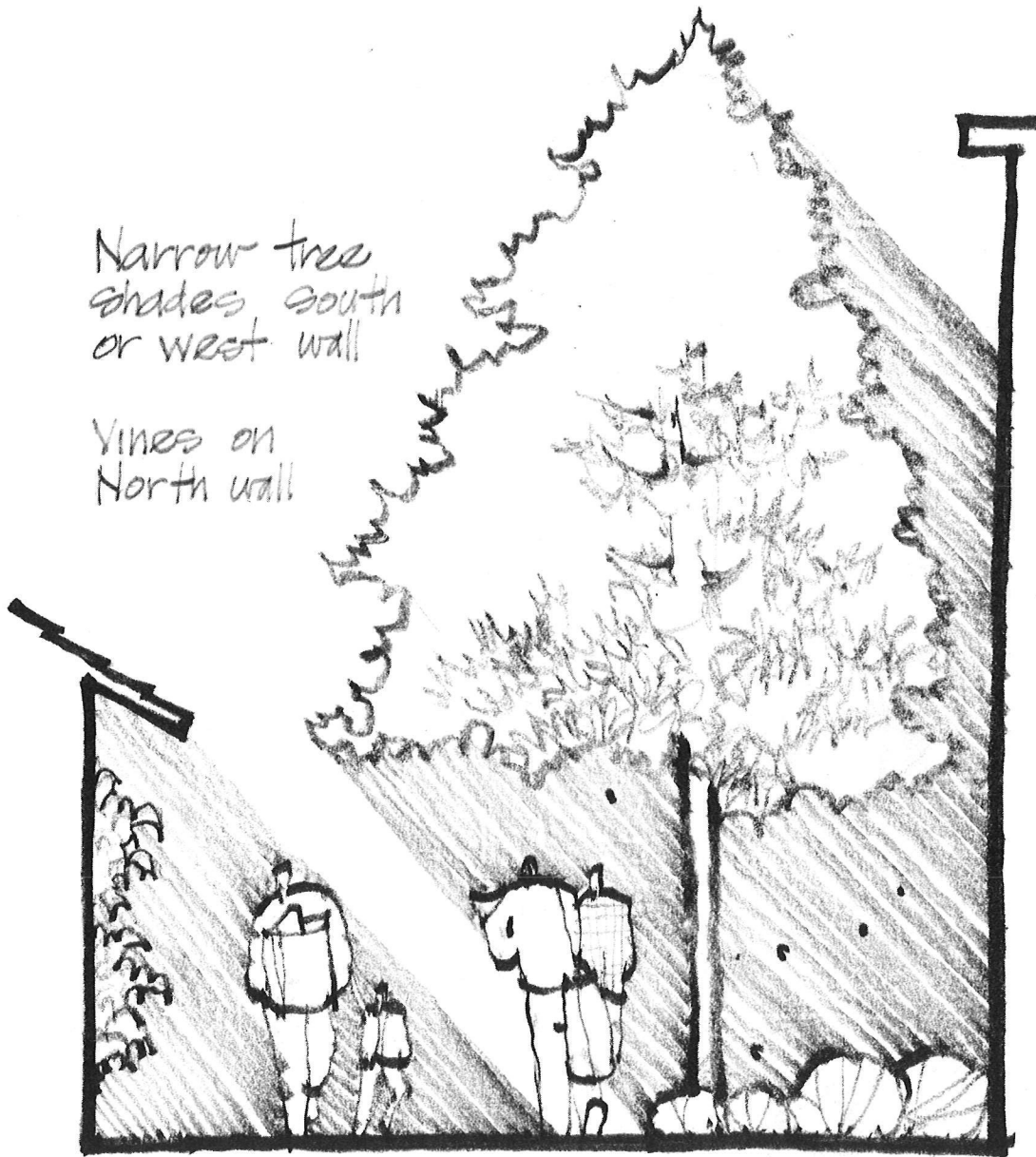


Low-branching or conical trees crowd sidewalks.

Trees which have deep root systems should be used when this can be determined. Known shallow-rooted trees such as those on the accompanying list should be avoided. Similarly trees which create excessive litter should be avoided. This does not mean selecting only broadleaf evergreen trees. Many deciduous trees are "cleaner" in that they shed their leaves only once during the year. Many broadleaf evergreens shed their older leaves continuously, creating constant litter.

TREES INAPPROPRIATE FOR SIDEWALKS OR PAVED AREAS

Plant Name	Problem
Ailanthus altissima— Tree of Heaven	litter, aggressive roots
Acer saccharinum— Silver Maple	litter, aggressive roots
Albizia julibrissin— Silk Tree	litter, aggressive roots
Betula verrucosa— White Birch	low branching
Catalpa speciosa— Western Catalpa	litter
Cedrus deodara— Deodar Cedar	low branching
Cinnamomum camphora— Camphor Tree	aggressive roots
Fraxinus uhdei— Shamel Ash	aggressive roots
Maytenus boaria— Chilean Mayten Tree	litter, low branching
Populus alba— White Poplar	low branching, aggressive roots
P. nigra 'Italica'— Lombardy Poplar	low branching, aggressive roots
Pinus species— Pines	litter, low branching
Prunus blireiana— Purpleleaf Plum	low branching
Salix babylonica— Weeping Willow	litter, low branching, aggressive roots
Schinus molle— California Pepper	litter, low branching aggressive roots
Sequoia sempervirens— Coast Redwood	low branching, litter
Ulmus pumila— Siberian Elm	litter, aggressive roots



