



AGENDA REPORT

SAN CLEMENTE CITY COUNCIL MEETING
Meeting Date: September 5, 2017

Agenda Item 9-A
Approvals:
City Manager [Signature]
Dept. Head [Signature]
Attorney _____
Finance JR

Department: Public Works / Maintenance Services OB
Prepared By: Randy Little, Maintenance Manager

Subject: *REMOVAL AND REPLACEMENT OF ESPLANADE MEDIAN TREES.*

Fiscal Impact: None. There are sufficient funds available in the approved budget for this expense.

Summary: Staff recommends the City Council approve the removal of 17 Schinus terebinthifolius (Brazilian Pepper) trees and replace four existing tree vacancy sites.

Background: The median trees in the 100 and 200 block of Esplanade have advanced symptoms of Phytophthora root rot and decay. Of the 37 total trees, four trees have failed and were removed over the last year because of the disease. There is no treatment to save the 17 infected trees. Once removed, the soil can be treated with granular sulfur and the same species replanted.

Discussion: The Esplanade median trees have been living in soil with root rot present for many years and are now showing signs of decay. The main stems are spongy to the touch and the canopies are very weak. Last year's storms caused failure in four trees and they were removed. Several other trees have lost partial canopies due to the disease as well.

Staff had the trees evaluated by a Certified Arborist and a Landscape Pest Control Advisor. Collectively, we all agreed that removal is the only option given the advanced state of the disease. The attached memo documents the state of the medina trees, and also presents several tree replacement options. With granular sulfur soil treatment to control root rot, new Brazilian Pepper trees could be planted to replace the removed trees, and this would maintain a consistent tree species within the Esplanade street medians. The replacement trees would be 36-inch box, 10 to 12 feet tall, to lessen the impact of the removals on the neighborhood aesthetics.

There was concern by some area residents about the tree removals and proposed replacements. Staff met with a neighborhood representative and explained that not all of the trees would be removed and that Brazilian Pepper trees, to match the existing species, would be proposed for replacement. This appeared to address resident's concerns. To ensure that all Esplanade residents are informed of this proposal staff will notify all residents of the 100 and 200 blocks of Esplanade that the City Council will be considering this matter at its September 5 meeting.

Recommended

Action: STAFF RECOMMENDS THAT the City Council approve the removal of 17 diseased trees within the Esplanade street median (100 and 200 blocks) and approve planting of 21 new Brazilian Pepper trees.

Attachments: Esplanade Tree Removal Memorandum, Photos and Locations.

Notification: Residents of 100 and 200 Block of Esplanade.

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Memorandum Maintenance Services

June 20, 2017

To: James Makshanoff, City Manager
From: Randy Little, Maintenance Manager
Subject: Replacement Tree Species for the 100 and 200 Blocks of Esplanade
Copy: Tom Bonigut, Deputy Public Works Director

I have evaluated the choice of replacement tree species for the 100 and 200 blocks of Esplanade. I enlisted the assistance of Rick Rodriguez, Certified Arborist and Dr. Grow Landscape Pest Control. The fungal issues that are present in the soils of the Esplanade medians can be successfully treated with granular sulfur after removal and replacement of the infected trees. The option to replace with the existing species is now possible.

There are 17 existing ***Schinus Terebinthifolius* Brazilian Pepper** trees that need to be removed and 4 vacant tree locations from prior failures. The removal and replacement of these locations will cost approximately \$45,000.

Attached are photos of the trees, growth characteristics, location addresses, overall map and spreadsheet with tree conditions. Below are my prioritized replacement recommendations for discussion and approval.

- 1) Replace with same species, ***Schinus Terebinthifolius* Brazilian Pepper** (Attachment E), treat planting pits with granular sulfur every six months to control root rot.
- 2) Replace with Jacaranda Mimosifolia (Attachment D).
- 3) Replace with Geijera Parvifolia (Attachment A).
- 4) Replace with (Attachment B or C).

**100 & 200 Block of Esplanade
Brazilian Pepper (*Schinus terebinthifolius*) Removal**

106 Esplanade	Vacant spot to replant tree.
108 Esplanade	Dead Canopy. Remove and replace.
110 Esplanade	Vacant spot to replant tree.
126 Esplanade	Dead. Remove and replace.
128 Esplanade	There is decay throughout the trunk and limbs. Tree is unbalanced and has a history of broken branches with this tree. Remove and replace.
132 Esplanade	There is decay throughout the trunk and limbs, termites, beetle damage, and discoloration of the wood turning yellow. Remove and replace.
	Signs of Root Rot and Decay. Remove and replace.
	Signs of Root Rot and Decay. Remove and replace.
142 Esplanade	Vacant spot to replant tree
146 Esplanade	There was a fruiting body at the base of this tree expressing root rot, and ½ of the canopy is dead. Remove and replace.
202 Esplanade	Crown dying out and signs of decay. Remove and replace .
204 Esplanade	Vacant spot to replant tree.
206 Esplanade	There was a fruiting body at the base of this tree expressing root rot, and ½ of the canopy is dead. Remove and replace.
208 Esplanade	Vacant spot to replant tree.
210 Esplanade	There was a fruiting body at the base of this tree expressing root rot, and discoloring of the wood turning yellow. Remove and replace.
212 Esplanade	There was a fruiting body at the base of this tree expressing root rot, and ½ of the canopy is dead. There has been a history of broken branches with this tree. Remove and replace.
214 Esplanade	There are signs of root rot. Remove and replace.
216 Esplanade	½ of the Canopy is has broken branches and is unbalanced. Remove and replace.
220 Esplanade	Heavily leaning, and at the base of the tree there is decay and fruiting bodies expressing root rot. Remove and replace.
222 Esplanade	There are signs of root. Remove and replace.
224 Esplanade	Dead Canopy. Remove and replace.

