

**COMMUNITY STREET TREE MASTER PLAN  
SOUTHEAST SAN DIEGO**



**PREPARED FOR:  
THE SOUTHEAST ECONOMIC DEVELOPMENT CORPORATION (SEDC)**

**PREPARED BY:  
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**MAY 1992**

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## HOW TO USE THIS PLAN

This plan includes both design concepts and practical directions for planting trees. It has five main parts. These parts are listed below with a description of what you will find in each:

- |                                 |  |
|---------------------------------|--|
| 1. The Introduction             | The goals of this planning study, and a description of the Southeast San Diego Community context.  |
| 2. The Street Tree Plan Concept | Description of the main design and ecological concepts used to determine which tree types are recommended, and a plan showing the locations of "Corridor" and "Neighborhood" Streets. The Master Plan Graphic also shows the types of trees for use on "Corridor" streets. |
| 3. How To Plant A Tree          | Directions for choosing a tree species and planting a tree.  |
| 4. The Neighborhood Plans       | Plans for each neighborhood showing the types of trees for use on "Neighborhood" streets.  |
| 5. The Technical Appendix       | Detailed regulations on planting in the street right-of-way and background information that was used in preparing this study.  |

*If you are interested in...*

- What you need to do to plant trees start in Section 3 and then go to Section 4.
- Understanding the basic ideas of the study read Section 1 and 2.
- The full requirements of the Landscape Technical Manual, and detailed information collected about the tree species, read section 5.

# 1. INTRODUCTION

## GOAL OF THIS PLAN

The goal of this plan is help people to plant quality street trees on residential and commercial streets. This plan establishes the locations and types of street trees that should be planted in Southeast San Diego, and describes how to plant them. It depends upon community residents and developers to plant trees to improve their neighborhoods and directs those efforts to planting sites and tree species that will serve the Urban Design objectives established for the community in the Community Plan.

Three other documents are closely related to this effort:

The **Project First Class Urban Design Program** established the Urban Design objectives for street tree planting that this plan is intended to carry out.

The **Southeast San Diego Community Plan** provides the development regulations for this area and established the neighborhoods as used in this plan.

The **City of San Diego Landscape Ordinance** regulates planting in the public right-of-way where street trees are planted and provides requirements for tree planting on private lands.



**PLAN AREA LOCATION**

## **A WORD ABOUT PLANTING IN SOUTHEAST**

Planting conditions are highly variable in Southeast San Diego. People who have planted many trees in Southeast have found that the planting conditions (such as soil type, drainage, and width of planting area) can be inconsistent in locations even on a single street. The inconsistent quality of the existing street trees is a result of this variation.

To allow for this variability this plan:

1. Identifies the general planting conditions for each neighborhood.
2. Provides a list of several types of trees fitting the general conditions expected for each neighborhood.
3. Includes on the list tree types that will thrive in the various specific planting situations that are expected within the neighborhood.

Although the plan provides trees that will live in the neighborhood, each person must assess their specific conditions, and choose from the list the tree types indicated for those conditions. In this way the trees selected for each neighborhood are chosen both to reflect the distinctive character of each neighborhood, and to support a variety of different planting conditions.

## **WHY PLANT TREES**

It is the action taken: planting trees, that gives people pride in--and responsibility for--their neighborhoods. Quiet residential streets with rich landscaping signal a good neighborhood. It shows that residents take pride in their homes, and street trees show that they take pride in their community. For commercial streets there is the opportunity to establish a 'mainstreet' for the surrounding neighborhood by planting consistent street trees.

## Urban Design

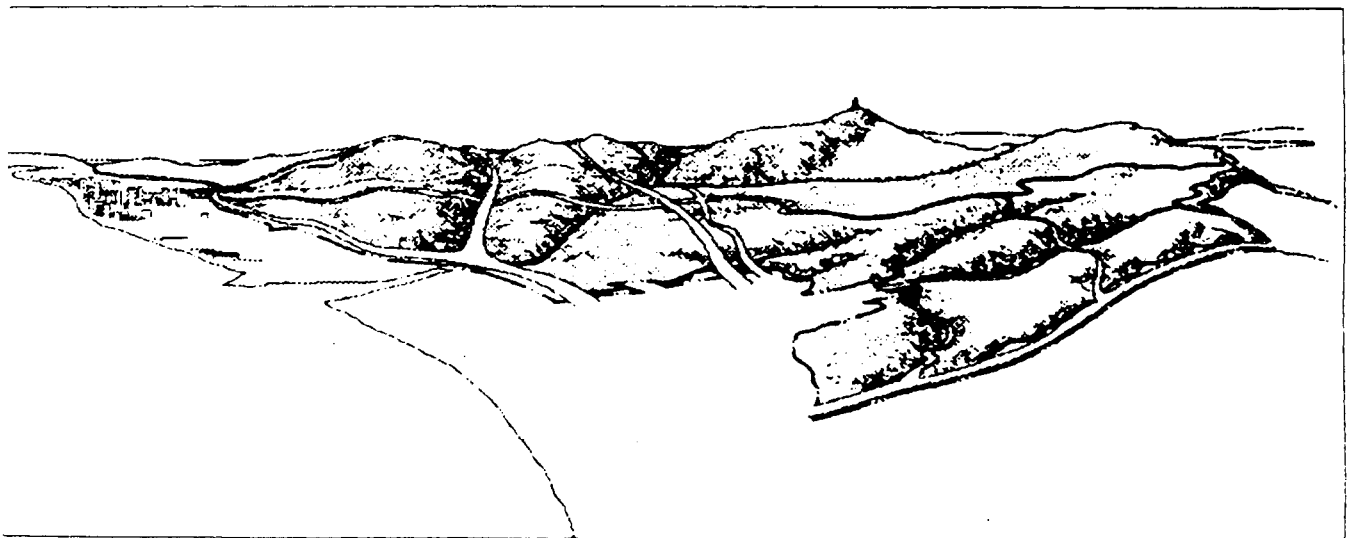
Southeast is made up of neighborhoods, each with characteristics such as historic structures, topography, street types, or trees that strongly distinguish one from another. People take pride in their own neighborhood's character. Street trees that are connected to that character—by sharing the neighborhood's rustic look or exuberant colors, for example—give a very big dose of self esteem that costs a very small amount of money.

Street trees can have a similar emotional impact on Corridor Streets: such as through-streets like Market and Euclid, where commercial uses are concentrated. But for these types of corridors, street trees also have a second important role. Because the grid pattern of streets in Southeast is interrupted again and again by small turns such as those on Imperial Avenue it is difficult to drive through the community on a main street. Street trees can signal that one street is more important than another, and in Southeast they can be used to connect all the existing segments of Corridor Streets and help to identify them as corridors. Strengthening the Corridor Streets with stronger street tree planting can help to establish them as dominant streets.

## Ecology

In addition to the positive impact trees can have to our community's appearance and pride, they also reduce pollution. Street trees reduce glare, relieve summertime heat, provide animal habitat, and enrich the soil. Think of how hot and dirty a patch of concrete sidewalk is on a summer day between one-hundred feet of asphalt street and sixty feet of parking lot. Planting street trees next to that sidewalk provides shade and removes dirt from the air.

Within the study area there are also several valleys that are potentially valuable as natural areas and minor animal habitats. Street trees of the correct type and sensitive development can add to these beautiful examples of wildlife habitat in an urbanized area.



## **THE STREET TREE PLAN CONCEPT**

Southeast's street trees will reflect: **1. The Urban Design System** established for community in Project First Class and the Community Plan, and **2. The Planting Conditions**.

### **1. The Urban Design System**

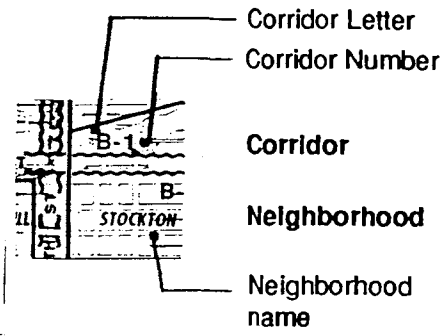
Southeast is a community made up of many discrete neighborhoods. Each neighborhood has a collection of buildings and landscape on Neighborhood Streets that together distinguish it from other neighborhoods. Planting trees that are consistent with a neighborhood's particular character will help to strengthen the neighborhood's identity. Corridor streets, such as Market Street, are important as through-streets for moving among the neighborhoods, and are often commercial rather than residential. The landscape and buildings along Corridor Streets give character to the entire community, and planting them with a limited number of tree types will help to give structure to the community.

Hilly topography is also an important part of Southeast's character that can be strengthened. When driving through the community and crossing the rolling terrain you can appreciate the variety of valley and hilltop landscapes. Planting the valley areas on both Corridor Streets and Neighborhood Streets with London Plane trees makes the contrast between valleys and other areas stronger and brings more natural views to the community.

### **2. The Planting Conditions**

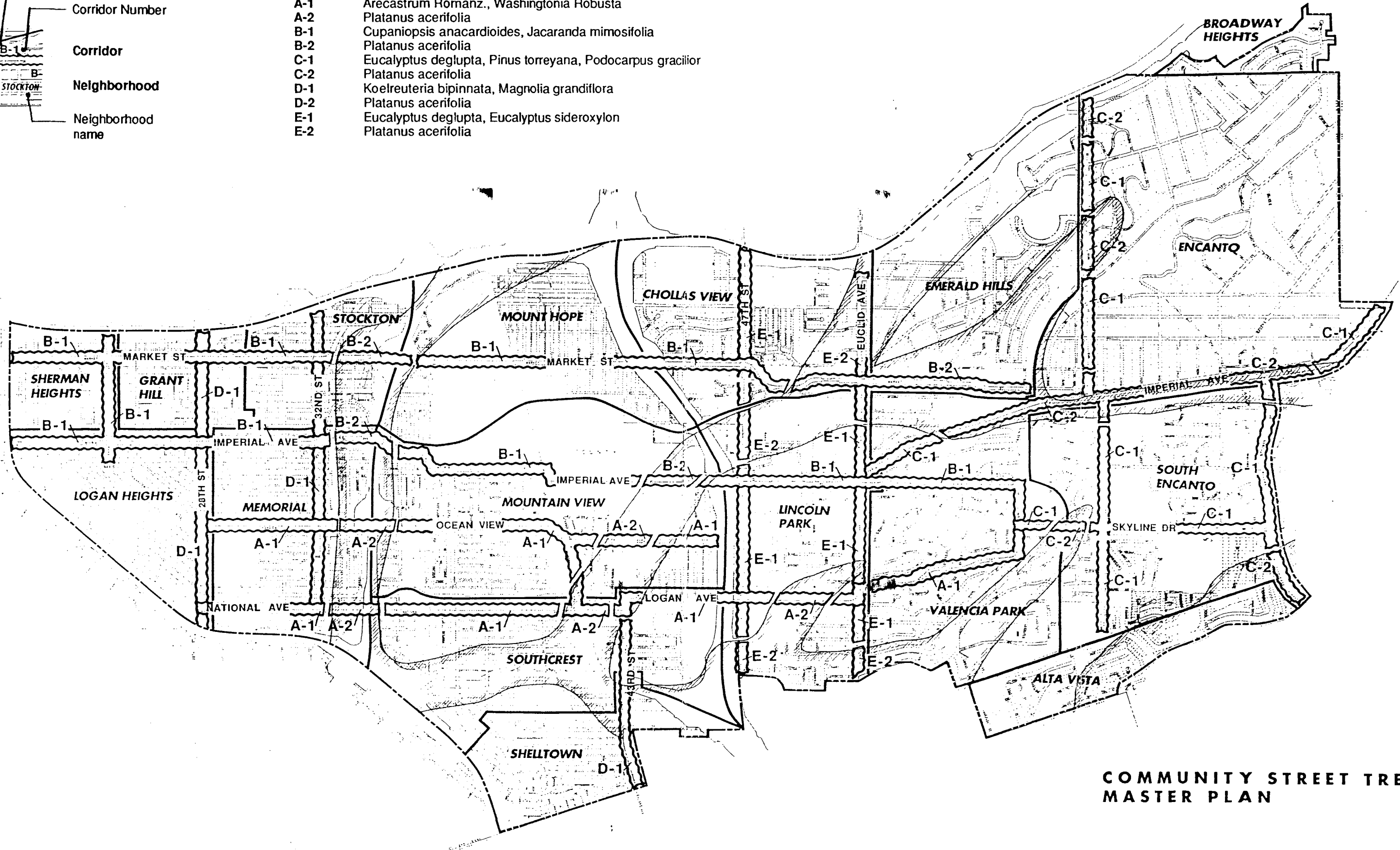
The main difficulty in planting trees in Southeast has been finding tree types that will thrive over the long term. This is partly caused by planting conditions that vary greatly. People who have planted many trees in Southeast have found that the planting conditions (such as soil type, drainage, and width of planting area) can be inconsistent in locations even on a single street. To meet this need the plan provides lists of tree types appropriate to each neighborhood's conditions with directions about the situation in which each tree type should be used. In this way the plan provides some guidance, but still enough flexibility to support the variety of situations presented.

**LEGEND**



**CORRIDOR TREE LIST**

- A-1 Arecastrum Romanz., Washingtonia Robusta
- A-2 Platanus acerifolia
- B-1 Cupaniopsis anacardioides, Jacaranda mimosifolia
- B-2 Platanus acerifolia
- C-1 Eucalyptus deglupta, Pinus torreyana, Podocarpus gracilior
- C-2 Platanus acerifolia
- D-1 Koelreuteria bipinnata, Magnolia grandiflora
- D-2 Platanus acerifolia
- E-1 Eucalyptus deglupta, Eucalyptus sideroxylon
- E-2 Platanus acerifolia



**COMMUNITY STREET TREE MASTER PLAN**



**ACKNOWLEDGMENTS**

**CITY OF SAN DIEGO MAYOR AND CITY COUNCIL**

MAYOR	MAUREEN O'CONNOR
1ST DISTRICT	ABBE WOLFSHEIMER
2ND DISTRICT	RON ROBERTS
3RD DISTRICT	JOHN HARTLEY
4TH DISTRICT	GEORGE STEVENS
5TH DISTRICT	TOM BEHR
6TH DISTRICT	VALERIE STALLINGS
7TH DISTRICT	JUDY McCARTY
8TH DISTRICT	BOB FILNER

**PARTICIPATING CITY STAFF**

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JERRY GROOMES  
CAROLYN SMITH  
SUE MCDEVITT

**CONSULTANT**

ANDREW SPURLOCK MARTIN POIRIER LANDSCAPE ARCHITECTS

### 3. HOW TO PLANT A TREE

#### STEP 1: ASSESS YOUR SITE

The first task is to be sure that the tree you plant will grow well in the site you have in mind: you must "assess your site". One good way to assess your site is to note which types of trees are growing in the area now. If there are lots of trees that are growing well in your neighborhood your site is probably a good growing site. If there aren't trees you could avoid a disappointing planting by finding out why there are no trees.

When choosing which tree type to plant you should avoid types that are not doing well on a nearby site. Also, you will often see a type of tree that is doing well but is not included on your neighborhood's tree list. This is probably because many trees that were popular in the past are not now permitted in the street right-of-way because their roots lift pavements or disturb sewer lines.

**There are three main factors you should measure to determine which type of site you have. Measure each factor listed and check the appropriate box listed under each factor:**

1. Width of planting area: Measure the width of the open soil surface where the tree is to be planted. For example, in a parkway condition, measure the distance from the curb to the sidewalk. If the width of open soil surface is less than 4 feet wide it is not possible to plant a tree without professional assistance.

- Sidewalk cut-out 4 feet wide
- Parkway: 4 feet wide
- 4 to 8 feet wide
- Greater than 8 feet wide

2. Soil drainage: First, feel the ground with your hand and step on the spot where you plan to plant. Is it soggy, or do you remember it often being so? If so it is probably too wet to plant in. If not, dig a test tree pit such as you would to plant the tree in. Fill the pit to the brim with water and let it all drain away, then fill the pit to the brim again and measure how much time it takes for the water to drain into the soil.

- Less than 6 hours
- 6 to 12 hours
- Greater than 12 hours

3. Availability of care: Care includes choosing a location that appears protected to prevent vandalism and watering the tree when young. Watering is generally required once a week for the first twelve weeks, and regularly for the first year.

- Care is available as described
- Care is not available as described

## **STEP 2: WHAT TYPE OF TREE TO PLANT**

1. On the Master Plan Graphic (Page 9) find the street you intend to plant. This plan shows two types of streets: Corridor Streets and Neighborhood Streets.
2. If your street is a Corridor Street: Note the label on the section of the street you intend to plant and locate that label on the Corridor Tree List.  
  
If your street is a Neighborhood Street: Locate the name to the neighborhood where you intend to plant, turn to the Neighborhood Street Tree Plan for that neighborhood.
3. On the Neighborhood Street Tree Plan your area will be labeled "Valley" or "Midland". A Neighborhood Tree List under that label is included next to the plan. This list includes trees with the situations where they are most appropriate. With your completed site assessment in mind, choose a type of tree that is appropriate for your type of site.
4. Refer to the directions "How to Plant a Tree" , and plant the tree!