Narrow tree
shades south
or west wall

Vines on
North wall

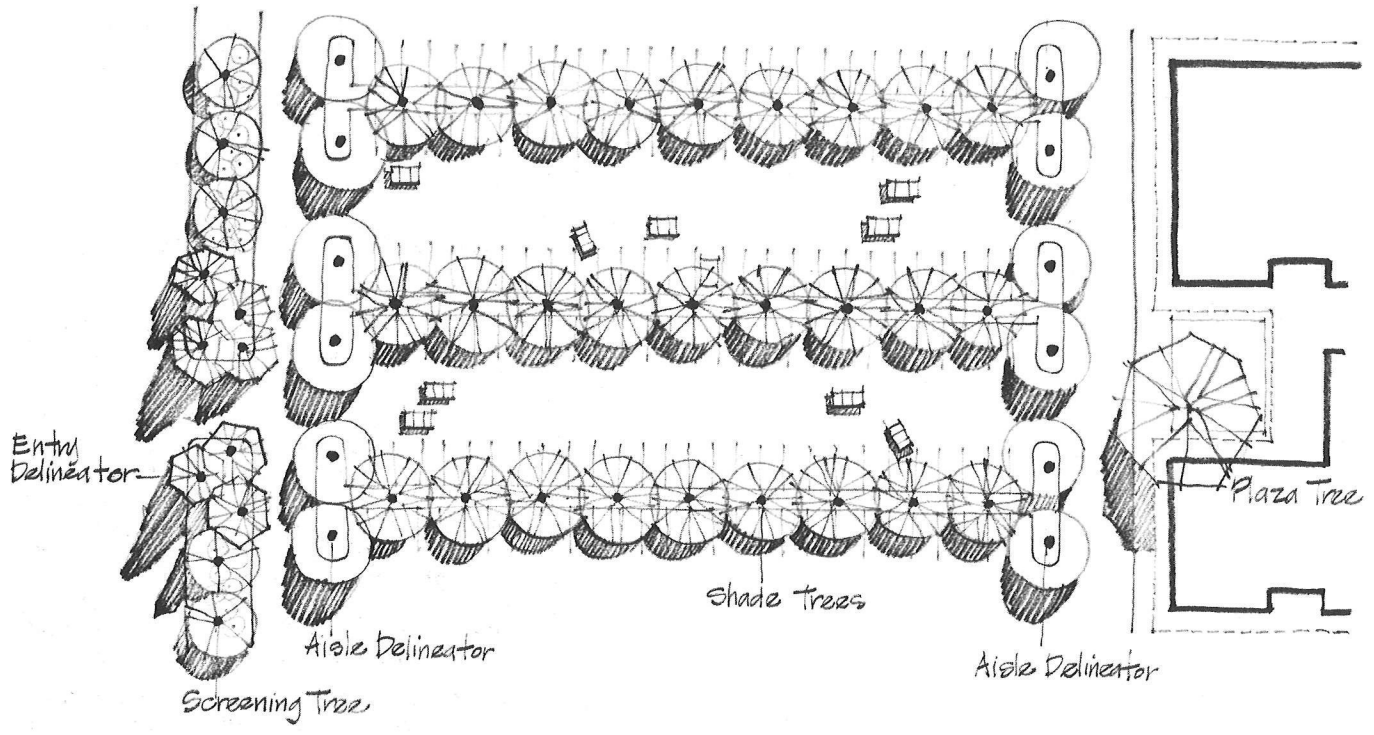
Plazas, Malls and Pedestrian Walkways

These spaces are small in scale and size and are related to the slow pace of walking.

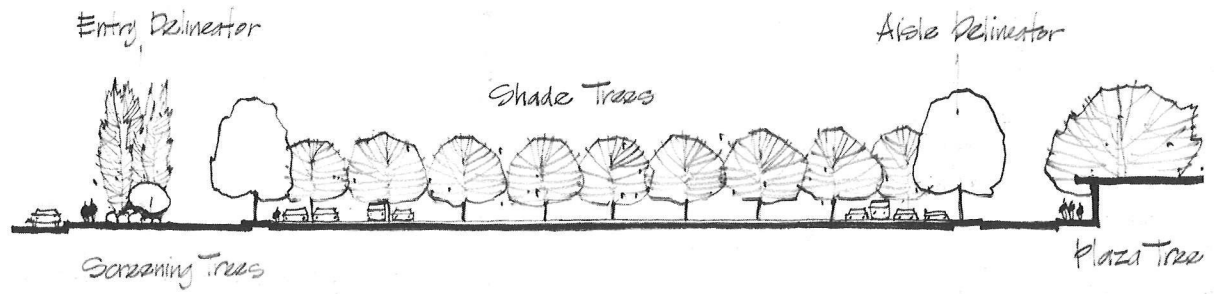
Close observation of detail is important in small spaces. Interesting shadow patterns on pavement, seasonal color and sculptural form are desirable elements in tree selection. Trees should generally be planted closely together. The apparent size of a small space can be manipulated through varied tree spacing. Trees for these spaces need not branch at the height required for automobiles and multi-trunked specimens can be used.

Clearly defined pedestrian ways and linkages should become integrated into the central portion of the business district. They are especially important to include in future development.

Typical planting of an alley converted to a pedestrian walkway.



Parking area concept sketch.



Typical Section

Parking Areas

Trees for parking areas fall into three basic types: shade trees, emphatic or delineator trees and screening or edge defining trees.

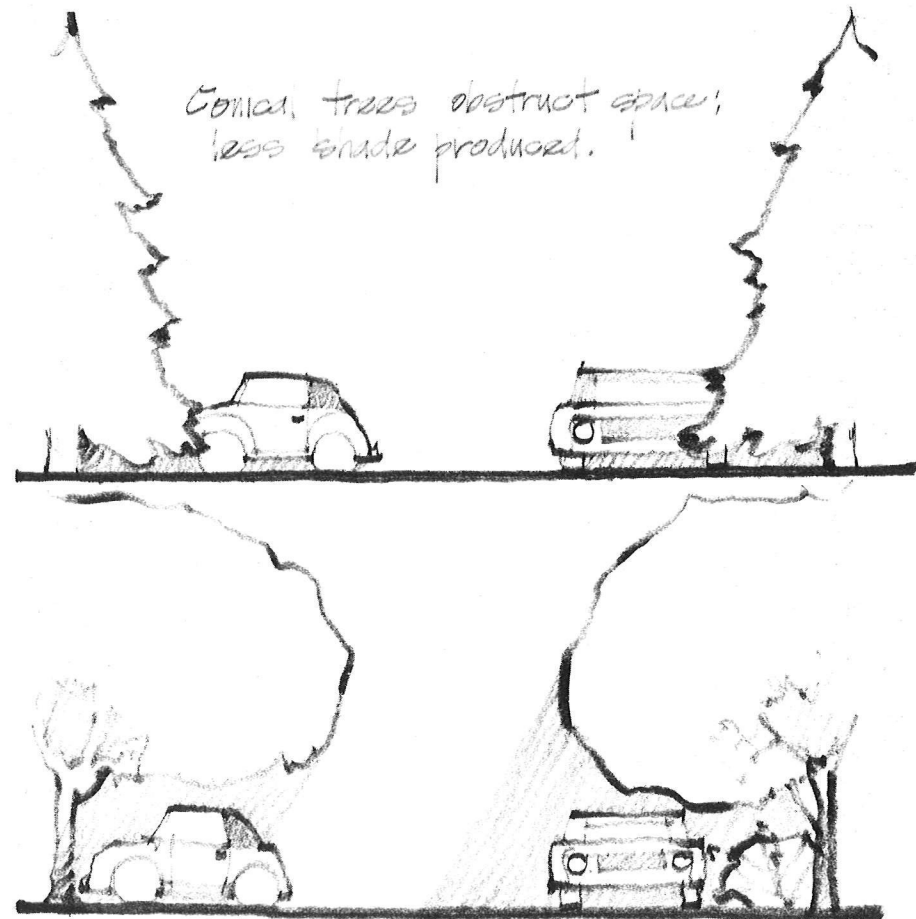
The shade trees should have a rounded, high branched form and grow relatively quickly to cast a broad shadow. Deciduous trees allow winter sun to dry the asphalt beneath which helps to prevent cracking.

Delineator trees are used to guide traffic, highlight entrances, terminate vistas and indicate ends of parking bays. They should be taller and more erect (pyramidal or ovoid forms) than the shade trees used; contrasting foliage color is also desirable. Broadleaf evergreen trees are suitable for year 'round visibility, but this is not essential.

Screening trees may be smaller in size than shade or delineator trees. Both round and erect forms are appropriate. Low branching is important if sufficient planting space is available. Evergreen trees afford year 'round screening. Higher branching trees can be effectively used if they are combined with low shrubs. The canopy shadow tends to block the glare from cars thereby giving the illusion of screening.

All trees used in parking areas should be fairly drought tolerant and be able to withstand intense, reflected heat.

In addition low branching, conical trees, particularly conifers, should be avoided in parking areas.



Parking area tree selection.

TREES FOR PARKING AREAS

Plant Name	Deciduous/ Broadleaf Evergreen/ Conifer	Needs 8' Min. Root Space
Shade Trees		
Albizia julibrissin— Silk Tree	deciduous	•
Celtis australis— European Hackberry	deciduous	
Fraxinus oxycarpa 'Raywoodii'— Raywood Ash	deciduous	
F. uhdei— Shamel Ash	deciduous	•
F. velutina 'Modesto'— Modesto Ash	deciduous	
Gleditsia triacanthos inermis— 'Moraine'— 'Sunburst'— Honeylocust Varieties	deciduous deciduous	
Morus alba 'Fruitless'— Fruitless Mulberry	deciduous	•
Pistacia chinensis— Chinese Pistache	deciduous	
Platanus acerifolia— London Plane Tree	deciduous	•
Robinia pseudocacia 'Decaisneana'— Pink Locust	deciduous	
Zelkova serrata— Japanese Zelkova	deciduous	

Delineator Trees

Eucalyptus leucoxylon— White Ironbark	broadleaf	
E. pauciflora— Ghost Gum	broadleaf	
E. polyanthemos— Silver Dollar Gum	broadleaf	
E. rudis— Desert Gum	broadleaf	
E. sideroxylon 'Rosea'— Pink Ironbark	broadleaf	
Liquidambar styraciflua— American Sweetgum	deciduous	
Liriodendron tulipifera— Tulip Tree	deciduous	•
Populus nigra 'Italica'— Lombardy Poplar	deciduous	•

Plant Name	Deciduous/ Broadleaf Evergreen/ Conifer	Needs 8' Min. Root Space
Screen/Edging Trees		
Ceratonia siliqua— Carob Tree	broadleaf	•
Cinnamomum camphora— Camphor	broadleaf	•
Crataegus 'Autumn Glory'— Hawthorn cultivar	deciduous	
C. javallei— Carrier Hawthorn	deciduous	
C. phaenopyrum— Washington Thorn	deciduous	
Eucalyptus leucoxylon macrocarpa 'Rosea'— Large Fruited Redflowering Gum	broadleaf	
Laurus nobilis— Grecian Laurel	broadleaf	
Ligustrum lucidum— Glossy Privet	broadleaf	
Liquidambar styraciflua— American Sweetgum	deciduous	
Nerium oleander— Oleander	broadleaf	
Olea europaea— Olive	broadleaf	
Photinia serrulata— Chinese Photinia	broadleaf	
Pinus pinea— Italian Stone Pine	conifer	•
Prunus lyonii— Catalina Cherry	broadleaf	
Pyrus kawakami— Evergreen Pear	semi.-deciduous	
Quercus ilex— Holly Oak	broadleaf	
Rhamnus alaternus— Italian Buckthorn	broadleaf	

The Buffer Zone

The strip of land north of the business district on the EBMUD corridor affords a special opportunity to combine tree planting with recreational development. The trees selected for this narrow band should be tall, upright trees which will provide a visual buffer between the business district and the freeway. Also they should be selected and arranged for the linear continuity of future trails as well as the freeway. Where freeway planting exists, the buffer zone trees should blend or repeat the trees already existing. Informal combinations using both deciduous and broadleaf evergreen trees should be used.

Because of the special problems associated with planting along the underground water conduit, no attempt is made here to develop a list of trees. The corridor is a special design problem and must be discussed with officials of EBMUD. The intent here is merely to recommend conceptual criteria.