### STEP 3: PLANTING THE TREE

1.



**Dig the hole:**

*Plant the tree high in the hole.*

Dig the hole 1 - 2" less deep than the level of the soil in the grower's container, or the depth of the rootball, and two times wider than the root ball. (For bare root trees, make the hole wide enough for the roots to fit without bending.) Plan to make the tree roots 1 - 2" higher than the surrounding soil. Don't worry about a few roots showing on the surface. If you have to dig deep to get through a hardpan or compacted soil layer, refill the hole with the original loosened soil and compact it (to the depth recommended above), fill the hole with water and let it settle for a week or so before planting the tree. Trees tend to settle once planted and can die if they settle to below the surrounding soil level.

Roughen the sides of the hole. This makes it easier for the roots to penetrate the soil. Check for twisted, circling or kinked roots. Cut and remove roots that wrap around the root ball or are broken and discolored.

2.



**Test for Drainage**

Trees grow better if water drains out of the tree pit within a few hours after watering. To test this: fill the hole with water, wait 12 hours, and then refill completely, and wait 12 hours again. If all the water has not drained away within 12 hours of the second filling, then you should:

- Dig an extra large tree pit: three feet deep and four times as wide as the rootball and replace with an even mixture of native soil and good quality topsoil around the rootball. Then, in the months to come, take care not to water too often.
- If your site is often wet and soggy don't plant a tree in that site, find a place with good soil and drainage.

3.



**Refill the hole around the rootball**

Refill with the original soil unless there is a drainage problem. Soil amendments like peat moss, compost, rice hulls or saw dust are not helpful in most situations. (if you have extremely poor soil, you might want to add amendments to the whole area.) To exclude air pockets, compact the soil around the roots as you fill the hole. When the hole is half filled add 6" of water, then let the water soak in, and finish filling with soil.

4.



Water the tree thoroughly after planting to settle the soil around the roots.

## **TREE MAINTENANCE**

### **HOW SHOULD THESE TREES BE PLANTED AND CARED FOR?**

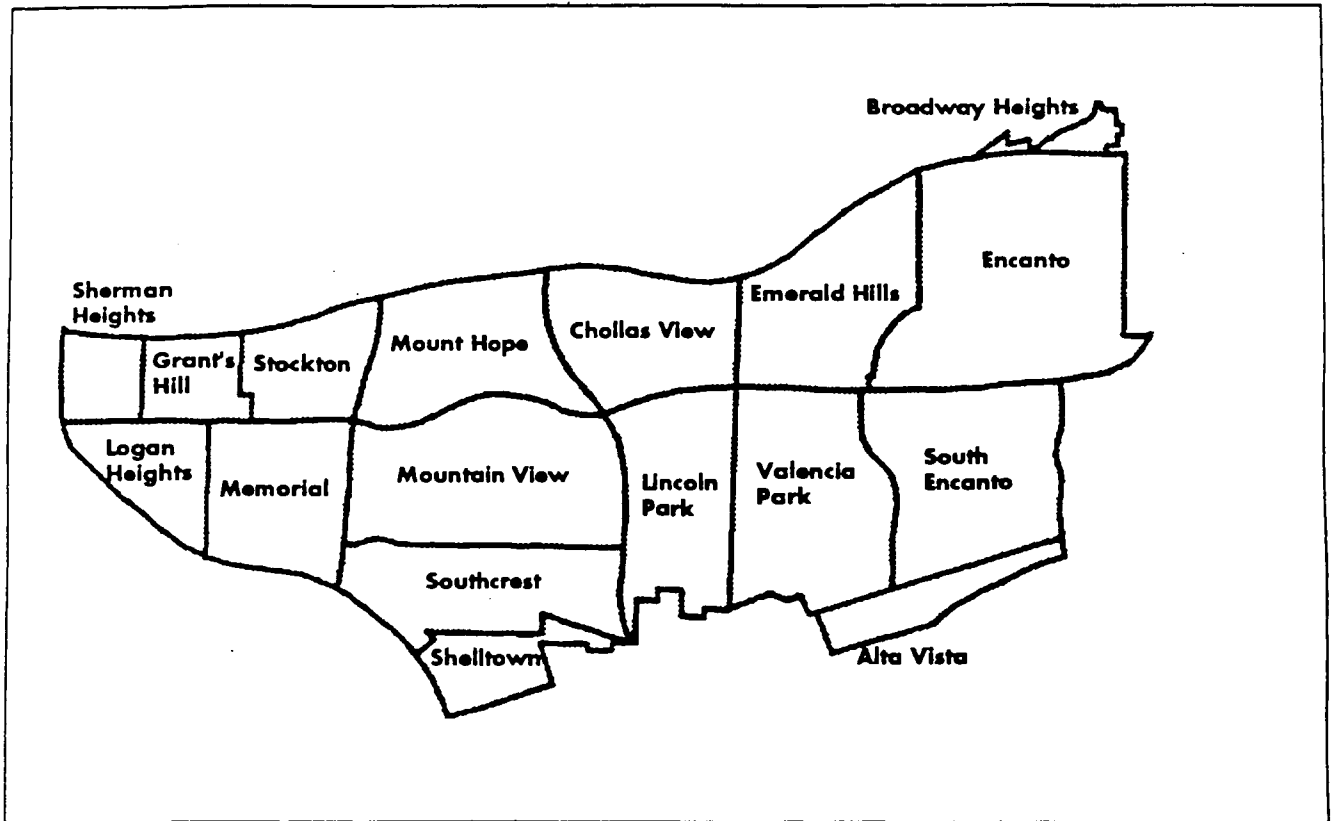
This manual gives step-by-step instructions for planting street trees. Care for all trees must be arranged for with nearby landowners and tenants before the tree is planted. Proper planting often means the difference between a healthy, vigorous tree and one that becomes sick or dies. It is not difficult to care for a tree, but requires a commitment to water and fertilize at regular intervals over the first year, and less frequently in later years.

Watering is essential to keep the trees alive and thriving especially when young. Because winter rains are unpredictable property owners must take responsibility for deep watering at least once a week for the first twelve weeks, and regularly for the first two years. After that, the general watering requirements vary according to the type of tree planted. Refer to the Tree Selection Matrix which lists the watering requirements for each tree.

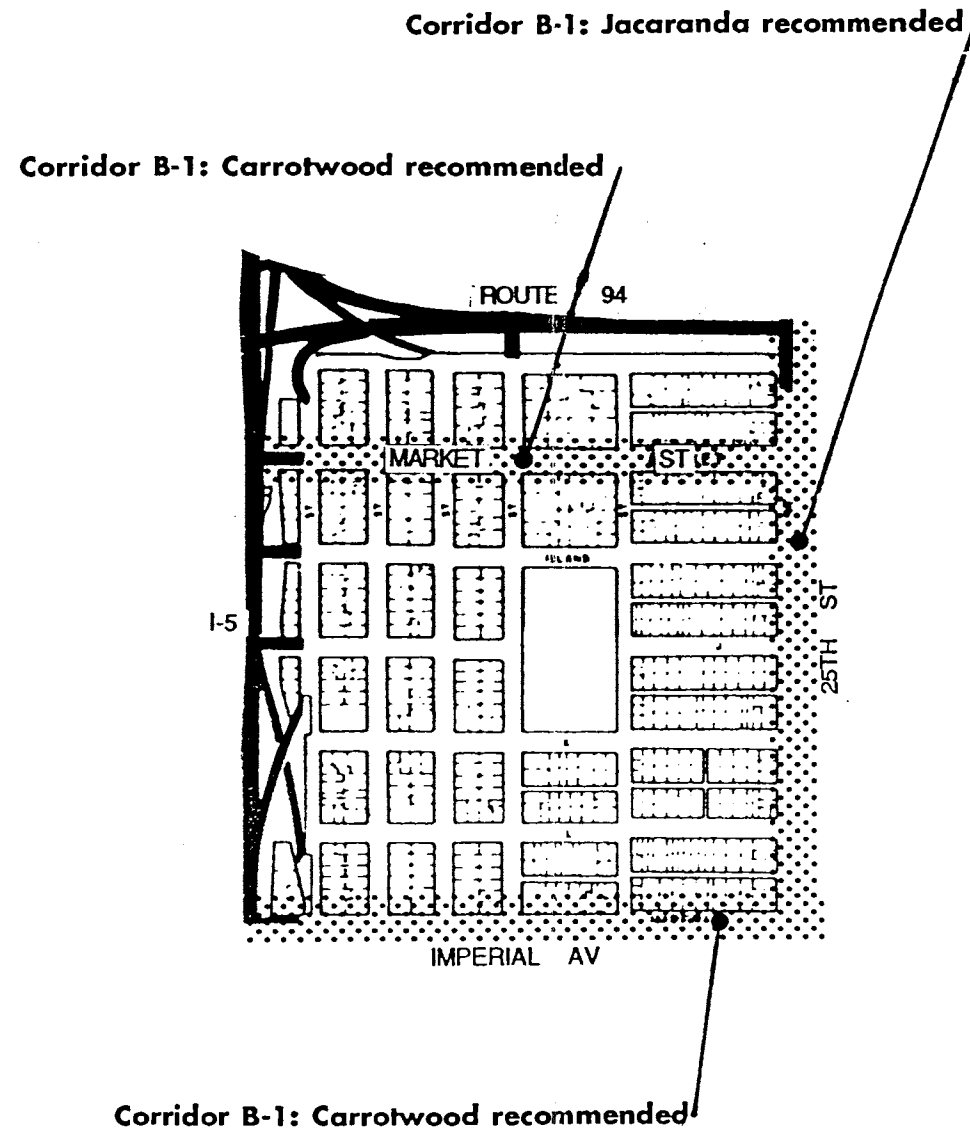
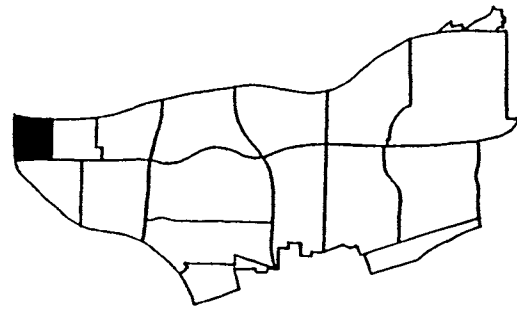
Other types of care may be required including: Weeding the tree well to allow proper growth, Maintaining a basin around the tree for retaining water or mulching the tree base, Showing that the tree is cared for to protect it from vandalism, Pruning the young tree to ensure a proper shape, Cleaning up tree litter including leaves and fruit.

4.

**NEIGHBORHOOD STREET TREE PLANS**



**THE NEIGHBORHOODS**



**PREDOMINANT EXISTING TREE TYPES:**

- Canary Island Date Palm
- Fan Palm: Prominent from freeways
- Queen Palm: On Imperial (in poor health)
- Jacaranda: Especially prominent in this neighborhood and a consistent tree on 25th street

**OPPORTUNITIES**

Strengthen street tree themes on Market Street and Imperial Avenue Corridors.

**PROPOSED TREE TYPES:**

**Botanical, Common Name**

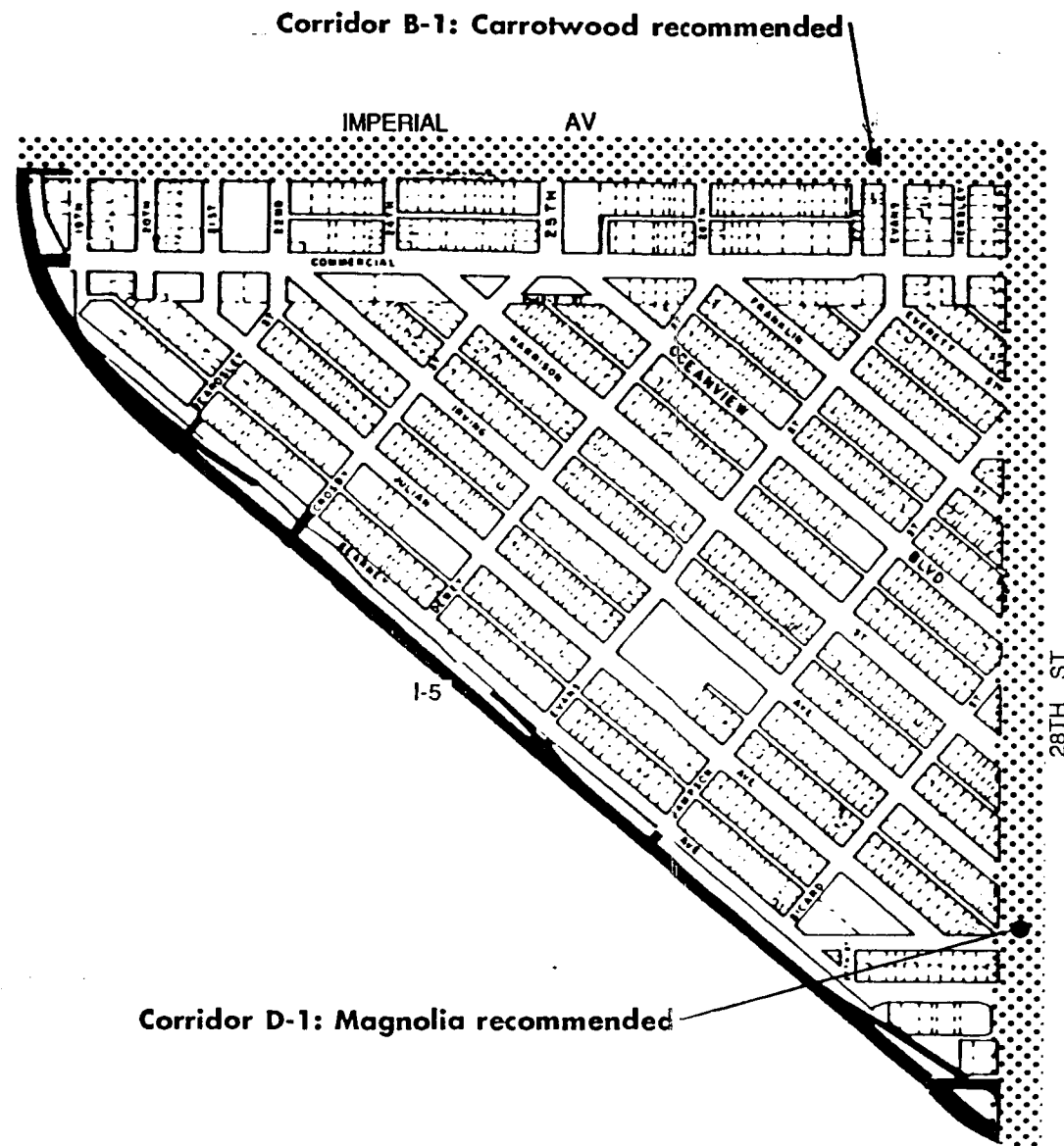
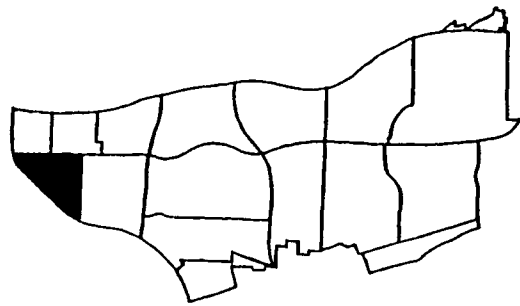
**Requirements**

Soil	Drainage	Care
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<b>Archontophoenix cunninghamina, King Palm</b>	4' by 4'	6 hours or less	Standard
<b>Arecastrum romanzoffianum, Queen Palm</b>	4' by 4'	6 hours or less	Standard
<b>Brahea armata, Mexican Blue Palm</b>	8' or greater	6 hours or less	Standard
<b>Callistemon viminalis, Weeping Bottle Brush</b>	Parkway	6 to 12 hours	Standard
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus polyanthemos, Silver Dollar Gum</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus sideroxylon 'Rosea', Red Iron Bark</b>	4' to 8'	6 hours or less	Standard
<b>Jacaranda mimosifolia, Jacaranda</b>	4' by 4'	6 hours or less	Standard
<b>Metrosideros excelsus, New Zealand Christ.</b>	8' or greater	6 to 12 hours	Standard
<b>Pistacia chinensis, Chinese Pistache</b>	4' to 8'	6 to 12 hours	Standard
<b>Pittosporum undulatum, Victorian Box</b>	8' or greater	6 to 12 hours	Standard
<b>Platanus acerifolia, London Plane Tree</b>	4' by 4'	6 hours or less	Standard
<b>Trachycarpus fortunei, Windmill Palm</b>	4' by 4'	6 to 12 hours	Standard

**SHERMAN HEIGHTS**

NEIGHBORHOOD TREE PLAN



Corridor B-1: Carrotwood recommended

Corridor D-1: Magnolia recommended

**PREDOMINANT EXISTING TREE TYPES:**

- Brazilian & California Pepper
- Jacaranda
- Mixed Palms
- Silk Oaks: large specimen

**OPPORTUNITIES**

Strengthen street tree theme Imperial Avenue Corridor.

**PROPOSED TREE TYPES:**

**Botanical, Common Name**

**Requirements**

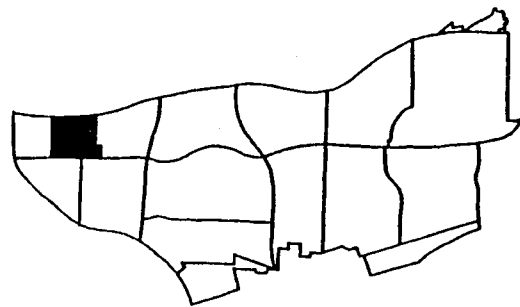
Soil  
Width \_\_\_\_\_ Drainage \_\_\_\_\_ Care \_\_\_\_\_

<b>Arecastrum romanzoffianum, Queen Palm</b>	4' by 4'	6 hours or less	Standard
<b>Brahea armata, Mexican Blue Palm</b>	8' or greater	6 hours or less	Standard
<b>Callistemon viminalis, Weeping Bottle Brush</b>	Parkway	6 to 12 hours	Standard
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus polyanthemos, Silver Dollar Gum</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus sideroxylon 'Rosea', Red Iron Bark</b>	4' to 8'	6 hours or less	Standard
<b>Jacaranda mimosifolia, Jacaranda</b>	4' by 4'	6 hours or less	Standard
<b>Metrosideros excelsus, New Zealand Christ.</b>	8' or greater	6 to 12 hours	Standard
<b>Platanus acerifolia, London Plane Tree</b>	4' by 4'	6 hours or less	Standard

**LOGAN HEIGHTS**

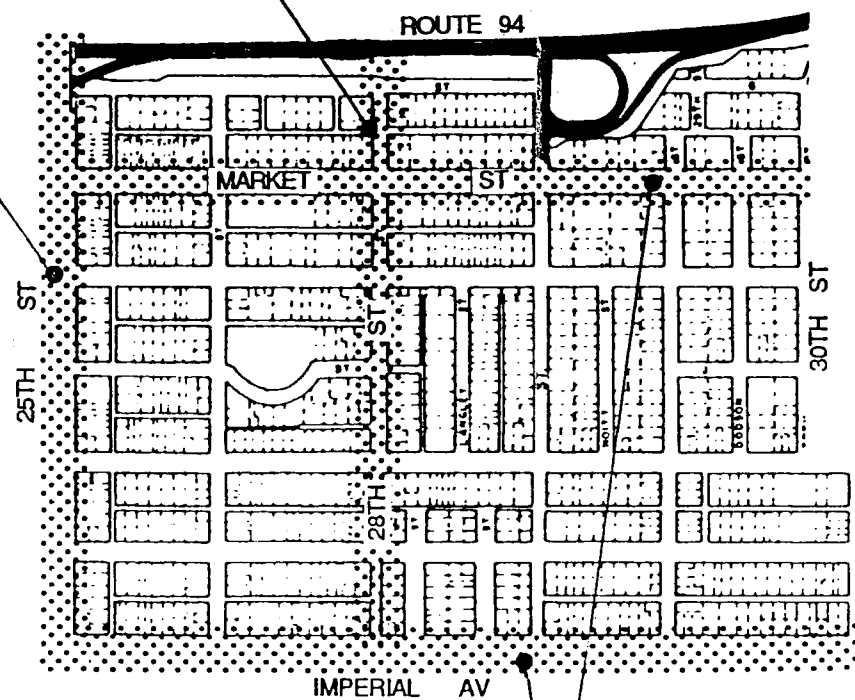
NEIGHBORHOOD TREE PLAN





Corridor D-1: Koelreuteria recommended

Corridor B-1: Jacaranda recommended



Corridor B-1: Carrotwood recommended

**PREDOMINANT EXISTING TREE TYPES:**

- Jacaranda
- Koelreuteria
- Magnolia
- Queen Palm
- Tristania

**OPPORTUNITIES**

Strengthen street tree themes on 25th, 28th, and Imperial Avenue Corridors.

**PROPOSED TREE TYPES:**

**Botanical, Common Name**

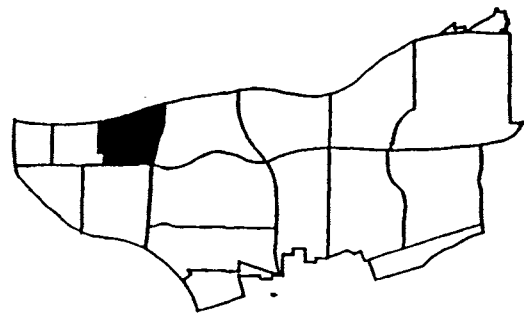
**Requirements**

Soil	Drainage	Care
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<b>Arecastrum romanzoffianum, Queen Palm</b>	4' by 4'	6 hours or less	Standard
<b>Brahea armata, Mexican Blue Palm</b>	4' to 8'	6 hours or less	Standard
<b>Callistemon viminalis, Weeping Bottle Brush</b>	4' to 8'	6 to 12 hours	Standard
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	Standard
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	Standard
<b>Eucalyptus sideroxylon 'Rosea', Red Iron Bark</b>	4' to 8'	6 to 12 hours	Standard
<b>Jacaranda mimosifolia, Jacaranda</b>	4' by 4'	6 hours or less	Standard
<b>Magnolia grandiflora, Evergreen Magnolia</b>	4' to 8'	6 to 12 hours	Standard
<b>Metrosideros excelsus, New Zealand Christmas Tree</b>	8' or greater	6 to 12 hours	Standard
<b>Tristania conferta, Brisbane Box</b>	4' to 8'	6 to 12 hours	Standard

**GRANT HILL**

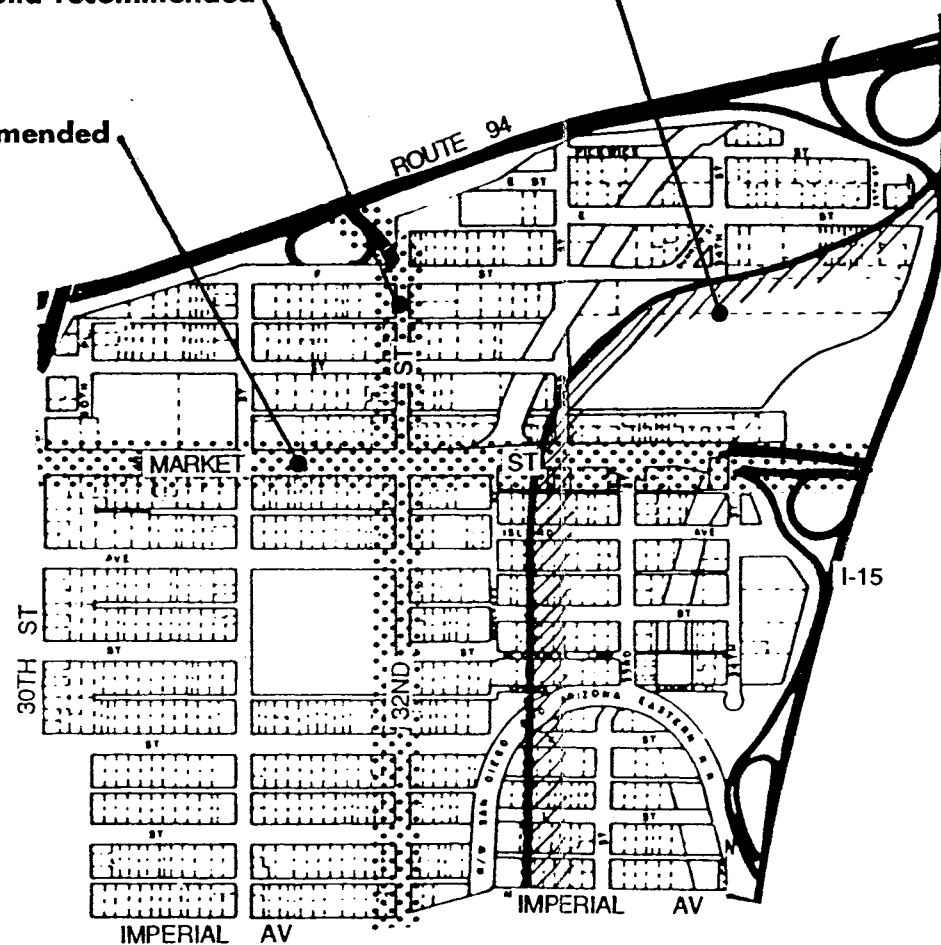
NEIGHBORHOOD TREE PLAN



'Valley' Area: Plant with London Plane Tree

Corridor D-1: Koelreuteria or Magnolia recommended

Corridor B-1: Carrotwood recommended



**PREDOMINANT EXISTING TREE TYPES:**

- Brazilian Pepper
- California Pepper
- Carrotwood
- Eucalyptus
- Fern Pine: on Island Ave between 29th & 32nd
- Jacaranda
- Palm

**OPPORTUNITIES**

- Plant London Plane Tree in Valley area
- Planting in King Elementary School: Mature Coast Live Oak should be maintained and augmented with new plantings
- 3189 Franklin features 5 dramatic flowering Lagunaria pattersonii which should be maintained
- Corner of 30th and L st features Pencil Tree (Euphorbia tirucalli) which should be maintained

**PROPOSED TREE TYPES:**

**Botanical, Common Name**

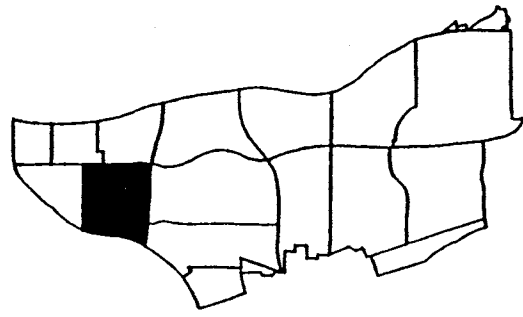
**Requirements**

Soil \_\_\_\_\_  
 Width \_\_\_\_\_ Drainage \_\_\_\_\_ Care \_\_\_\_\_

<b>Celtis occidentalis, Common Hackberry</b>	8' or greater	6 hours or less	None
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus polyanthemos, Silver Dollar Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus sideroxylon 'Rosea', Red Ironbark</b>	4' to 8'	6 to 12 hours	None
<b>Ginkgo Biloba, Maiden Hair</b>	4' to 8'	6 to 12 hours	Standard
<b>Lagunaria patersonii, Primrose Tree</b>	4' to 8'	6 hours or less	None
<b>Metrosideros excelsus, New Zealand Christmas Tree</b>	8' or greater	6 to 12 hours	None
<b>Metrosideros robustus, North Island Rata</b>	8' or greater	6 to 12 hours	None
<b>Olea europaea, Olive</b>	8' or greater	6 hours or less	Standard
<b>Pinus torreyana, Torrey Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Podocarpus gracilior, Fern Pine</b>	4' to 8'	6 hours or less	Standard
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Rhus lancea, African Sumac</b>	4' to 8'	6 hours or less	None
<b>Washingtonia filifera, California Fan Palm</b>	4' by 4'	6 hours or less	None

**STOCKTON**

NEIGHBORHOOD TREE PLAN



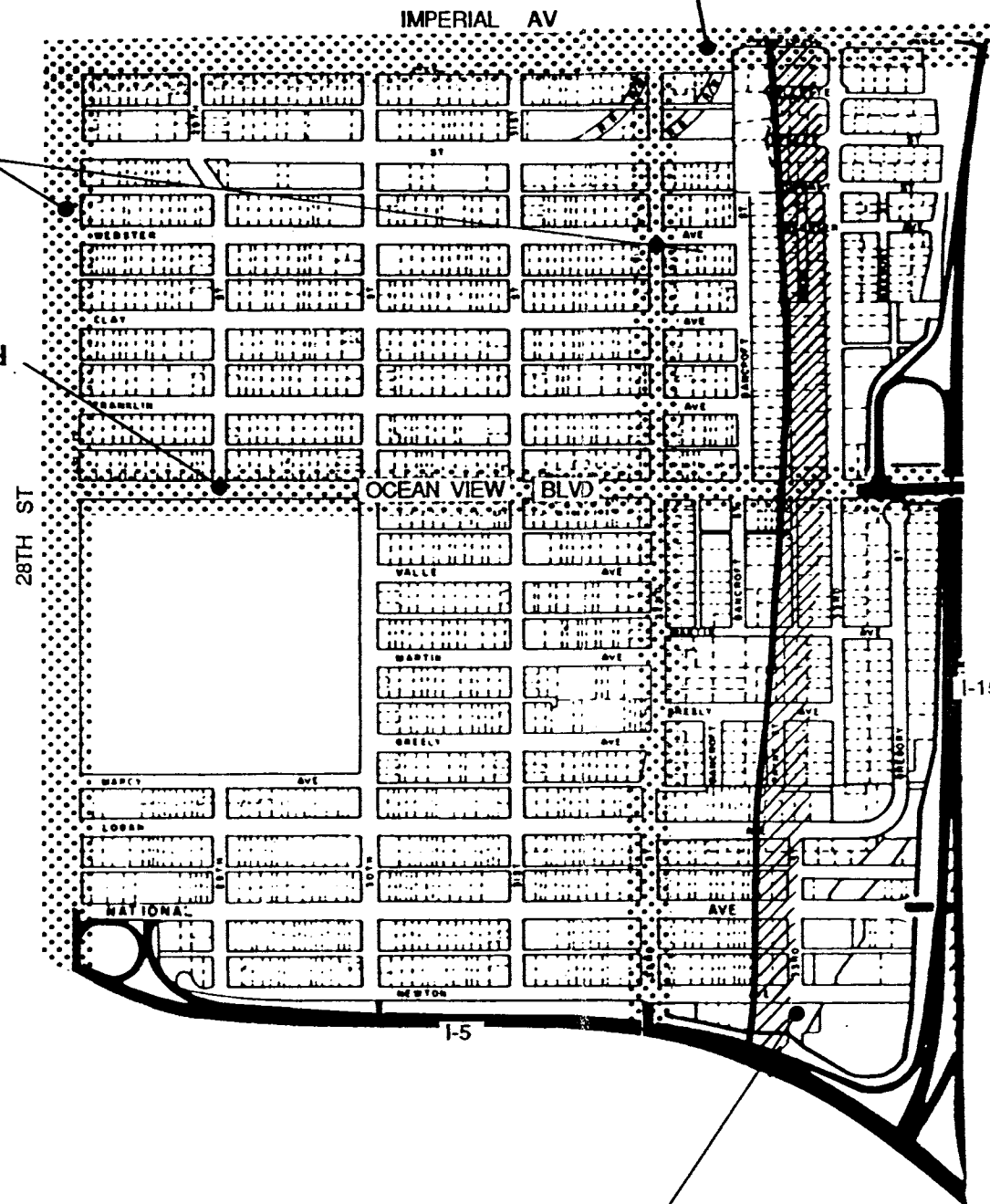
Corridor B-1: Carrotwood recommended

Corridor D-1: Koelreuteria or Magnolia recommended

Corridor A-1: Queen Palms and Mexican Fan Palms recommended

**PREDOMINANT EXISTING TREE TYPES:**  
none predominate

**OPPORTUNITIES**  
Plant London Plane Tree in 'Valley' area, including the freeway right-of-way  
Plant in Memorial Park and schools