Residential Areas

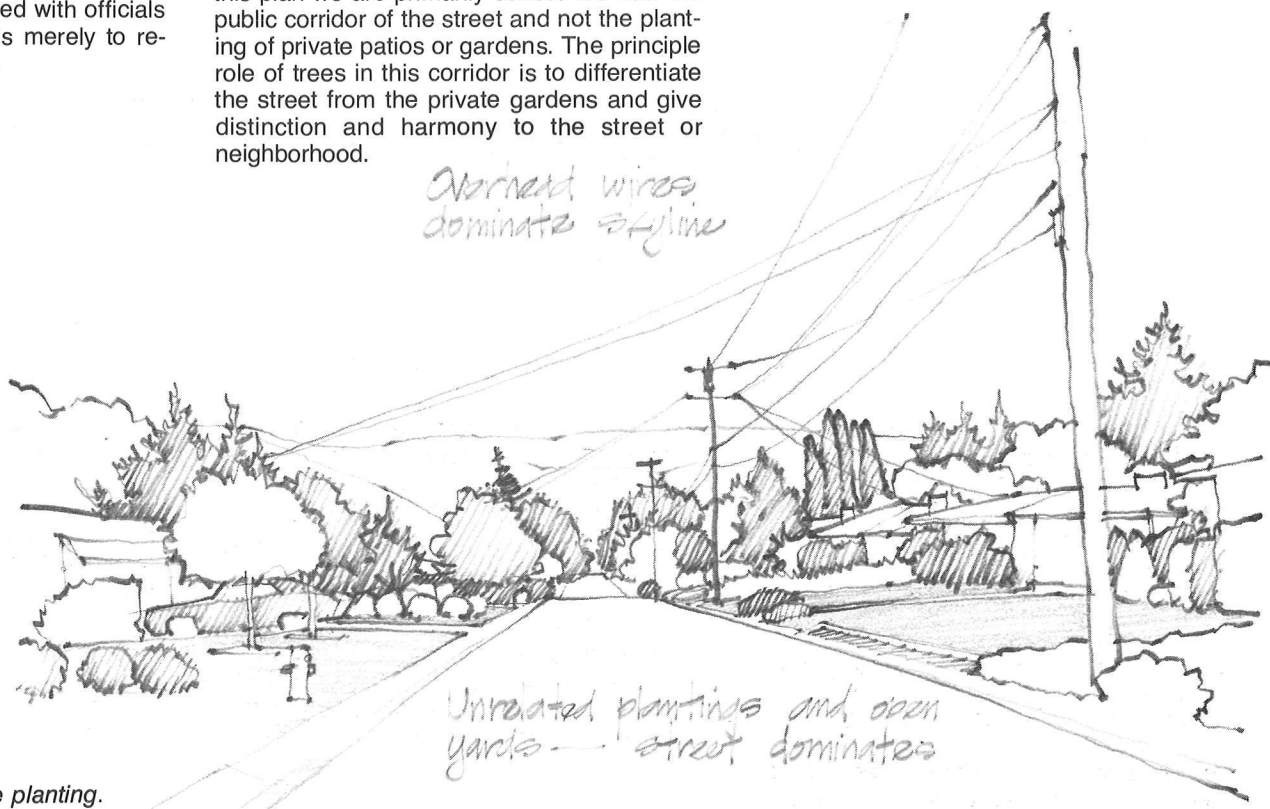
By comparison, the residential areas of Lafayette have many more trees than the commercial area. Large native Oaks in the wooded areas, older street and orchard trees, and the many trees in private gardens combine to provide verdant residential neighborhoods. Trees are commonplace here; they stand out boldly in the business district.

The question might then be raised as to what more can be said about trees in residential areas. How can this Plan be useful to areas that seem to be already well planted? Aren't private gardens with their own trees sufficient? Isn't tree selection an individual decision?

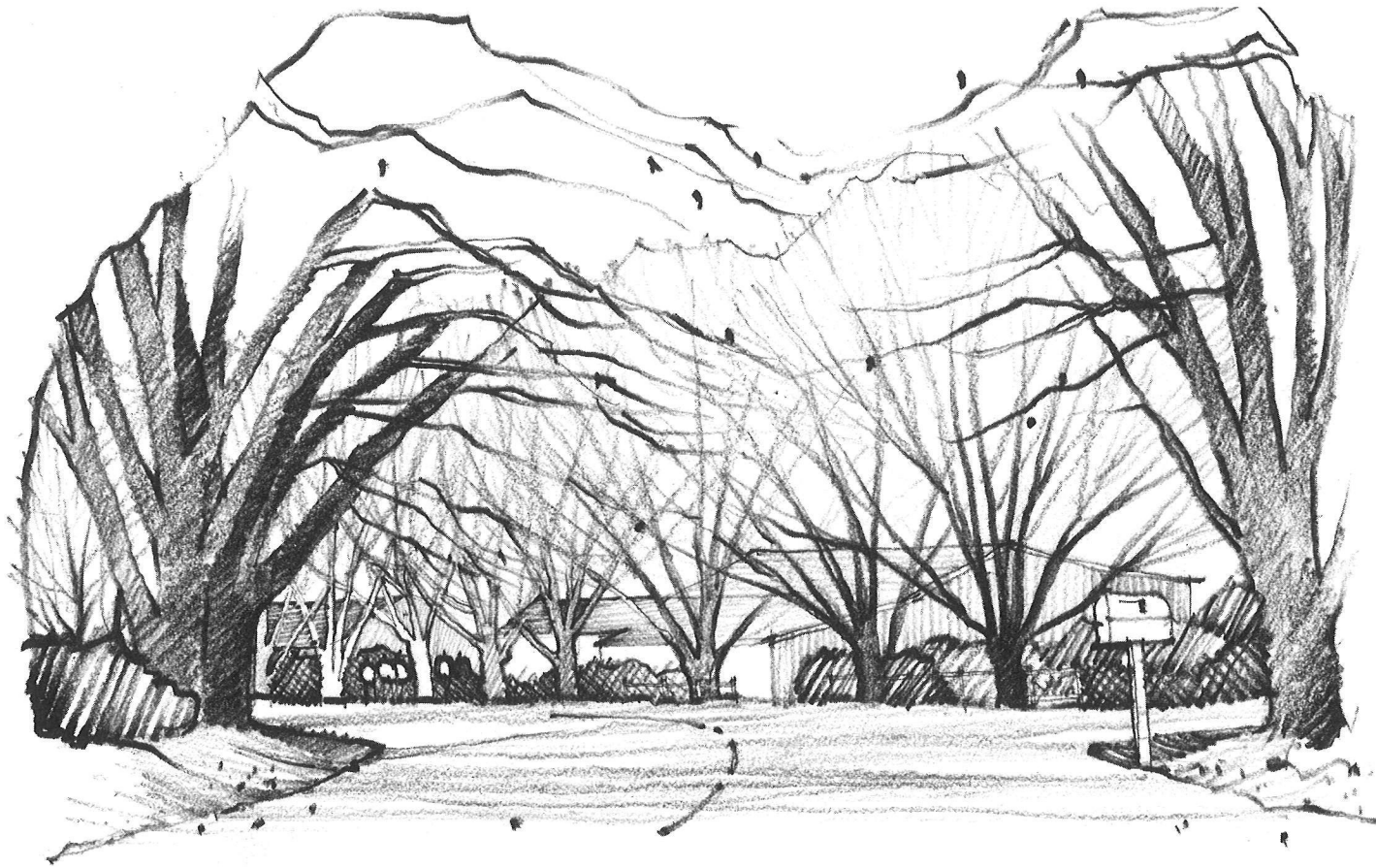
To answer these questions, let us examine the role trees can play in residential areas. In this plan we are primarily concerned with the public corridor of the street and not the planting of private patios or gardens. The principle role of trees in this corridor is to differentiate the street from the private gardens and give distinction and harmony to the street or neighborhood.