'Valley' Area: Plant with London Plane Tree

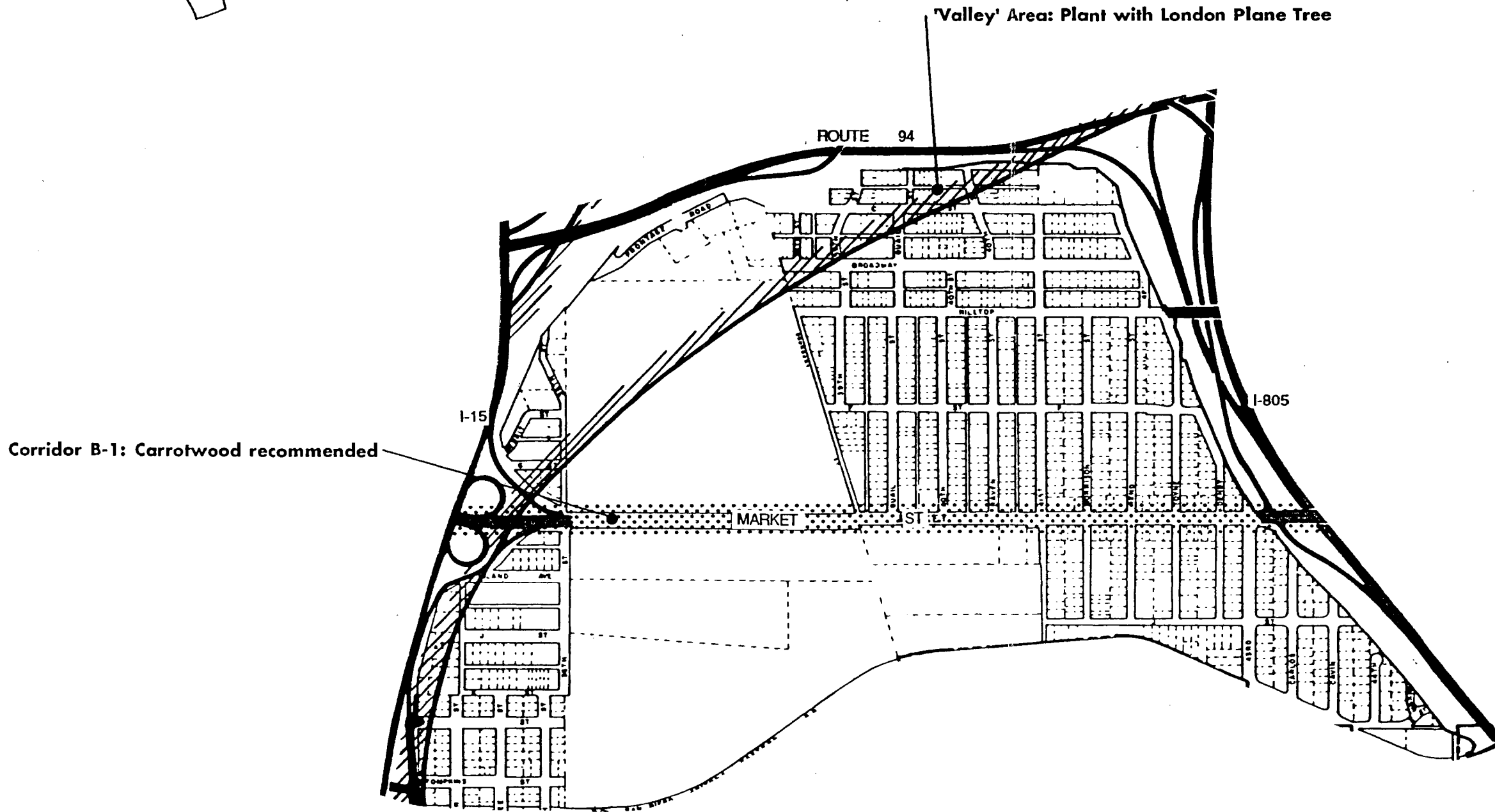
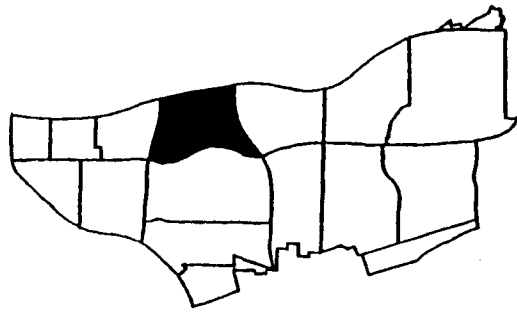
**PROPOSED TREE TYPES:**

**Botanical, Common Name**

	Requirements		
	Soil	Drainage	Care
<b>Arecastrum romanzoffianum, Queen Palm</b>	4' by 4'	6 hours or less	None
<b>Brahea armata, Mexican Blue Palm</b>	4' to 8'	6 hours or less	None
<b>Callistemon viminalis, Weeping Bottle Brush</b>	4' to 8'	6 to 12 hours	Extra
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Metrosideros excelsus, New Zealand Christmas Tree</b>	8' or greater	6 to 12 hours	None
<b>Platanus acerifolia, London Plane Tree</b>	4' by 4'	6 hours or less	None
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Quercus ilex, Holly Oak</b>	8' or greater	6 hours or less	Standard

**MEMORIAL**

NEIGHBORHOOD TREE PLAN



**PROPOSED TREE TYPES:**

**Botanical, Common Name**

**Requirements**

Soil \_\_\_\_\_  
 Width \_\_\_\_\_ Drainage \_\_\_\_\_ Care \_\_\_\_\_

<b>Calodendrum capense, Cape Chestnut</b>	8' or greater	6 hours or less	None
<b>Casuarina cunninghamiana, River She Oak</b>	4' to 8'	6 hours or less	Standard
<b>Koelreuteria bipinnata, Chinese Flame Tree</b>	4' to 8'	6 to 12 hours	Standard
<b>Liquidambar styraciflua, American Sweet Gum</b>	4' by 4'	6 to 12 hours	None
<b>Melaleuca quinquenervia, Cajeput Tree</b>	4' to 8'	6 to 12 hours	None
<b>Olea europaea, Olive</b>	8' or greater	6 hours or less	Standard
<b>Pinus canariensis, Canary Island Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Podocarpus gracilior, Fern Pine</b>	4' to 8'	6 hours or less	Standard
<b>Tabebuia impetiginosa, Pink Trumpet Tree</b>	8' or greater	6 hours or less	None
<b>Trachycarpus fortunei, Windmill Palm</b>	4' to 8'	6 hours or less	None

**PREDOMINANT EXISTING TREE TYPES:**

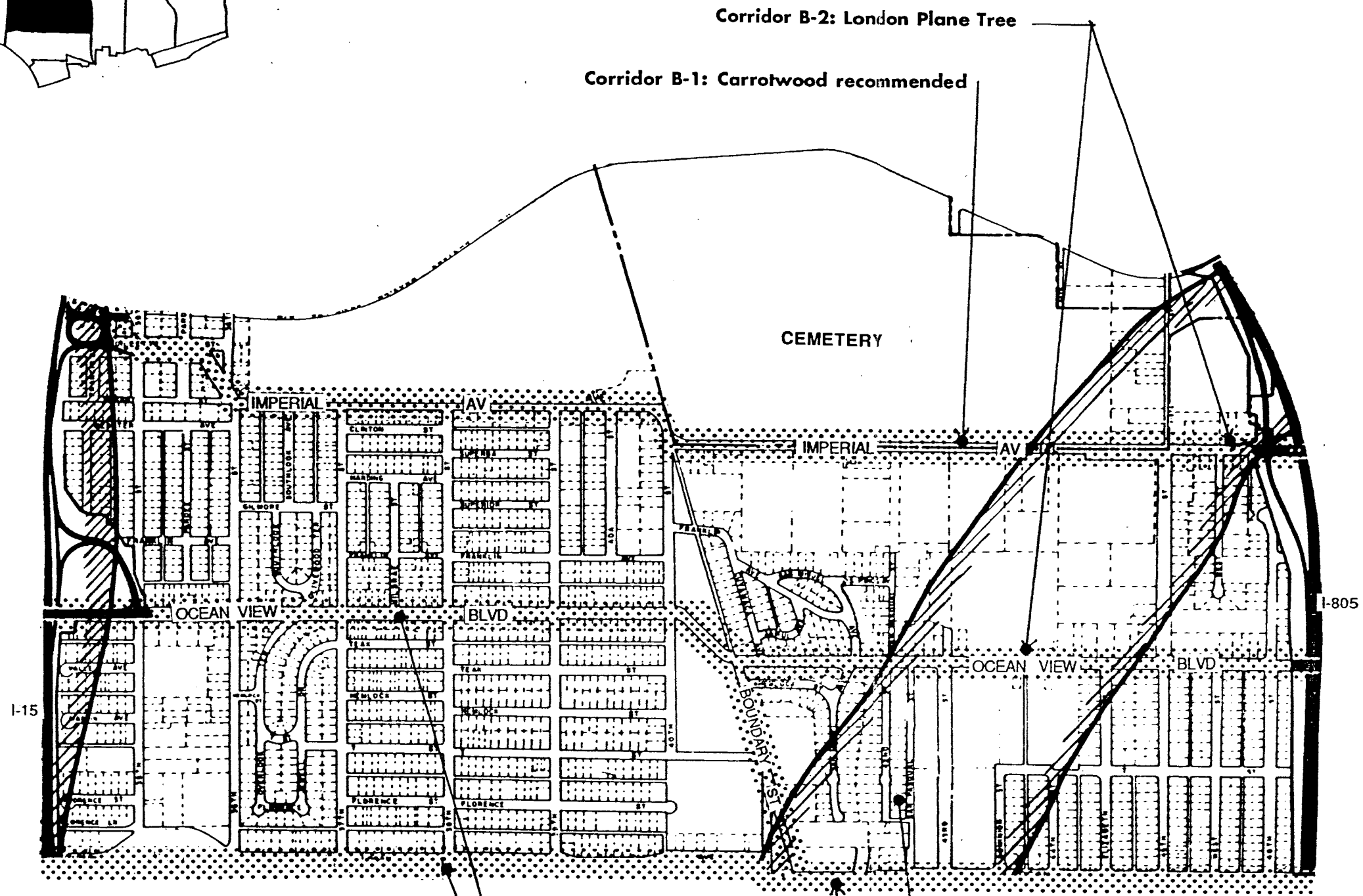
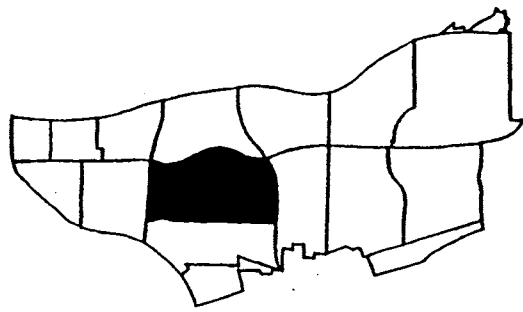
none predominate

**OPPORTUNITIES**

Plant mixed species in cemetery  
 Plant London Plane Tree in 'Valley' area, including the  
 freeway right-of-way

**MOUNT HOPE**

NEIGHBORHOOD TREE PLAN



**PROPOSED TREE TYPES:**

Botanical, Common Name	Requirements		
	Soil Width	Drainage	Care
<b>Arecastrum romanzoffianum, Queen Palm</b> 4' by 4'	6 hours or less	None	
<b>Albizia julibrissin, Silk Tree</b> 8' or greater	6 to 12 hours	None	
<b>Brahea armata, Mexican Blue Palm</b> 4' to 8'	6 hours or less	None	
<b>Broussonetia papyrifera, Paper Mulberry</b> 4' to 8'	6 to 12 hours	Standard	
<b>Callistemon viminalis, Weeping Bottle Brush</b> 4' to 8'	6 to 12 hours	Extra	
<b>Eriobotrya deflexa, Bronze Loquat</b> 4' to 8'	6 hours or less	Standard	
<b>Eucalyptus deglupta, Mindanao Gum</b> 4' to 8'	6 to 12 hours	None	
<b>Eucalyptus ficifolia, Red Flowering Gum</b> 4' to 8'	6 to 12 hours	None	
<b>Jacaranda mimosifolia, Jacaranda</b> 4' to 8'	6 to 12 hours	None	
<b>Lagunaria patersonii, Primrose Tree</b> 4' to 8'	6 hours or less	None	
<b>Metrosideros excelsus, New Zealand Christmas Tree</b> 8' or greater	6 to 12 hours	None	
<b>Tabebuia impetiginosa, Pink Trumpet Tree</b> 8' or greater	6 hours or less	None	
<b>Tristania conferta, Brisbane Box</b> 4' to 8'	6 to 12 hours	None	
<b>Washingtonia robusta, Mexican Fan Palm</b> 4' by 4'	6 hours or less	None	

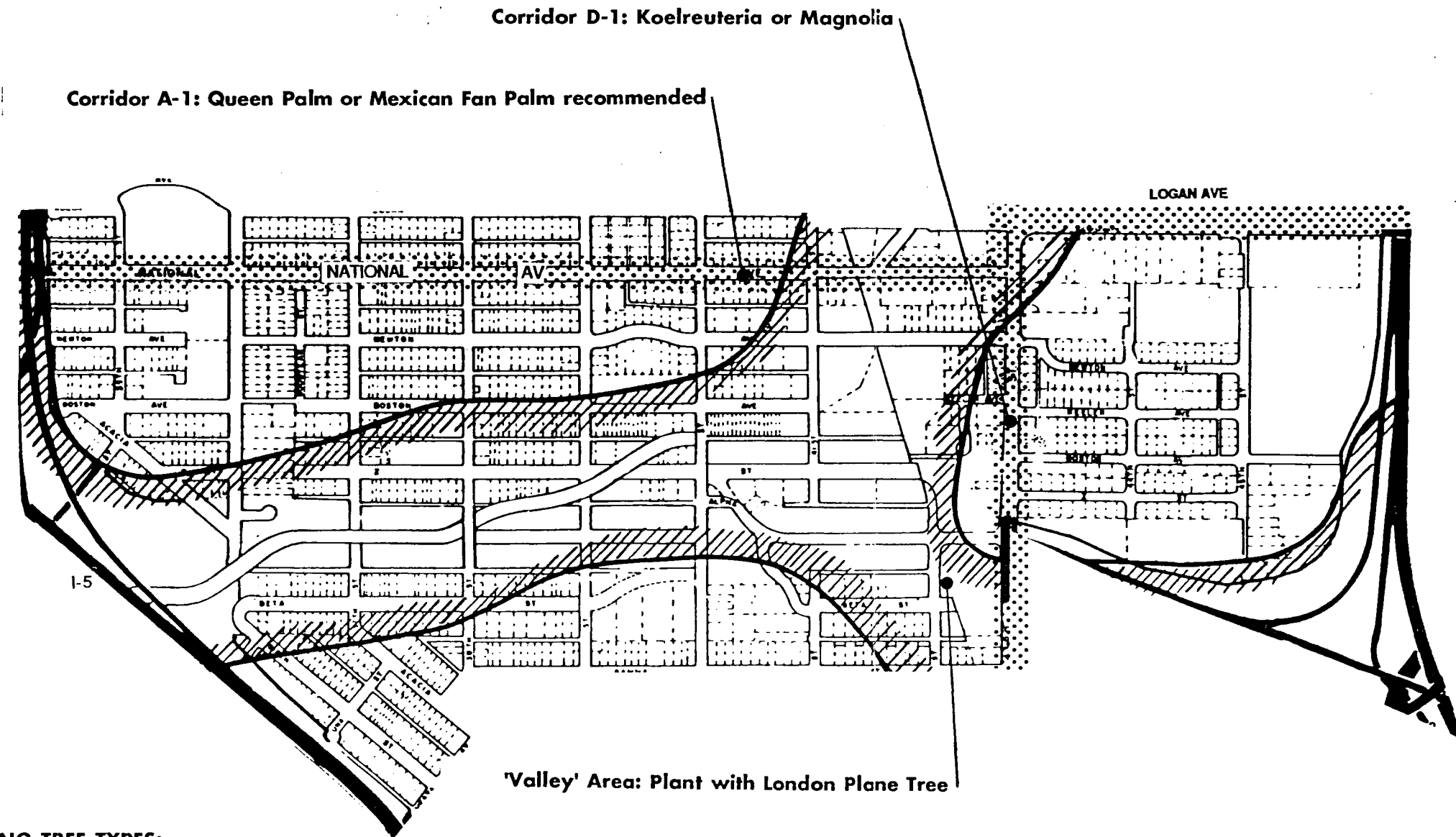
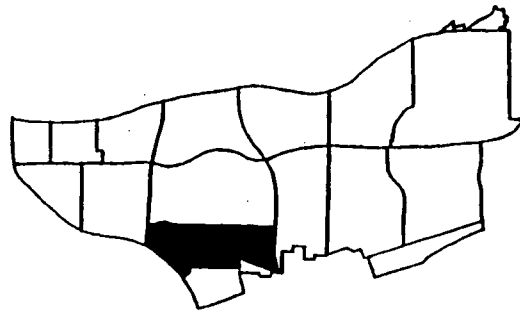
**PREDOMINANT EXISTING TREE TYPES:**  
None predominate

**OPPORTUNITIES**  
Plant mixed species in cemetery  
Plant London Plane Tree in 'Valley' area, including the freeway right-of-way

'Valley' Area: Plant with London Plane Tree  
Corridor A-2: London Plane Tree  
Corridor A-1: Queen Palm or Mexican Fan Palm recommended

**MOUNTAIN VIEW**

NEIGHBORHOOD TREE PLAN



**PROPOSED TREE TYPES:**

Botanical, Common Name	Requirements		
	Soil Width	Drainage	Care
<b>Agonis flexuosa, Peppermint Tree</b>	8' or greater	6 hours or less	None
<b>Arecastrum romanzoffianum, Queen Palm</b>	4' by 4'	6 hours or less	None
<b>Brahea armata, Mexican Blue Palm</b>	4' to 8'	6 hours or less	None
<b>Callistemon viminalis, Weeping Bottle Brush</b>	4' to 8'	6 to 12 hours	Extra
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Geijera parviflora, Australian Willow</b>	4' to 8'	6 hours or less	Standard
<b>Jacaranda mimosifolia, Jacaranda</b>	4' to 8'	6 to 12 hours	None
<b>Lagunaria patersonii, Primrose Tree</b>	4' to 8'	6 hours or less	None
<b>Metrosideros excelsus, New Zealand Christmas Tree</b>	8' or greater	6 to 12 hours	None
<b>Pinus canariensis, Canary Island Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Pinus torreyana, Torrey Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Tabebuia impetiginosa, Pink Trumpet Tree</b>	8' or greater	6 hours or less	None