Residential gardens reflect a high degree of individuality and rightfully so. On the other hand, a street is a public or semi-public space. The street or neighborhood should be considered a design problem just as a garden planting is considered a design problem. However, a street is *not* a garden, but a larger-scaled landscape relating to the more or less linear corridor and the higher speed travel experience.

Here the functional uses of trees are less important considerations than in the commercial area. The harmonious character or theme that tree plantings can achieve becomes their dominant role. The repetition of tree species or types of trees helps unify a street of varying architectural styles and garden plantings. A street with too many small, dissimilar, unrelated tree forms tends to appear disorderly.



Residential street without tree planting.



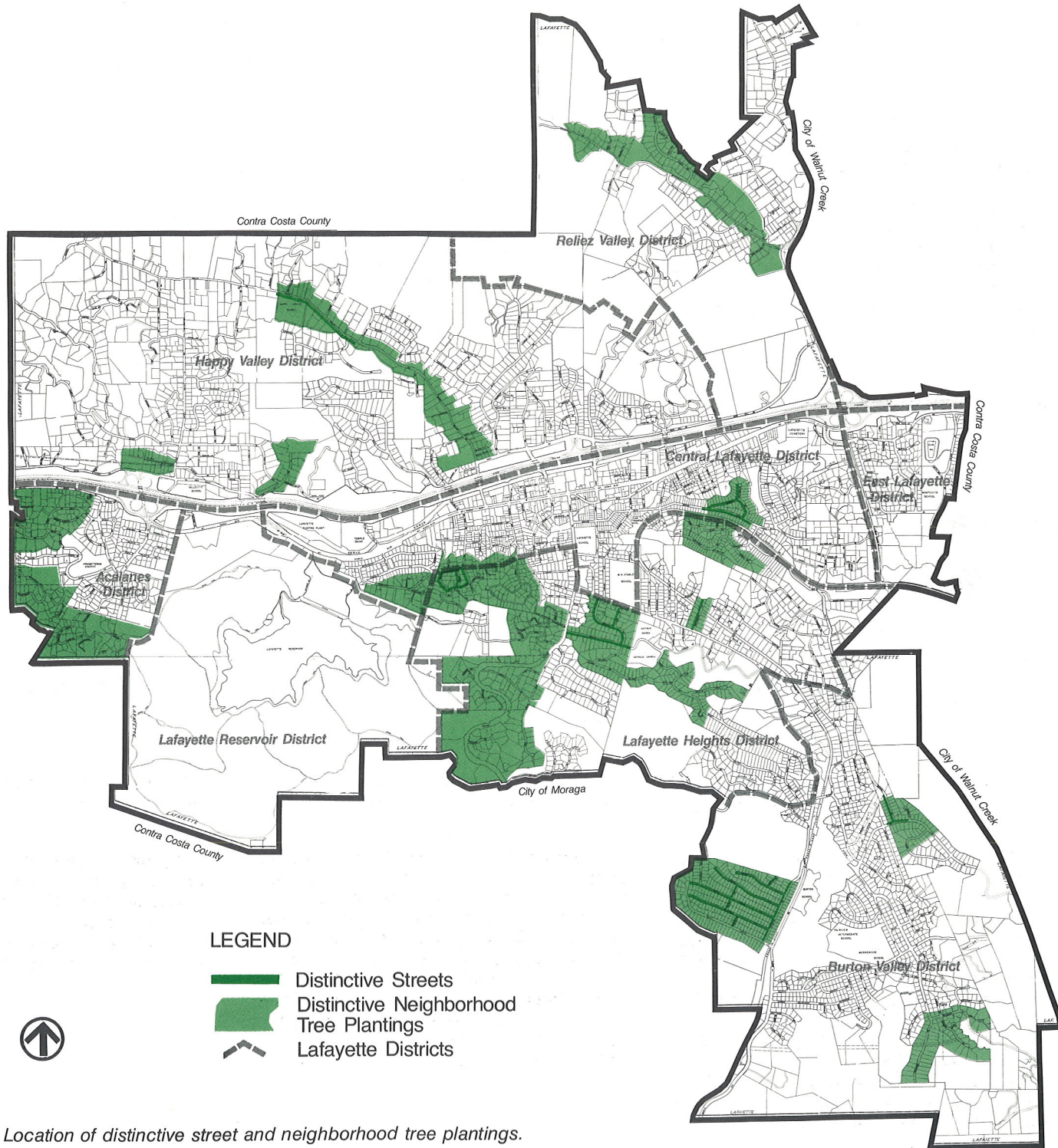
Residential street unified with consistent planting of mature Modesto Ash.

The most pleasing streets and neighborhoods in Lafayette are those with a strength of unity due to a consistent use of trees. This can be achieved without infringing upon the individuality of plantings in private gardens. A number of streets in Lafayette exemplify this principle. Streets such as Hamlin Drive and Broadmore Court are planted to achieve a fine strength of character. These streets are identified on the accompanying map. Similarly, many neighborhoods have a fine visual harmony, not necessarily because of regular street plantings, but because of the repetition of similar trees in a consistent fashion. These residential areas are also indicated on the map.

The decision of what trees to plant and how to plant them along residential streets is based upon qualitative questions relating to the desired street character.

- Should it be open and sunny or closed and canopied?
- Should the tree canopy give dense shadows or dappled light?
- Is formality and regularity or informal consistency important?
- Is seasonal color desirable or is a uniform green necessary?

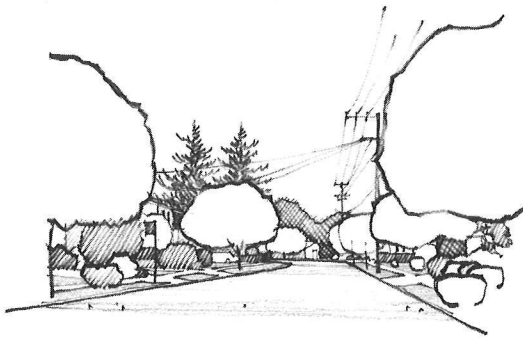
Planting trees in regular lines is perhaps the first treatment which comes to mind when street trees are discussed. This is the most common approach, but is only one alternative. Others are possible and relate to the street width, the presence or absence of existing trees and the topography. Taking clues from nature, we can observe that a fine Oak Woodland is visually pleasing because of repetition of forms, colors and textures—a simplicity achieved through a variety of similar tree species.