**PREDOMINANT EXISTING TREE TYPES:**

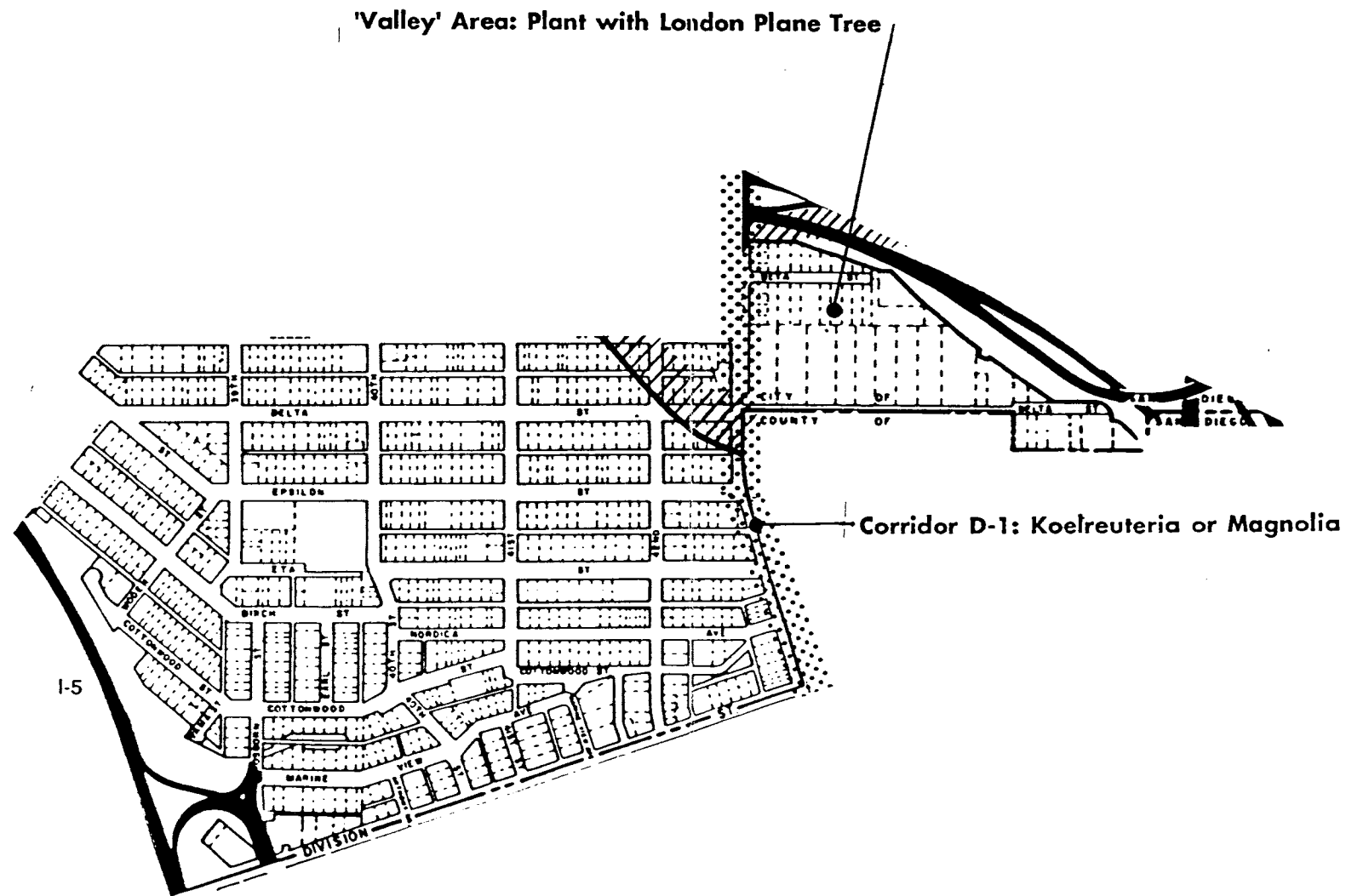
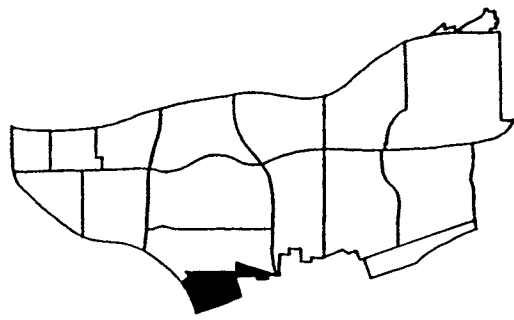
- Brazilian Pepper
- California Pepper
- Carrotwood
- Eucalyptus
- Jacaranda
- Pines

**OPPORTUNITIES**

Plant London Plane Tree in 'Valley' area  
252 Corridor

**SOUTHCREST**

NEIGHBORHOOD TREE PLAN



**PREDOMINANT EXISTING TREE TYPES:**

- Brazilian Pepper
- California Pepper
- Canary Island Date Palms: Beta St. right-of-way at 43rd
- Queen Palms: consistent planting on Division Street
- Carrotwood
- Eucalyptus
- Jacaranda
- Pines

**OPPORTUNITIES**

- Southern edge of the 252 Corridor
- Plant London Plane Tree in 'Valley' area

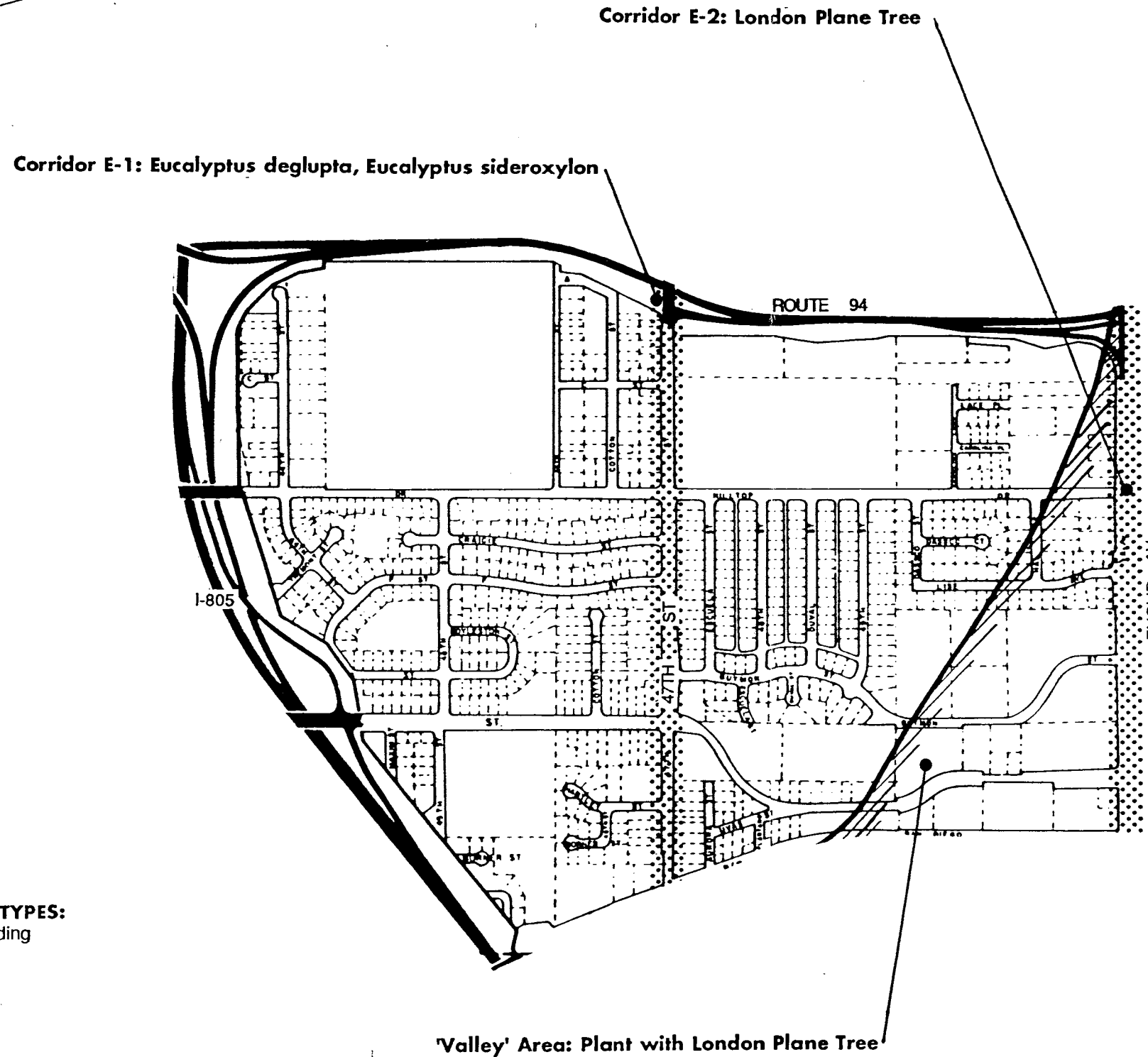
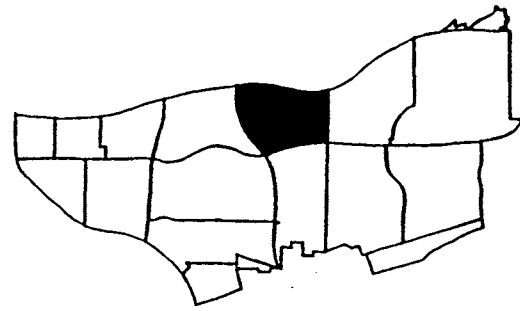
**PROPOSED TREE TYPES:**

**Botanical, Common Name**

Requirements			
	Soil	Drainage	Care
<b>Albizia julibrissin, Silk Tree</b>	8' or greater	6 to 12 hours	None
<b>Arecastrum romanzoffianum, Queen Palm</b>	4' by 4'	6 hours or less	None
<b>Broussonetia papyrifera, Paper Mulberry</b>	4' to 8'	6 to 12 hours	Standard
<b>Celtis occidentalis, Common Hackberry</b>	8' or greater	6 hours or less	None
<b>Jacaranda mimosifolia, Jacaranda</b>	4' to 8'	6 to 12 hours	None
<b>Liquidambar styraciflua, American Sweet Gum</b>	4' by 4'	6 to 12 hours	None
<b>Pinus canariensis, Canary Island Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Prunus sp., Flowering Plum</b>	4' to 8'	6 to 12 hours	None
<b>Quercus ilex, Holly Oak</b>	8' or greater	6 hours or less	Standard
<b>Rhus lancea, African Sumac</b>	4' to 8'	6 hours or less	None
<b>Washingtonia robusta, Mexican Fan Palm</b>	4' by 4'	6 hours or less	None

**SHELLTOWN**

NEIGHBORHOOD TREE PLAN



**PROPOSED TREE TYPES:**

**Botanical, Common Name**

Requirements	Soil		
	Width	Drainage	Care
<b>Eriobotrya deflexa, Bronze Loquat</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus polyanthemos, Silver Dollar Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus sideroxylon 'Rosea', Red Ironbark</b>	4' to 8'	6 to 12 hours	None
<b>Geijera parviflora, Australian Willow</b>	4' to 8'	6 hours or less	Standard
<b>Koelreuteria bipinnata, Chinese Flame Tree</b>	4' to 8'	6 to 12 hours	Standard
<b>Metrosideros excelsus, New Zealand Christmas Tree</b>	8' or greater	6 to 12 hours	None
<b>Metrosideros robustus, North Island Rata</b>	8' or greater	6 to 12 hours	None
<b>Pinus torreyana, Torrey Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Rhus lancea, African Sumac</b>	4' to 8'	6 hours or less	None
<b>Washingtonia filifera, California Fan Palm</b>	4' by 4'	6 hours or less	None

**PREDOMINANT EXISTING TREE TYPES:**

- Ash: Market Street at the County Building
- Brazilian Pepper
- Eucalyptus
- Jacaranda
- Mexican Fan Palm
- Brisbane Box

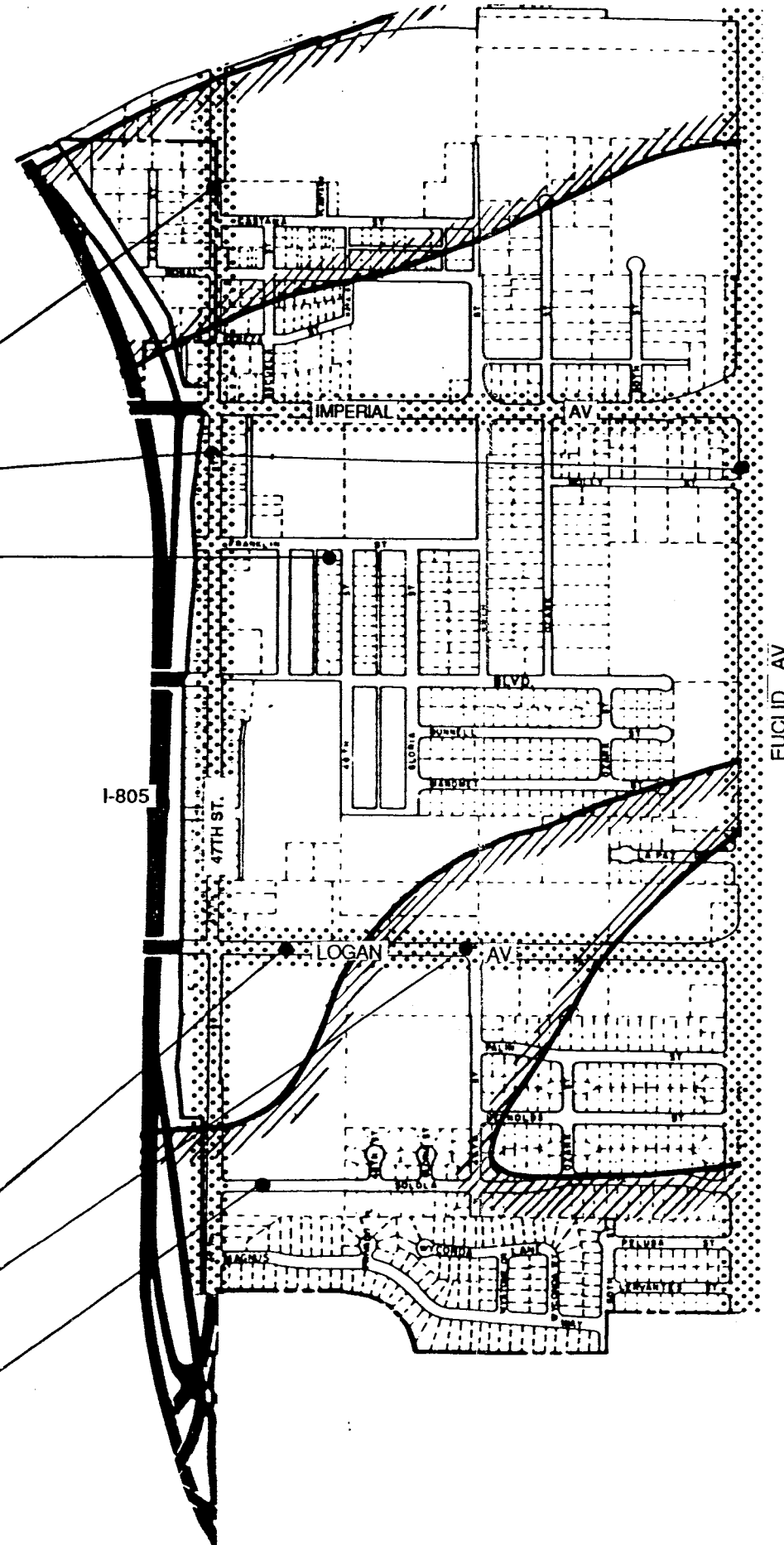
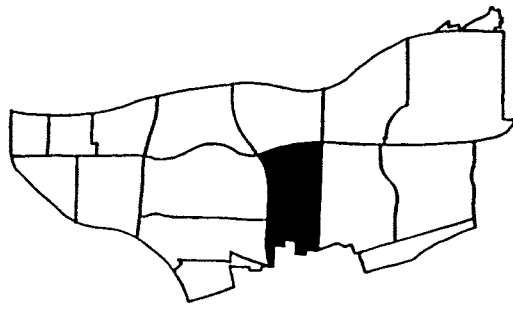
**OPPORTUNITIES**