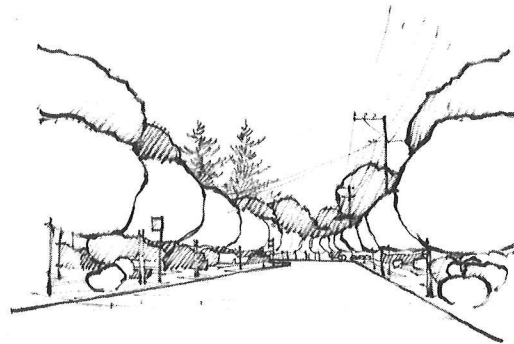
Location of distinctive street and neighborhood tree plantings.

In a residential landscape lacking natural tree cover, the harmony we see in the natural landscape can be achieved by the deliberate planting of visually similar trees. A combination of Modesto Ash, London Plane and Tulip Trees planted randomly, but repeatedly, throughout a neighborhood or along a street can achieve this effect. The predominance of overhead wires on the skyline can be masked or softened by using large canopy trees.

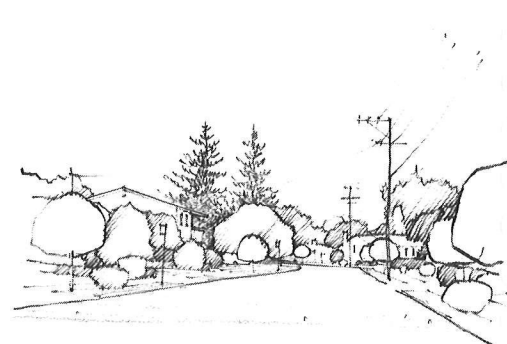
Random planting of similar trees unifies a narrow residential street.



Random planting of same tree species lends informal unity to a wide residential street.



Regular planting of same tree species gives reinforcement to a wide residential street.



Random planting of small trees unifies a street, yet allows openness.

In a residential landscape with various existing trees, a more cohesive appearance can be achieved with a random planting of a single species such as Zelkova or Chinese Pistache. In such a planting, the trees are spaced at various distances from each other along the street. Their locations are determined by analyzing the existing conditions and carefully placing the trees in the most effective spaces. This can be done to screen views of utility lines and poles, shade driveways and south or west facing building walls and separate open front yards from the street.

Valley areas tend to have flatter, more undifferentiated terrain. If the street is quite wide such as Silverado Drive, heat and glare can be uncomfortable in summer. Here the decision might be made to use large-canopy shade trees to enclose the street and humanize the scale of the broad, flat landscape. Trees such as White Alder or the Tulip Tree planted 30 to 40 feet apart and 6 feet from the pavement will achieve this effect.

A narrower street in an older neighborhood may have many large trees in the private gardens. Here a smaller tree such as Washington Thorn or Japanese Crabapple might be used to give the street harmony without destroying its openness.

There are a number of other possibilities. The theme of Walnut orchards can be repeated by using the Fruitless Mulberry or Chinese Pistache in regular rows to replace the declining Walnuts. Where space permits, simply encouraging or replanting the Black Walnut can be an effective street treatment.

On hillside streets, trees should be selected that will not obstruct the views from adjacent residences. Low, rounded trees such as Holly Oak or Glossy Privet are more appropriate than conical or erect trees.

Utility poles and overhead wires are visually distracting elements in most Lafayette neighborhoods. Of course, the best solution for eliminating this distraction is underground wiring—a very costly undertaking. However, trees planted along a street can significantly mask the prominence of power lines. Either rows or randomly spaced trees planted forward on lots offset the regularity of utility pole spacing. The canopy of small to medium sized trees planted beneath wires can block the direct view of overhead lines. Large trees, if properly pruned when young, can be trained to completely screen the view of lines. The wires are strung unencumbered through the center of the canopies.

Many neighborhoods or streets in Lafayette can benefit from developing street planting programs. The results can be a more satisfactory streetscape and quite possibly a greater sense of neighborhood unity. The actual tree planting can be a shared event that will bring together neighbors, young and old alike, in a concerted effort at neighborhood improvement. The recommendation of specific trees for residential neighborhoods is more difficult than for commercial areas which tend to have more definitive design criteria. Factors such as topography, soil, existing trees, proximity to natural woodlands all added to the more personal nature of residential areas form a complexity of design determinants. In some areas, trees will be planted in irrigated lawns. On certain streets, trees will be planted in partially irrigated beds or groundcover or shrubs. In still others, the unirrigated orchard or field edge forms the planting space.

The accompanying lists are divided into two types—one for medium to large trees (30 to 70 feet or more) and one for small trees (15 to 30 feet). Each one lists whether the trees are

suitable for planting in lawns or not, whether the trees are broadleaf evergreen or deciduous and whether the relative growth rates are fast, moderate or slow (F,M,S).

TREES FOR RESIDENTIAL STREETS

Large Trees, generally rounded forms suitable for development of tree canopy

Plant Name	Planting in Lawns	Semi-irrigated	Growth Rate (F,M,S)	Deciduous or Broadleaf Evergreen
Acer rubrum Red Maple	•		M	deciduous
Aesculus carnea Redflowering Horsechestnut	•		S	deciduous
Albizia julibrissin Silk Tree		•	F	deciduous
Alnus rhombifolia White Alder	•		F	deciduous
A. cordata Italian Alder	•		F	deciduous
Celtis australis European Hackberry	•	•	M	deciduous
Ceratonia siliqua Carob		•	M	broadleaf
Cinnamomum camphora Camphor		•	S	broadleaf
Fraxinus holotricha 'Moraine' Moraine Ash	•		F	deciduous
F. uhdei Shamel Ash	•		F	deciduous
F. velutina 'Modesto' Modesto Ash	•	•	F	deciduous
Gleditsia triacanthos inermis 'Moraine'	•	•	F	deciduous
'Shademaster'	•	•	F	deciduous
'Sunburst'	•	•	F	deciduous
Honeylocust Varieties				
Ginkgo biloba 'Autumn Gold' Maidenhair Tree	•		F	deciduous
Juglans hindsii Black Walnut		•	F	deciduous
Liriodendron tulipifera Tulip Tree	•		M-F	deciduous
Magnolia grandiflora 'Samuel Sommer' Southern Magnolia Variety	•		S	broadleaf

TREES FOR RESIDENTIAL STREETS

Large Trees, generally rounded forms suitable for development of tree canopy

Plant Name	Planting in Lawns	Semi-irrigated	Growth Rate (F,M,S)	Deciduous or Broadleaf Evergreen
Morus alba 'Fruitless'— Fruitless Mulberry	•	•	F	deciduous
Pistacia chinensis Chinese Pistache	•	•	M	deciduous
Platanus acerifolia London Plane Tree	•	•	F	deciduous
Quercus agrifolia Coast Live Oak		•	S-M	broadleaf
Q. coccinea Scarlet Oak	•		M	deciduous
Q. ilex Holly Oak	•	•	M	broadleaf
Q. lobata Valley Oak		•	M	deciduous
Q. suber Cork Oak	•	•	M	broadleaf
Robinia pseudoacacia 'Decaisneana' Pink Locust	•	•	F	deciduous
Sophora japonica Japanese Pagoda Tree	•		M	deciduous
Tilia cordata Little-leaf Linden	•		M	deciduous
Ulmus parvifolia Evergreen Elm	•		F	deciduous
Zelkova serrata Japanese Zelkova	•	•	M-F	deciduous

TREES FOR RESIDENTIAL STREETS

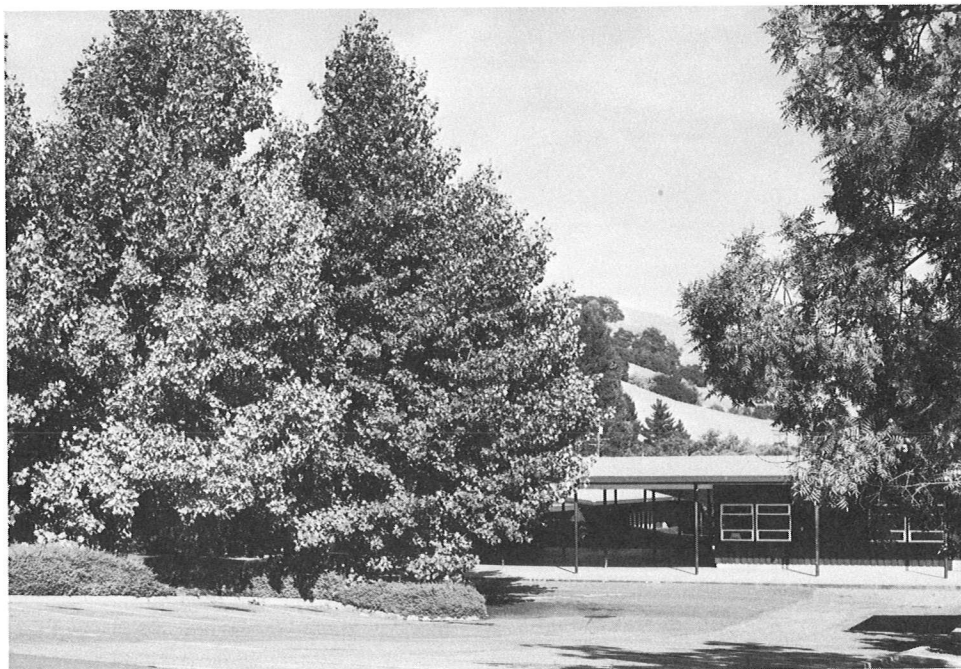
Small Trees

Plant Name	Planting in Lawns	Semi-irrigated	Growth Rate (F,M,S)	Deciduous or Broadleaf Evergreen
Acer buergerianum Trident Maple	•		S	deciduous
A. campestre Hedge Maple	•		S	deciduous
Crataegus 'Autumn Glory' Hawthorn cultivar		•	F	deciduous
C. phaenopyrum Washington Thorn		•	M	deciduous
Fraxinus oxycarpa 'Raywoodii' Raywood Ash	•		F	deciduous
Lagerstroemia indica Crape Myrtle	•		S	deciduous
Ligustrum lucidum Glossy Privet	•		M	broadleaf
Liquidambar styraciflua American Sweetgum	•		S	deciduous
Malus floribunda Japanese Flowering Crabapple	•		M	deciduous
Prunus cerasifera 'Atropurpurea' Purpleleaf Plum	•		M	deciduous
Pyrus calleryana 'Bradfordi' Bradford Pear	•		M	deciduous
P. kawakami Evergreen Pear	•		M-F	semi-deciduous

Schools and Churches

Public schools present a splendid opportunity for extensive tree plantings. Environmental education is becoming an important feature in school curricula development. By using the school grounds as outdoor classrooms and laboratories, the plantings can be more meaningful as well as improve the aesthetic qualities of the school environment.

The grounds of the public schools of Lafayette were evaluated using criteria similar to those developed for residential streets and neighborhoods. Two schools stand out as fine examples of excellence in planting design—Happy Valley School and Springhill School. The plantings are consistent throughout, not merely streetside facades. The total environment of the schools was planted sensitively—playgrounds and athletic fields as well as interior and parking areas. The maintenance has been superb.



Happy Valley School—an excellent example of tree planting throughout the grounds.

Other schools vary in the quality of plantings. All should be encouraged to develop planting programs that combine visual quality and environmental education. For example, Burton School has a splendid opportunity to take advantage of Las Trampas Creek as a study resource. Tree plantings harmonious to the riparian vegetation could be made by the children as a part of their education. The rich creek environment affords opportunities for countless studies—trees, fish, wildlife and birds. Such plantings should be planned carefully using consultants such as a landscape architect and a plant ecologist or biologist. The objective should be to develop integrated, harmonious plantings following a carefully developed theme, rather than to collect numerous, unrelated plants.

Similarly, churches should be encouraged to develop tree plantings harmonious to their surroundings. Like schools, churches have large parcels of lands. Their visual influence is great on the surrounding neighborhood as well as the entire community. The tendency to plant Pines just to provide green on the barren landscape is all too obvious. Sensitively conceived planting plans should consider the churches' relationship to the setting, their needs for outdoor classrooms as well as the various functional requirements of shade for cars, screening, and planting for low maintenance. Churches are not residential complexes and should not be planted in a residential manner. They are significant institutions which are permanent features in the landscape of the community. Their plantings should reinforce the dignity of this role.

The various plant lists presented in this Plan are appropriate to develop planting plans for both schools and churches. The lists for parking area trees, deer resistant trees, and street trees, as well as those related to the Oak and Riparian Woodlands can be used.

DISTINCTIVE TREES & TREE GROVES

Throughout Lafayette many fine mature individual trees exist. Many are located in prominent view from public streets and roads giving them special significance. Similarly, a number of excellent tree groves add considerable beauty to the landscape and skyline of the City.