- Gompers Park

**CHOLLAS VIEW**

NEIGHBORHOOD TREE PLAN





Corridor E-2: London Plane Tree

Corridor E-1: Eucalyptus deglupta, Eucalyptus sideroxylon

Corridor B-1: Carrotwood recommended

**PREDOMINANT EXISTING TREE TYPES:**

- Brazilian Pepper
- Eucalyptus
- Jacaranda
- Mixed Palms
- Sweetgum

**OPPORTUNITIES**

Plant London Plane Tree in 'Valley' area

Corridor A-1: Queen Palm or Mexican Fan Palm recommended

Corridor A-2: London Plane Tree

'Valley' Area: Plant with London Plane Tree

**PROPOSED TREE TYPES:**

**Botanical, Common Name**

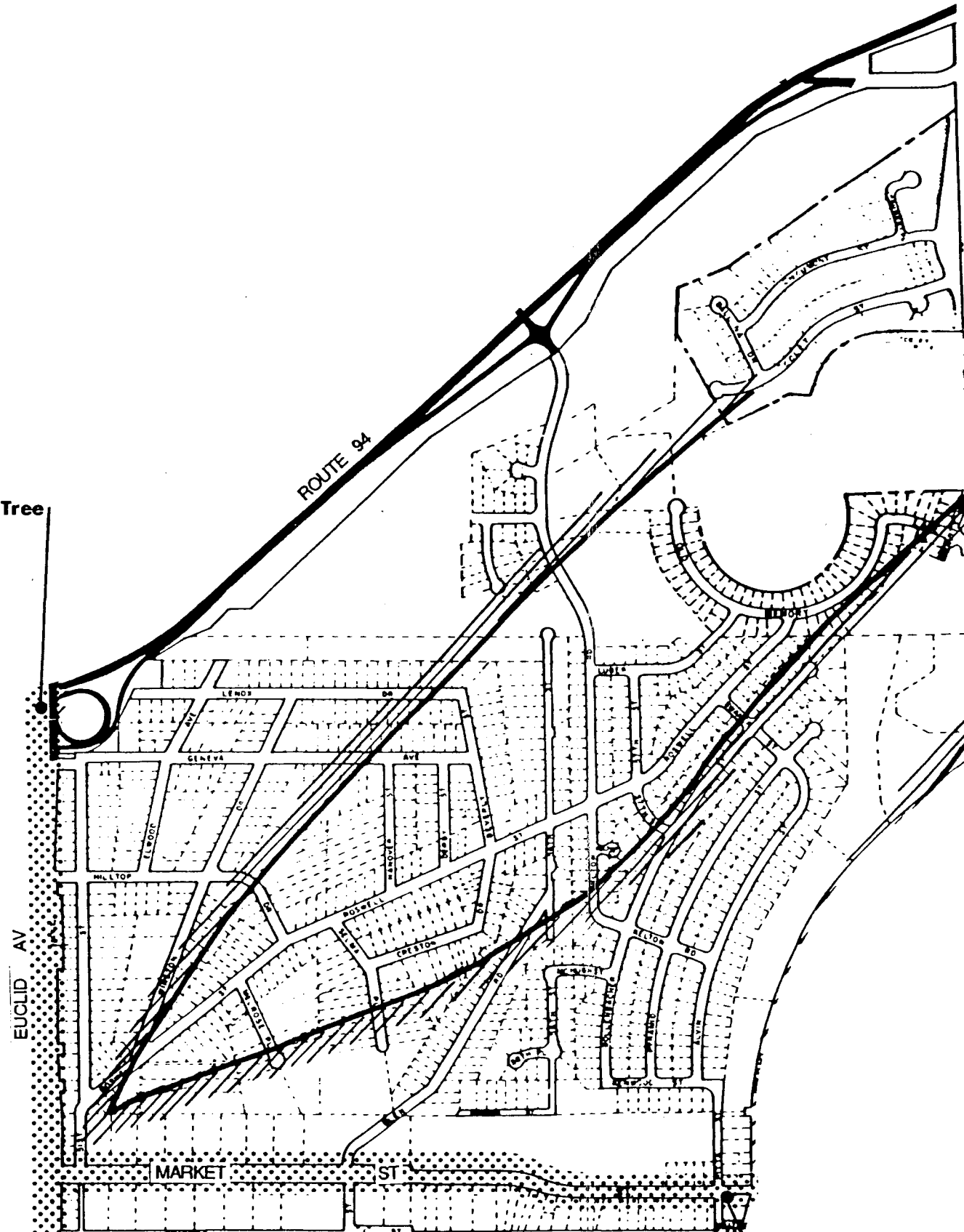
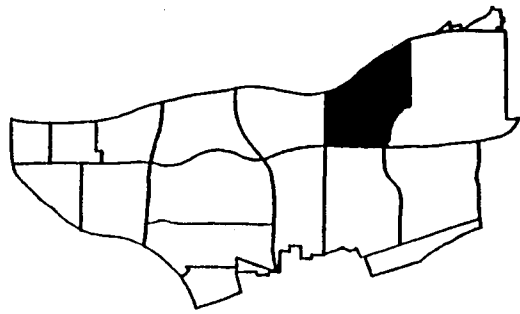
**Requirements**

Soil	Drainage	Care
Width		

<b>Albizia julibrissin, Silk Tree</b>	8' or greater	6 to 12 hours	None
<b>Arecastrum romanzoffianum, Queen Palm</b>	4' by 4'	6 hours or less	None
<b>Cercis canadensis, Eastern Redbud</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus sideroxylon 'Rosea', Red Ironbark</b>	4' to 8'	6 to 12 hours	None
<b>Liquidambar styraciflua, American Sweet Gum</b>	4' by 4'	6 to 12 hours	None
<b>Prunus sp., Flowering Plum</b>	4' by 4'	6 to 12 hours	None
<b>Quercus ilex, Holly Oak</b>	8' or greater	6 hours or less	Standard
<b>Rhus lancea, African Sumac</b>	4' to 8'	6 hours or less	None
<b>Washingtonia robusta, Mexican Fan Palm</b>	4' by 4'	6 hours or less	None

**LINCOLN PARK**

NEIGHBORHOOD TREE PLAN



**Corridor E-2: London Plane Tree**

**Corridor B-2: London Plane Tree**

**PREDOMINANT EXISTING TREE TYPES:**

- Ash: Strong street tree theme
- Brisbane Box: Strong street tree theme
- Chinese Elm: Strong street tree theme
- Eucalyptus: In Emerald Hills Park & School
- Jacaranda: Strong street tree theme
- Pines: In Emerald Hills Park & School
- Sweetgum: Strong street tree theme
- Weeping Bottle Brush: Strong street tree theme

**OPPORTUNITIES**

- Strengthen existing coherent street tree plantings
- Plant London Plane Tree in 'Valley' area

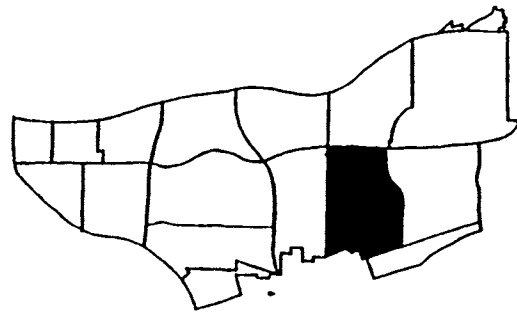
**PROPOSED TREE TYPES:**

**Botanical, Common Name**

Requirements	Soil		
	Width	Drainage	Care
<b>Callistemon viminalis, Weeping Bottle Brush</b>	4' to 8'	6 to 12 hours	Extra
<b>Eriobotrya deflexa, Bronze Loquat</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus polyanthemos, Silver Dollar Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus sideroxylon 'Rosea', Red Ironbark</b>	4' to 8'	6 to 12 hours	None
<b>Jacaranda mimosifolia, Jacaranda</b>	4' to 8'	6 to 12 hours	None
<b>Geijera parviflora, Australian Willow</b>	4' to 8'	6 hours or less	Standard
<b>Koelreuteria bipinnata, Chinese Flame Tree</b>	4' to 8'	6 to 12 hours	Standard
<b>Liquidambar styraciflua, American Sweet Gum</b>	4' by 4'	6 to 12 hours	None
<b>Pinus torreyana, Torrey Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Washingtonia filifera, California Fan Palm</b>	4' by 4'	6 hours or less	None
<b>Washingtonia robusta, Mexican Fan Palm</b>	4' by 4'	6 hours or less	None

**EMERALD HILLS**

NEIGHBORHOOD TREE PLAN



Corridor C-1: *Eucalyptus deglupta*, *Pinus torreyana*, *Podocarpus gracilior*

Corridor C-2: London Plane Tree

Corridor B-1: Carrotwood recommended

**PREDOMINANT EXISTING TREE TYPES:**

- Brazilian Pepper
- California Pepper
- Eucalyptus: in King Park
- Jacaranda
- Magnolia
- Mixed Palms
- Pines: in King Park
- Sweetgum

**OPPORTUNITIES**

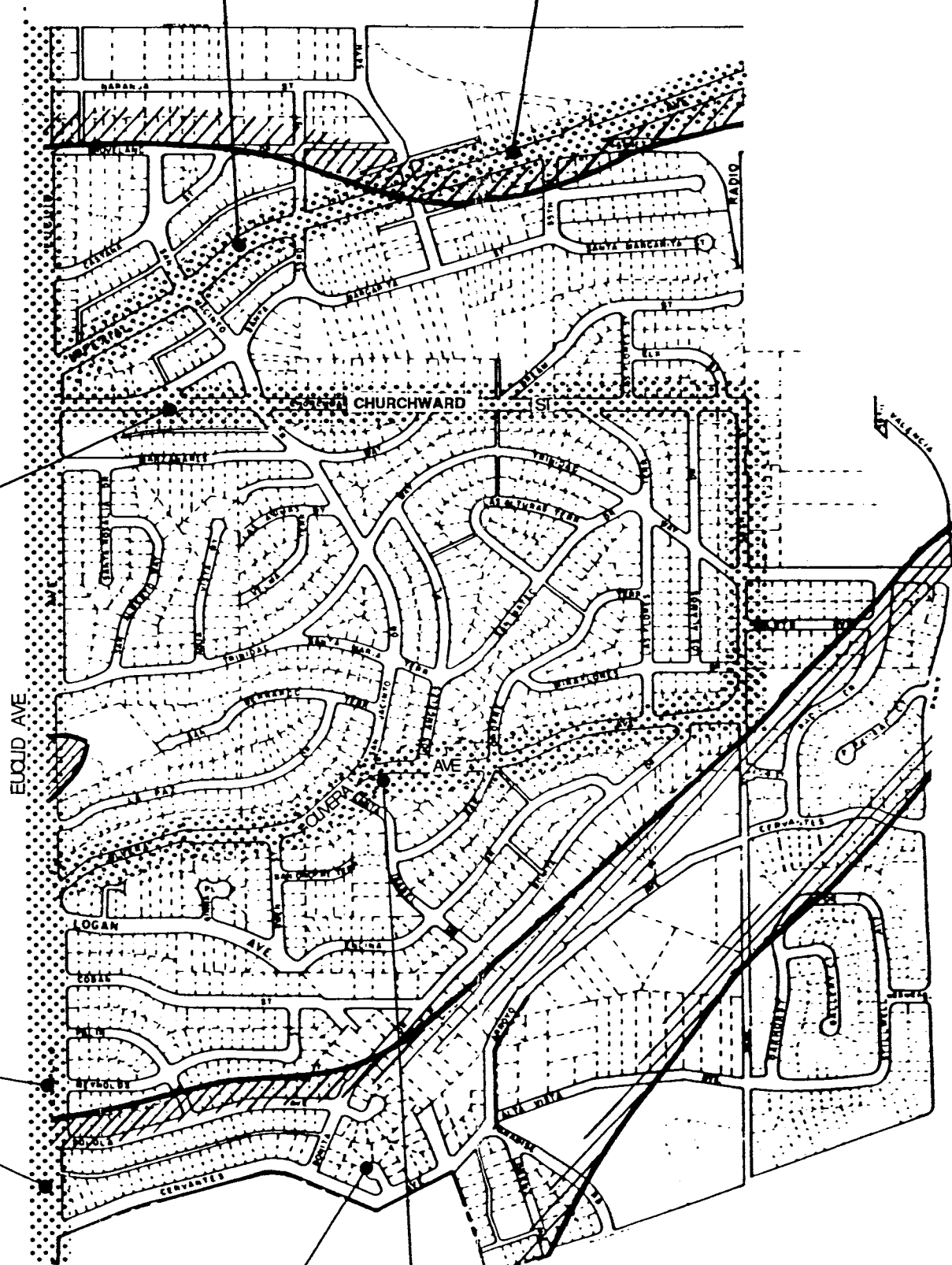
Plant London Plane Tree in 'Valley' area

Corridor E-1: *Eucalyptus deglupta*, *Eucalyptus sideroxylon*

Corridor E-2: London Plane Tree

'Valley' Area: Plant with London Plane Tree

Corridor A-1: Queen Palm or Mexican Fan Palm recommended



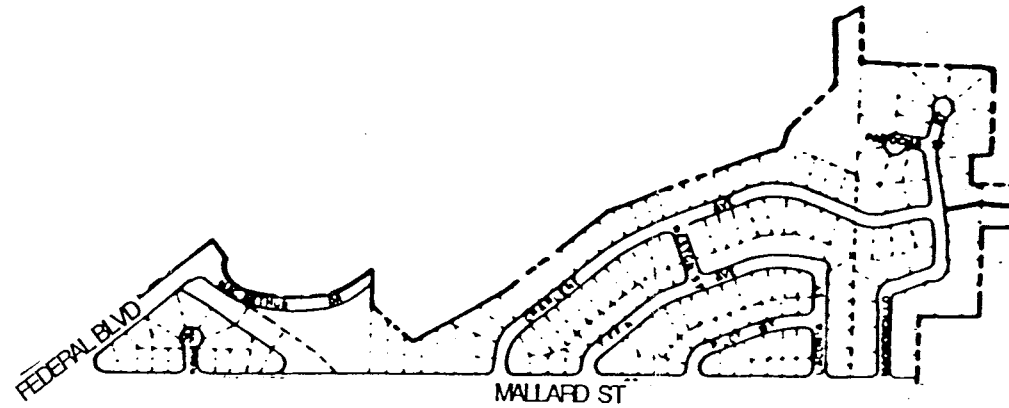
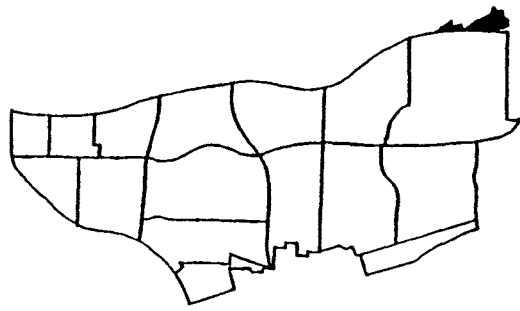
**PROPOSED TREE TYPES:**

Botanical, Common Name

	Requirements		
	Soil Width	Drainage	Care
<b><i>Agonis flexuosa</i>, Peppermint Tree</b> 8' or greater	6 hours or less	None	
<b><i>Arecastrum romanzoffianum</i>, Queen Palm</b> 4' by 4'	6 hours or less	None	
<b><i>Celtis occidentalis</i>, Common Hackberry</b> 8' or greater	6 hours or less	None	
<b><i>Eucalyptus deglupta</i>, Mindanao Gum</b> 4' to 8'	6 to 12 hours	None	
<b><i>Eucalyptus ficifolia</i>, Red Flowering Gum</b> 4' to 8'	6 to 12 hours	None	
<b><i>Eucalyptus polyanthemos</i>, Silver Dollar Gum</b> 4' to 8'	6 to 12 hours	None	
<b><i>Eucalyptus sideroxylon</i> 'Rosea', Red Ironbark</b> 4' to 8'	6 to 12 hours	None	
<b><i>Jacaranda mimosifolia</i>, Jacaranda</b> 4' to 8'	6 to 12 hours	None	
<b><i>Koelreuteria bipinnata</i>, Chinese Flame Tree</b> 4' to 8'	6 to 12 hours	Standard	
<b><i>Magnolia grandiflora</i>, Evergreen Magnolia</b> 4' to 8'	6 to 12 hours	Standard	
<b><i>Olea europaea</i>, Olive</b> 8' or greater	6 hours or less	Standard	
<b><i>Pinus torreyana</i>, Torrey Pine</b> 8' or greater	6 to 12 hours	Standard	
<b><i>Quercus agrifolia</i>, Live Oak</b> 8' or greater	6 hours or less	Standard	
<b><i>Rhus lancea</i>, African Sumac</b> 4' to 8'	6 hours or less	None	
<b><i>Washingtonia filifera</i>, California Fan Palm</b> 4' by 4'	6 hours or less	None	
<b><i>Washingtonia robusta</i>, Mexican Fan Palm</b> 4' by 4'	6 hours or less	None	

**VALENCIA PARK**

NEIGHBORHOOD TREE PLAN



**PREDOMINANT EXISTING TREE TYPES:**

- Carrotwood in private yards
- Eucalyptus
- Mixed Palms
- Sweetgum

**PROPOSED TREE TYPES:**

**Botanical, Common Name**

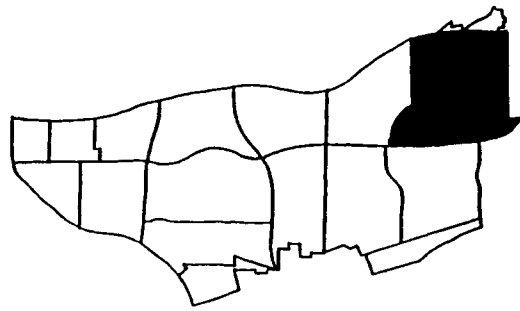
**Requirements**

Soil \_\_\_\_\_  
 Width \_\_\_\_\_ Drainage \_\_\_\_\_ Care \_\_\_\_\_

<b>Bauhinia variegata, Purple Orchid Tree</b>	4' to 8'	6 to 12 hours	Standard
<b>Eriobotrya deflexa, Bronze Loquat</b>	4' to 8'	6 hours or less	Standard
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus polyanthemos, Silver Dollar Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus sideroxylon 'Rosea', Red Ironbark</b>	4' to 8'	6 to 12 hours	None
<b>Koelreuteria bipinnata, Chinese Flame Tree</b>	4' to 8'	6 to 12 hours	Standard
<b>Metrosideros excelsus, New Zealand Christmas Tree</b>	8' or greater	6 to 12 hours	None
<b>Metrosideros robustus, North Island Rata</b>	8' or greater	6 to 12 hours	None
<b>Pinus torreyana, Torrey Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Rhus lancea, African Sumac</b>	4' to 8'	6 hours or less	None
<b>Washingtonia filifera, California Fan Palm</b>	4' by 4'	6 hours or less	None

**BROADWAY HEIGHTS**

NEIGHBORHOOD TREE PLAN

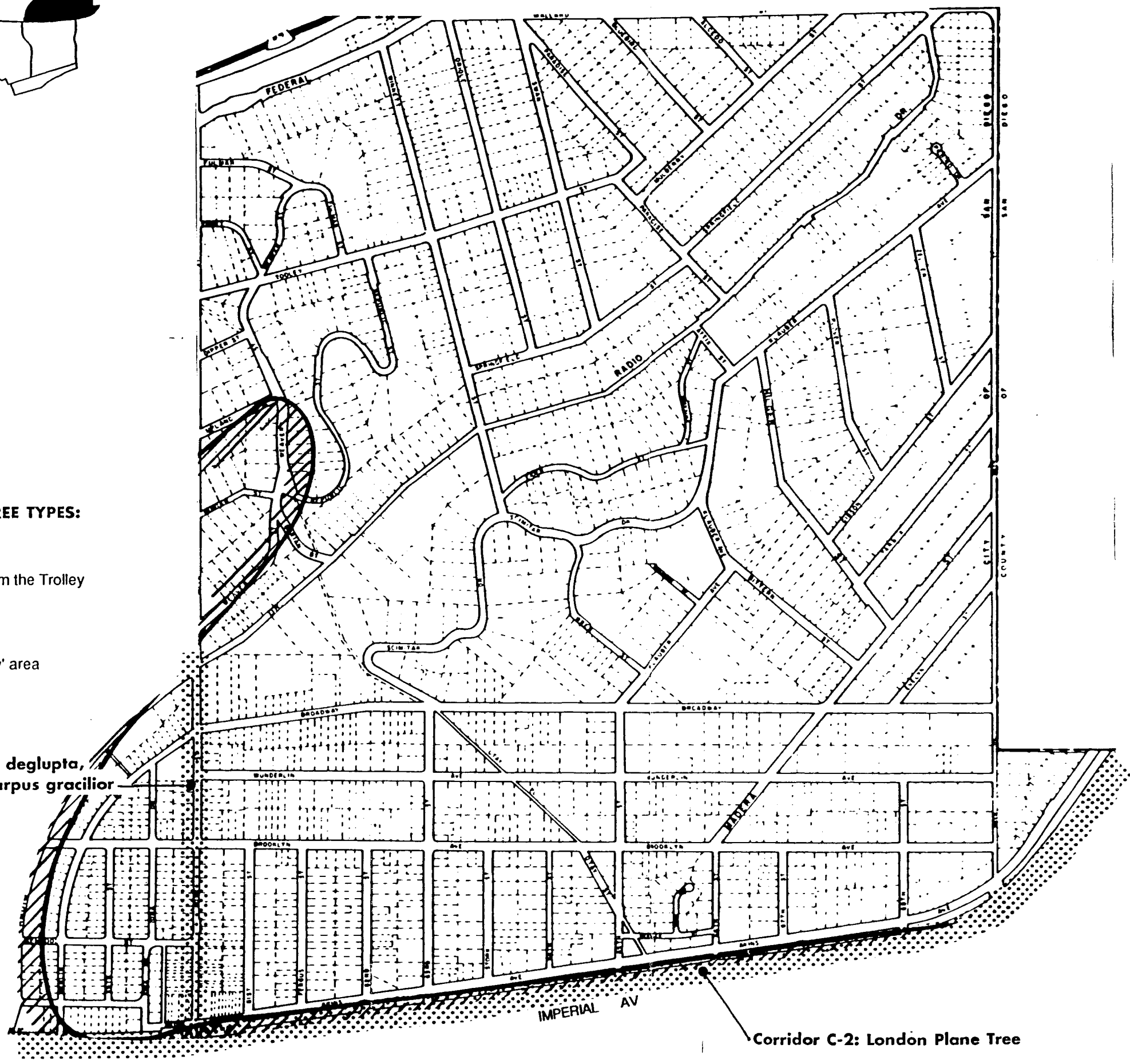


**PREDOMINANT EXISTING TREE TYPES:**  
 Brazilian Pepper  
 California Pepper  
 Eucalyptus  
 Jacaranda: Prominent in views from the Trolley  
 Pines

**OPPORTUNITIES**  
 Plant London Plane Tree in 'Valley' area

**Corridor C-1: Eucalyptus deglupta,  
 Pinus torreyana, Podocarpus gracilior**

**Corridor C-2: London Plane Tree**

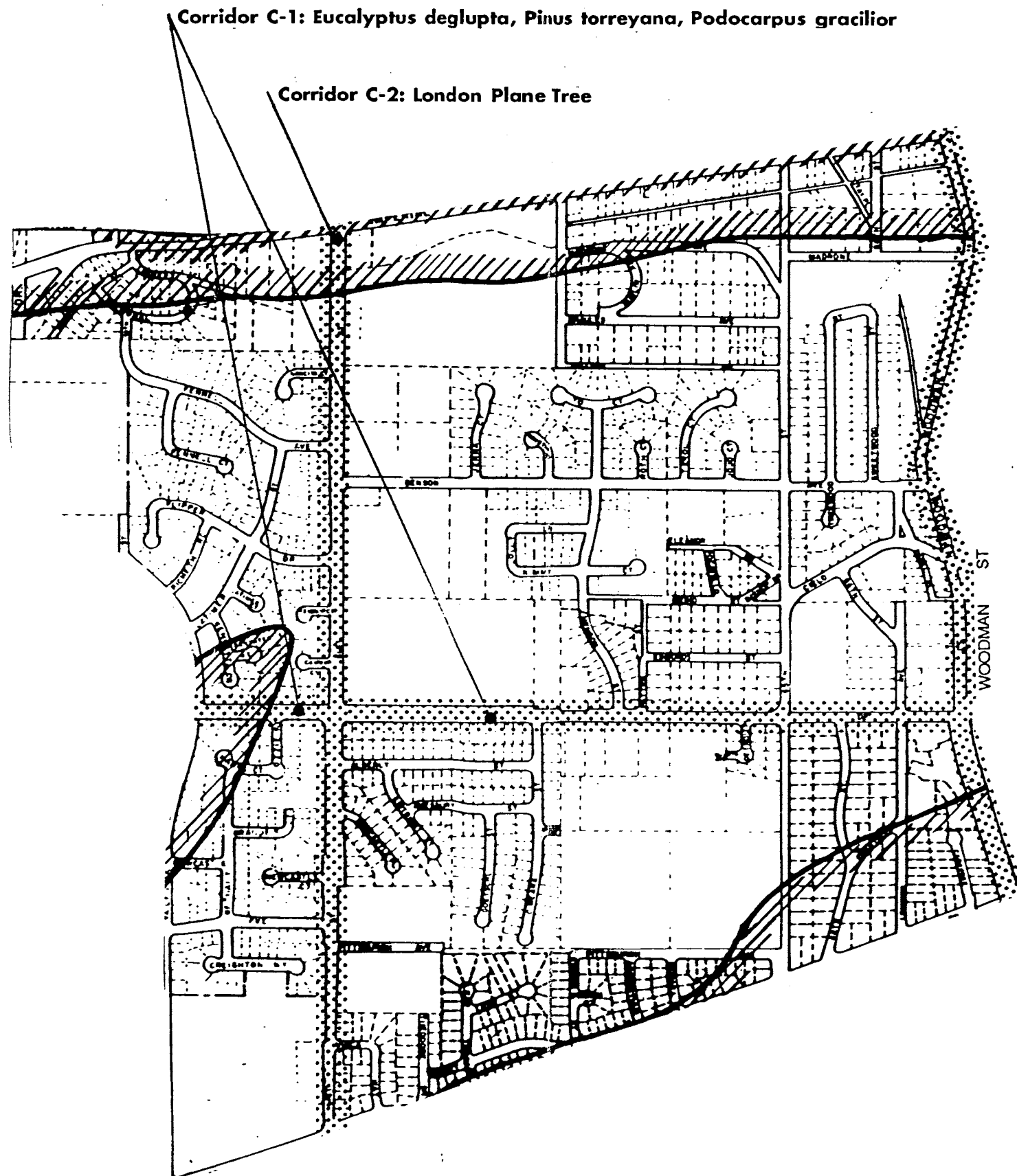
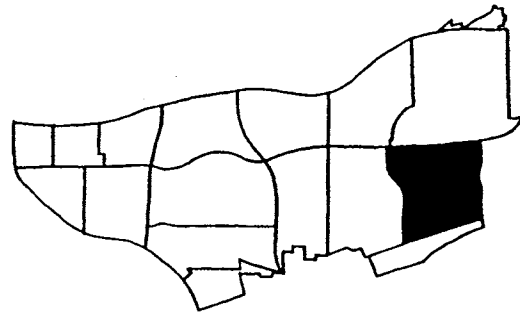


**PROPOSED TREE TYPES:**

Botanical, Common Name	Requirements		
	Soil Width	Drainage	Care
<b>Brachychiton populneus, Bottle Tree</b> 4' by 4'	6 to 12 hours	None	None
<b>Brahea armata, Mexican Blue Palm</b> 4' to 8'	6 hours or less	None	None
<b>Celtis occidentalis, Common Hackberry</b> 8' or greater	6 hours or less	None	None
<b>Eucalyptus deglupta, Mindanao Gum</b> 4' to 8'	6 to 12 hours	None	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b> 4' to 8'	6 to 12 hours	None	None
<b>Jacaranda mimosifolia, Jacaranda</b> 4' to 8'	6 to 12 hours	None	None
<b>Geijera parviflora, Austrailian Willow</b> 4' to 8'	6 hours or less	Standard	Standard
<b>Quercus agrifolia, Live Oak</b> 8' or greater	6 hours or less	Standard	Standard
<b>Tipuana Tipu, Tipu Tree</b> 8' or greater	6 hours or less	None	None
<b>Washingtonia robusta, Mexican Fan Palm</b> 4' by 4'	6 hours or less	None	None

**ENCANTO**

NEIGHBORHOOD TREE PLAN



**PREDOMINANT EXISTING TREE TYPES:**

California Pepper  
Mixed Palms  
Sweet Gum

**OPPORTUNITIES**

Plant London Plane Tree in 'Valley' area

**PROPOSED TREE TYPES:**

Botanical, Common Name

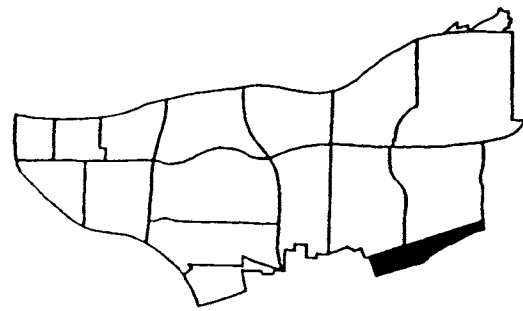
**Requirements**

Soil	Drainage	Care
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<b>Brachychiton populneus, Bottle Tree</b>	4' by 4'	6 to 12 hours	None
<b>Cupaniopsis anacardioides, Carrot Wood</b>	4' to 8'	6 to 12 hours	Extra
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Pinus torreyana, Torrey Pine</b>	8' or greater	6 to 12 hours	Standard
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Geijera parviflora, Austrailian Willow</b>	4' to 8'	6 hours or less	Standard
<b>Liquidambar styraciflua, American Sweet Gum</b>	4' by 4'	6 to 12 hours	None
<b>Pistacia chinensis, Chinese Pistache</b>	4' to 8'	6 to 12 hours	Standard
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Tristania conferta, Brisbane Box</b>	4' to 8'	6 to 12 hours	None
<b>Umbellularia californica, California Laurel</b>	4' to 8'	6 hours or less	Standard
<b>Washingtonia robusta, Mexican Fan Palm</b>	4' by 4'	6 hours or less	None

**SOUTH ENCANTO**

NEIGHBORHOOD TREE PLAN

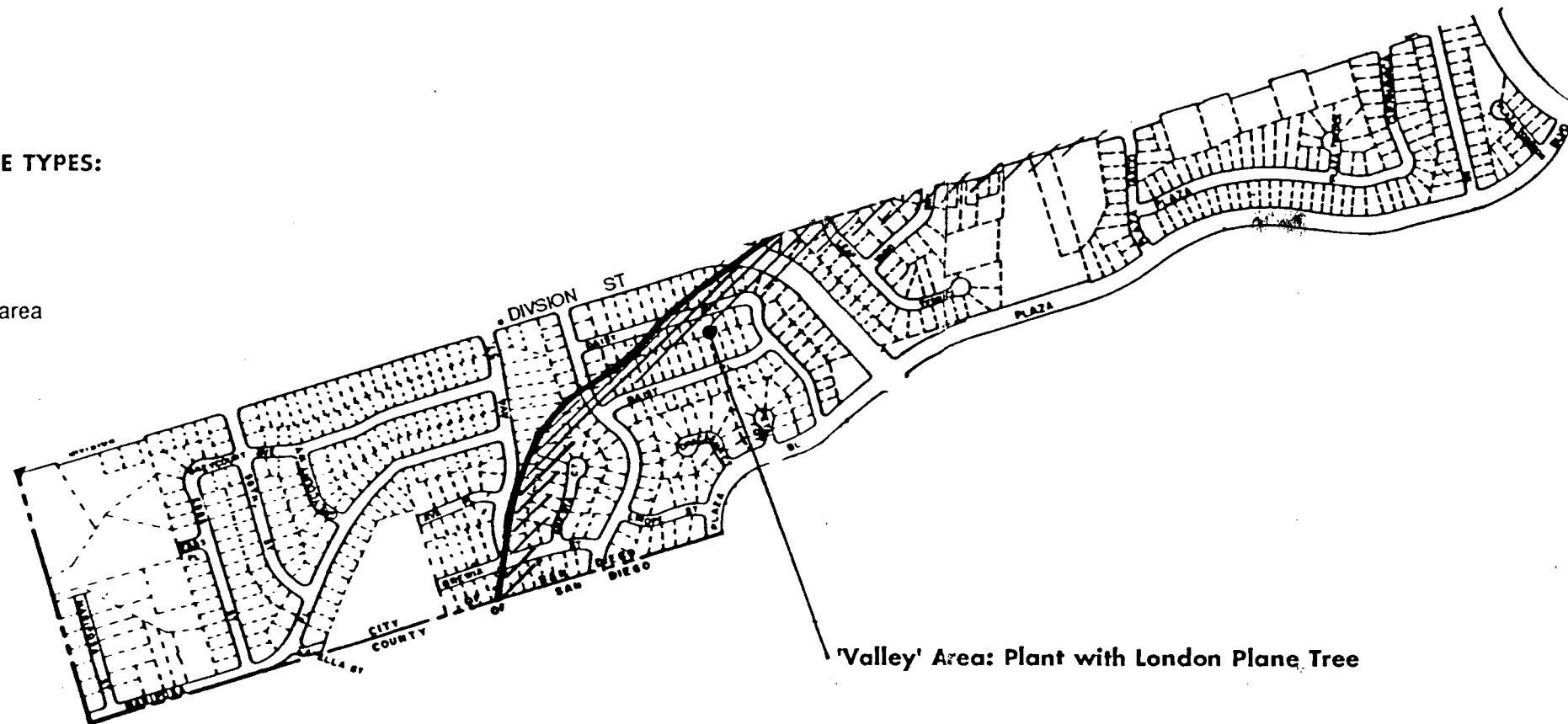


**PREDOMINANT EXISTING TREE TYPES:**

Carrotwood  
Eucalypts  
Fern Pine

**OPPORTUNITIES**

Plant London Plane Tree in 'Valley' area  
Paradise Hills Park and Rec



**PROPOSED TREE TYPES:**

**Botanical, Common Name**

**Requirements**

Soil	Drainage	Care
Width		

<b>Calodendrum capense, Cape Chestnut</b>	8' or greater	6 hours or less	None
<b>Casuarina cunninghamiana, River She Oak</b>	4' to 8'	6 hours or less	Standard
<b>Celtis occidentalis, Common Hackberry</b>	8' or greater	6 hours or less	None
<b>Eucalyptus deglupta, Mindanao Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus ficifolia, Red Flowering Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus polyanthemos, Silver Dollar Gum</b>	4' to 8'	6 to 12 hours	None
<b>Eucalyptus sideroxylon 'Rosea', Red Ironbark</b>	4' to 8'	6 to 12 hours	None
<b>Koelreuteria bipinnata, Chinese Flame Tree</b>	4' to 8'	6 to 12 hours	Standard
<b>Podocarpus gracilior, Fern Pine</b>	4' to 8'	6 hours or less	Standard
<b>Quercus agrifolia, Live Oak</b>	8' or greater	6 hours or less	Standard
<b>Stenocarpus sinuatus, Firewheel tree</b>	8' or greater	6 hours or less	None
<b>Tabebuia impetiginosa, Pink Trumpet Tree</b>	8' or greater	6 hours or less	None
<b>Umbellularia californica, California Laurel</b>	4' to 8'	6 hours or less	Standard

**ALTA VISTA**

NEIGHBORHOOD TREE PLAN

## 5. TECHNICAL APPENDIX

### HOW TREE SPECIES WERE CHOSEN

The conditions of each particular street determine which trees will grow best. These conditions are: Care, Space, Drainage, Soil, and Water. In Southeast these conditions are extremely variable within a neighborhood and even along a single street. To provide for variable conditions but still maintain a coherent system of trees the plan: Identifies existing, proven street tree species that are common in the neighborhood and are also appropriate to plant under today's conditions, Recommends additional species appropriate to the neighborhood's general conditions, and Restricts the use of some tree species to the specific conditions where they are most appropriate.