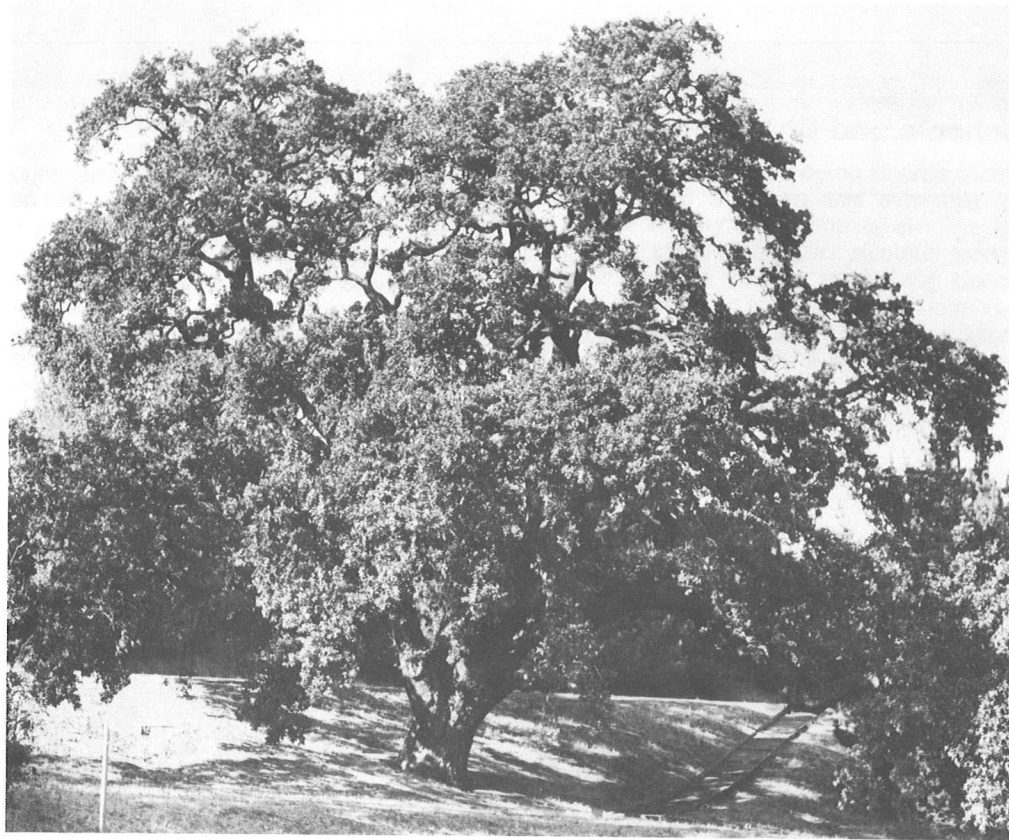
The City has taken a significant step towards the recognition and protection of such trees and groves. City Ordinance 38 establishes the Tree Commission and clearly states the City's commitment to designate and protect fine individual trees and groves. The Tree Commission has developed a set of criteria for selecting Grand Trees and has begun selecting "Grand Trees."

A Grand Tree shall meet one or more of the following criteria:

- have historical significance
- possess unusual beauty
- be of significant size or outstanding aesthetic impact.

In addition, candidate trees are judged on all of the following:

- be nominated by, or with the permission of the owner of the property on which the tree stands
- be visually accessible
- indicate a high chance of survival, be healthy and well maintained
- possess horticultural or structural interest
- be located on a permanent site, indicating little possibility of future clearing of the land for development
- be located within Lafayette City Limits.



The Grand Tree of Lafayette—a Valley Oak selected in 1971 to initiate the Grand Tree Program.

To date, (8/75) five Grand Trees have been so designated, in addition to "The Grand Tree of Lafayette" at the Lafayette-Orinda Presbyterian Church on Knox Drive. Each tree is marked with a bronze plaque. On the Lafayette Tree Guide accompanying this Plan the locations of these designated Grand Trees are marked.

During the field surveys which were done in preparation of this Plan, many unique specimen trees were discovered and inventoried. Most of these trees are native and all are worthy of special designation and protection. However, not all of the trees fit the criteria for Grand Tree.

To assist in objectively evaluating such trees, a rating form was developed. The basic criteria established for evaluating Grand Trees was expanded and quantified. The trees were judged on three basic sets of criteria and rated on a scale from 1 to 5:

The Tree Specimen

- form (symmetrical, typical for species)
- size
- uniqueness (rare species, unique to area)
- prominence (visibility from public rights-of-way)
- proximity to public property (adjacent to roads, parks, schools, churches)

The Setting

- stability of the site (susceptibility to landslides, future development, change of maintenance)
- compatibility with surroundings (visual fitness, aesthetic setting, composition)

Horticulture

- present health
- present level of maintenance

NOTE:

Key Symbols refer to tree grove locations shown on the Lafayette Tree Guide Map which has been distributed with copies of this Plan. Similar listings with street addresses are also included for Specie Specimens and Official Tree Groves.

DISTINCTIVE TREE GROVE CANDIDATES

Key Symbol	Description of Grove
1	Planted grove of Coast Redwoods (<i>Sequoia sempervirens</i>) already designated as the City's first Official Tree Grove.
2	Small grove of Black Oak (<i>Quercus kelloggii</i>), an Oak species found only in limited numbers in Lafayette.
3	Small stand of Madrone (<i>Arbutus menziesii</i>). This grove is part of a dense Oak Woodland.
4	Hilltop grove of Monterey Pine (<i>Pinus radiata</i>).
5	Striking row of Lombardy Poplars (<i>Populus nigra 'italica'</i>) lining a drainage swale.
6	Mature grove of Monterey Pine (<i>Pinus radiata</i>) planted as a street tree along Pine Lane.
7	Mature stand of Monterey Pine (<i>Pinus radiata</i>) planted when the Lafayette Reservoir was completed in the early 1930's.
8	Cluster of large Valley Oaks (<i>Quercus lobata</i>).
9	Fine example of an Oak Woodland. Valley Oak (<i>Quercus lobata</i>) is the dominant species.
10	Cluster of large Valley Oaks (<i>Quercus lobata</i>).
11	Cluster of large Valley Oaks (<i>Quercus lobata</i>).
12	Group of four large Valley Oaks (<i>Quercus lobata</i>).
13	Stand of Monterey Pine (<i>Pinus radiata</i>).
14	Double row of Olives (<i>Olea europaea</i>) lining an entrance drive.
15	Prominent grove of California Bay (<i>Umbellularia californica</i>) which is part of a Riparian Woodland.
16	Fine example of an Oak Woodland which includes both Valley Oak (<i>Quercus lobata</i>) and Coast Live Oak (<i>Quercus agrifolia</i>).
17	Prominent grove of Blue Gums (<i>Eucalyptus globulus</i>).