### PLANT SELECTION MATRIX

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#### TREE PLANTING REQUIREMENTS & FEATURES:

Each tree type on the following page is rated according to the requirements and features listed below. The number of each feature corresponds to the number at the column heading on the left of the next page.

- 1: **Root zone space requirement**
  - A <4-1/2' x 10'
  - B 4-1/2' x 10'
  - C open area only
- 2: **Pruning requirement**
  - D hazard reduction prune
  - E standard pruning regime
  - F more frequent than standard pruning required
- 3: **Tree pit drainage**
  - G fast drainage required
  - H accepts poor drainage
- 4: **Litter**
  - I minor litter
  - J flower, fruit, or leaf litter in one season
  - K flower, fruit, or leaf litter continuously
- 5: **Drought Tolerance**
  - L drought tolerant
  - M standard water requirement
  - N "garden" conditions water requirement
- 6: **Slope Condition**
  - O 0-20% slope planting area required
  - P > 20% slope planting area acceptable
- 7: **Size/Shape Class**
  - Q evergreen
  - R deciduous
  - S palm
  - T columnar
  - U open crown
  - V dense crown
  - W very large at maturity



These tree types are listed by the type of planting area appropriate for them.

**SMALLER TREES FOR NARROW PLANTING AREAS  
ON NEIGHBORHOOD STREETS:**

	1	2	3	4	5	6	7	8
<u>Bauhinia variegata</u> , Purple Orchid Tree	B	F	H	J	L	RU	V	*
<u>Broussonetia papyrifera</u> , Paper Mulberry	B	E	H	J	L	RV	M	
<u>Callistemon viminalis</u> , Weeping Bottle Brush	B	F	H	I	M	Q	M	
<u>Cercis canadensis</u> , Eastern Redbud	B	E	G	J	L	U	M	*
<u>Eriobotrya deflexa</u> , Bronze Loquat	B	E	G	I	M	Q	M	*
<u>Geijera parviflora</u> , Australian Willow	C	D	G	I	L	QV	M	
<u>Koelreuteria paniculata</u> , Goldenrain Tree	B	E	H	J	M	RV	M	*
<u>Melaleuca quinquenervia</u> , Cajuput Tree	B	D	H	I	L	QT	M	
<u>Olea europaea</u> , Olive	C	D	G	J	L	QV	M	*
<u>Pittosporum undulatum</u> , Victorian Box	C	E	H	K	L	QV	M	
<u>Trachycarpus fortunei</u> , Windmill Palm	A	D	H	I	L	S	M	
<u>Tristania conferta</u> , Brisbane Box	A	E	H	I	L	Q	M	
<u>Zelkova serrulata</u> , Zelkova Serrata	B	F	H	J	M	RU	M	

**URBAN AREAS WITH 4' X 4' PLANTING AREAS:**

	1	2	3	4	5	6	7	8
<u>Archontophoenix cunninghamiana</u> , King Palm	A	D	G	J	L	S	M	*
<u>Arecastrum romanzoffianum</u> , Queen Palm	A	D	G	I	M	S	M	
<u>Brahea edulis x brandegeei</u> , Guadalupe Palm	B	D	G	I	L	S	M	
<u>Cupaniopsis anacardioides</u> , Carrot Wood	B	F	H	J	M	QV	M	
<u>Ginkgo biloba</u> , Maiden Hair	B	E	H	J	M	RV	M	*
<u>Jacaranda mimosifolia</u> , Jacaranda	A	E	H	J	M	RU	M	
<u>Koelreuteria bipinnata</u> , Chinese Flame Tree	B	E	H	J	M	RV	M	*
<u>Liquidambar styraciflua</u> , American Sweet Gum	A	E	H	J	M	RT	V	
<u>Magnolia grandiflora</u> , Evergreen Magnolia	B	E	H	K	M	QV	V	
<u>Platanus acerifolia</u> , London Plane Tree	B	E	G	K	M	RV	V	
<u>Podocarpus gracillior</u> , Fern Pine	B	E	G	I	M	QV	M	
<u>Prunus sp.</u> , Flowering Plum	A	E	H	J	L	RV	M	*
<u>Rhus lancea</u> , African Sumac	A	E	G	I	L	Q	M	
<u>Washingtonia filifera</u> , California Fan Palm	A	D	G	I	L	S	M	
<u>Washingtonia robusta</u> , Mexican Fan Palm	B	D	G	I	L	S	M	

**BROAD PLANTING AREAS ON NEIGHBORHOOD STREETS:**

	1	2	3	4	5	6	7	8
<u>Brachychiton populneus</u> , Bottle Tree	A	E	H	K	L	Q	M	
<u>Eucalyptus deglupta</u> , Mindanao Gum	B	D	H	K	L	Q	M	
<u>Eucalyptus ficifolia</u> , Red Flowering Gum	B	D	H	K	L	Q	M	
<u>Eucalyptus polyanthemus</u> , Silver Dollar Gum	B	D	H	K	L	Q	M	
<u>Eucalyptus sideroxylon 'Rosea'</u> , Red Ironbark	B	D	H	K	L	Q	M	
<u>Pinus canariensis</u> , Canary Island Pine	C	D	H	K	L	QT	M	
<u>Pinus torreyana</u> , Torrey Pine	C	D	H	K	L	QU	M	
<u>Pistacia chinensis</u> , Chinese Pistache	B	E	H	J	L	RV	M	
<u>Quercus ilex</u> , Holly Oak	C	D	G	I	L	QW	M	

**OPEN SPACES AND PARKS:**

	1	2	3	4	5	6	7	8
<u>Agonis flexuosa</u> , Peppermint Tree	C	E	G	I	L	QV	M	
<u>Albizia julibrissin</u> , Silk Tree	C	E	H	K	M	RU	M	
<u>Brahea armata</u> , Mexican Blue Palm	B	D	G	I	L	S	M	*
<u>Butia capitata</u> , Jelly Palm	B	D	G	I	L	S	M	
<u>Calodendrum capense</u> , Cape Chestnut	C	E	G	J	M	RV	M	*
<u>Castanea crenata X mollissima</u> , Chestnut	C	E	G	J	M	R	M	
<u>Casuarina cunninghamiana</u> , River She Oak	B	E	G	K	L	QT	M	
<u>Celtis occidentalis</u> , Common Hackberry	C	E	G	J	L	R	W	
<u>Chorisia speciosa</u> , Floss Silk Tree	C	E	G	J	M	QU	V	
<u>Lagunaria patersonii</u> , Primrose Tree	B	D	G	J	L	QT		*
<u>Metrosideros excelsus</u> , New Zealand Christmas Tree	C	E	H	I	L	Q	V	
<u>Metrosideros robustus</u> , North Island Rata	C	E	H	I	L	Q	V	
<u>Phoenix canariensis</u> , Canary Island Palm	B	E	G	I	L	Q	V	
<u>Quercus agrifolia</u> , Live Oak	C	D	G	I	L	Q	W	
<u>Schinus molle</u> , California Pepper Tree	B	E	G	K	L	Q	V	
<u>Schinus terebinthifolius</u> Brazilian Pepper Tree	B	E	G	K	L	Q	V	
<u>Stenocarpus sinuatus</u> , Firewheel tree	C	E	G	I	N	QU	M	
<u>Tabebuia impetiginosa</u> , Pink Trumpet Tree	C	E	G	J	L	Q	V	*
<u>Tipuana tipu</u> , Tipu Tree	C	E	G	J	L	W	V	
<u>Umbellularia californica</u> , California Laurel	B	E	G	J	L	QT	M	

**8: Special Conditions Required:**

- \* Archontophoenix cunninghamiana, King Palm: subject to pink crown rot
- \* Bauhinia variegata, Purple Orchid Tree: tender: subject to frost damage, juveniles are low branching
- \* Brahea armata, Mexican Blue Palm: needs lots of space and is very spined
- \* Calodendrum capense, Cape Chestnut: needs protected location
- \* Cercis canadensis, Eastern Redbud: requires protective sponsorship when young
- \* Eriobotrya deflexa, Bronze Loquat: multi-trunk unless trained as standard
- \* Ginkgo Biloba, Maiden Hair: Males only
- \* Koelreuteria bipinnata, Chinese Flame Tree: requires protective sponsorship when young
- \* Lagunaria patersonii, Primrose Tree: Plant only where minimal or no pruning is required
- \* Olea europaea, Olive: plant non-fruiting varieties
- \* Tabebuia impetiginosa, Pink Trumpet Tree: Prefers irrigation only in summer

\*in a planting of more than four trees, palms may make up only 2/3 of the trees planted, all others must be of a type casting greater amounts of shade, such as broad-headed canopy trees.

## **PLAN METHODOLOGY**

### **1. Introduction**

The design concept for the South East San Diego Community Street Tree Master Plan was established through a process which is summarized into the following steps:

- A. Identification of the natural conditions of the community as they relate to the growth of a tree, i.e. soils, geology, drainage patterns.
- B. Identification of the man-made conditions of the site as they relate to the growth of a tree, i.e. adjacent land use, ground surface treatment, availability of someone to care for tree. See summary of these classifications on the Man-Made Conditions Map.
- C. Combination of the two sets of conditions into Tree Planting Zones into a Classification Map which formed basis for the Master Plan.
- D. List of potential trees suitable to the regional climate.
- E. Identification of the growth requirements and habits for each tree, i.e. type of soil, quantity and frequency of water, potential for the tree to damage pavement or drop too much litter, rate of growth, shape of tree etc.
- F. Match the Tree Planting Zones with the growth requirements and habits of the Master Tree List to produce a palette of street trees.
- G. Development of the design concept of the Community Street Tree Master Plan selecting trees from the palette for each zone and those trees typical of each neighborhood.
- H. Evaluation of the community's ability to achieve the design concept using the tree planting mechanisms available.

### **2. Description of Methodology: Features considered**

#### **A. Introduction**

The primary tools developed for the Research and Analysis of the Community Street Tree Plan were a series of overlays and matrices. The overlays are transparent sheets of acetate which were marked to indicate the the community's site features and are positioned on a base map of the community. The purpose of the overlay method was to identify the various conditions affecting tree growth and evaluate them in relation to one another.

The following site features were mapped onto overlays. The information from the overlays was combined to produce the Classification Map which was used in the formulation of the design concept of the Community Street Tree Master Plan. The street tree lists for each neighborhood reflect the major types of planting conditions in each neighborhood and the existing tree species.

#### **B. Soils**

The landforms and soils of Southeast San Diego have developed through the processes of marine sedimentation with some uplift of underlying geology and a great deal of surface weathering. The weathering includes surface drainage of water which has cut indiscriminately across each soil type. The soils have been disturbed with development which has created either cut or fill conditions during construction. Soil suitability for tree growth depend greatly on if site is cut or fill. It was found that the variation in soil type occurs

at a finer scale than this study could consider, so the plan offers tree species options for the various potential soil types, and asks the planter to test the soil.

The complex system of native soils can be separated into three categories described in terms relative to the region:

**Deep loam-** These soils are the alluvium deposits of upstream soils, typically found in riparian areas and outwash planes. They contain a relatively high amount of nutrients available to the tree, and are structured to allow water draining away quickly. The soil additionally retains a large quantity of water and is deep enough to allow tree roots to grow down a healthy distance before reaching an impermeable layer of hardpan.

**Clay loam-** As a layer of marine sediment this soil is located typically on top of the third soil type. Sand is included but the primary component is clay. Less nutrients are typically available and water drains slower with less water holding capacity and less potential root depth. These soils are slightly more acidic.

**Clay-** The underlying soil is typically clay. It is able to hold onto nutrients but is slow to drain water and the roots have a difficult time growing beyond the tree pit.

The soils of the area have been disturbed by either cutting or filling for construction. Soil suitability for tree growth depends greatly on the cut or fill condition. If the planting site is on a construction cut the type of substrata could be known to direct the type of planting hole required. If the site is located on a fill area then the soil is imported and its type must be tested. This coupled with the experiences reported by people in the area has led to the conclusion that soil type cannot be determined from available geologic maps. It is therefore recommended in this plan that each planting site be tested for drainage prior to planting.

#### C. Bio-geography

Bio-geography describes land forms that are indicative of the community's ecology.

**Valley-** Natural drainage ways which provide seasonal moisture to trees and a diverse habitat of plants and animals.

**Slopes-** Hillsides with slopes greater than 15%. Little moisture is available to trees and the ground plane is fragile due to surface runoff, the natural habitat is specialized to dry conditions.

**Midlands-** Areas of higher elevations providing views to surrounding areas, natural water retention varies upon each site.

**Hilltops-** Highest elevations visible as distinct points on a vista.

The study of the bio-geographic features of the study area revealed the opportunity to recommend moisture-loving trees in the "valley" areas.

#### D. Man-Made Conditions: Land Use

Man-made conditions identified in the Land Use overlay indicate the levels of maintenance that can be expected.

**Public park-** Planted and maintained area with public access. Regular water is typically available as is public maintenance. The root space available to trees is unrestricted by surface conditions i.e. sidewalks and curbs.

Public undeveloped open space- Unplanted areas with public access. Only seasonal water would be available with no maintenance. The root space available to trees is unrestricted by surface conditions i.e. sidewalks and curbs.

Public open space, barren- Unplanted areas with public access. Initiating water is possibly available as might be maintenance. The root space available to trees is unrestricted by surface conditions i.e. sidewalks and curbs.

Private open space- Planted and maintained area with restricted public access. Depending upon Right-of -Way conditions regular water may be available but maintenance is limited. The root space available to trees is restricted by surface conditions i.e. sidewalks and curbs.

Residential- Private or shared residences that could supply water and maintenance. The root space available to trees is restricted by surface conditions i.e. sidewalks and curbs. Right-of-Way configuration of sidewalk and planting area varies: 1. Sidewalk adjacent to curb, planting area is between sidewalk and property line. 2. Parkway planting strip lies between the curb and the sidewalk, sidewalk is adjacent to the property line or is separated by an additional planting area. 3. No sidewalk exists.

Office park- Private use with public access. Depending upon Right-of -Way conditions regular water may be available but maintenance is limited. The root space available to trees is restricted by surface conditions i.e. sidewalks and curbs.

Commercial- Private water is potentially available as is maintenance. Pavement covers entire Right-of-Way. The root space available to trees is restricted by surface conditions i.e. sidewalks and curbs.

Industrial- Private use with restricted access, initial water is potentially available. Typically no sidewalk exists and informal auto parking threatens the tree but the root space available to trees is unrestricted by surface conditions i.e. sidewalks and curbs.

The study of man-made conditions lead to recommendations of tree types appropriate to the various levels of maintenance available in each neighborhood.

#### E. Circulation

The Circulation Site Types are classified separately as another type of man-made feature.

Freeway- Contained route accessible only at designated interchanges. Regular water and maintenance available within Cal Trans regulations. Air pollution levels are highest.

Major or 4 lane Collector- Heavily used streets. Lower levels of air pollution is concentrated at traffic signals.

Residential streets- Streets serving primarily residences.

Bike route- Bicycle paths accessible from designated entry points.

Trolley line- Contained RR track on grade accessible only at designated stations. No water nor maintenance available, trees must meet Trolley authority regulations.

The study of circulation lead to identification of opportunities for right-of-way plantings within the neighborhoods.

## F. Other Features

Other Features are unique situations that could present valuable opportunities to the community.

Faults- Lines across the site that are identified to be geologically unstable.

Landfills- Land that has been used as a dump site, typically reclaimed as a public park.

Neighborhood boundaries- Formal and informal divisions between areas within the City of San Diego.

Landmarks- Points or structures that are identifiable from a distance.

The study of other features allowed identification of conditions and opportunities not conforming to other categories.

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