Data Collections

Address	Remove or Vacant	DBH (Inch)	Height (Feet)
106 Esplanade	VACANT	N/A	N/A
108 Esplanade	REMOVE	20.5	20
110 Esplanade	REMOVE	18.2	20
126 Esplanade	REMOVE	25.0	20
128 Esplanade	REMOVE	22.6	20
132 Esplanade	REMOVE	31.4	20
134 Esplanade	VACANT	32.1	20
136 Esplanade	REMOVE	25.4	20
142 Esplanade	REMOVE	N/A	N/A
146 Esplanade	REMOVE	21.2	15
202 Esplanade	REMOVE	36.4	35
204 Esplanade	VACANT	N/A	N/A
206 Esplanade	REMOVE (Western)	34.1	35
208 Esplanade	VACANT	N/A	N/A
210 Esplanade	REMOVE	31.4	30
212 Esplanade	REMOVE	19.3	25
214 Esplanade	REMOVE (Western)	40.6	30
216 Esplanade	REMOVE	43.0	30
220 Esplanade	REMOVE	24.3	25
222 Esplanade	REMOVE	36.4	30
224 Esplanade	REMOVE (Western)	25.7	30

*Remove 17, Replant 21

* Western: There are two trees located on the same address. Western means the tree that is scheduled to be removed is the west facing tree.

Attachment A

Geijera parvifolia Australian Willow

Australian-Willow is an attractive evergreen, 30 to 35 feet tall and 20 feet wide, with an upright, oval silhouette. The main inner branches are composed of strong, wind resistant wood and are directed upward. Younger trees are more oval shaped. This characteristic, combined with the thin, narrow, three to six-inch-long, olive green leaves which droop from the branches, gives the tree much the same effect as a Weeping Willow. Short panicles of small, creamy white, showy flowers appear in early spring and early fall.



DESCRIPTION

Height: 30 to 35 feet

Spread: 20 to 25 feet

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms.

Crown shape: decurrent, weeping

Crown density: dense

Growth rate: fast

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns.

Pruning requirement: requires pruning to develop strong structure.

Breakage: resistant.

Light requirement: tree grows in full sun.

Soil tolerances: loam; sand; slightly alkaline; acidic; well-drained.

Pests and Diseases: No pests or diseases are of major concern. Root rot may be a problem on sites without excellent drainage.

Drought tolerance: moderate.

Resources:

Gilman, Edward F., and Dennis G. Watson. " *Geijera parvifolia*." (1993). June 15, 2017.

< http://hort.ifas.ufl.edu/database/documents/pdf/tree_fact_sheets/geipara.pdf>

Attachment B

Cinnamomum camphora Camphor Tree

This large, round-canopied, evergreen tree has broad, large-diameter, unusually strong branches and can reach 70 feet in height with a broader spread but is usually 40 to 50 feet with a 40 to 60-foot spread. The glossy green, thin but leathery leaves give off a camphor aroma when crushed and create dense shade. The stems and bark on young branches of Camphor-Tree are bright green, tinged with red when young, maturing into a



dark grey-brown, rugged- looking trunk which appears almost black when wet from rain. Trunk and branch structure on older trees appear similar to mature live oaks. The inconspicuous, tiny, yellow flowers are followed by a profusion of small, black berries which can become an annoyance on walks and driveways because they are messy but are quite attractive to wildlife.

Uses: screen; shade tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common.

Height: 40 to 50 feet.

Spread: 50 to 70 feet.

Crown uniformity: symmetrical canopy with a regular (or smooth) outline, and individuals have more or less identical crown forms.

Crown shape: decurrent.

Crown density: dense.

Growth rate: fast.

Fruit characteristics: attracts birds; attracts squirrels and other mammals; inconspicuous and not showy; fruit, twigs, or foliage cause significant litter.

Trunk/bark/branches: droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; should be grown with a single leader; no thorns

Pruning requirement: requires pruning to develop strong structure.

Breakage: resistant.

Light requirement: tree grows in part shade/part sun; tree grows in full sun

Soil tolerances: clay; loam; sand; slightly alkaline; acidic; well-drained

Drought tolerance: high

Aerosol salt tolerance: Low

Verticillium wilt susceptibility: susceptible

Pest resistance: long-term health usually not affected by pests

Diseases: Camphor-Tree is subject to a root rot, especially in poorly-drained soils.

Resources:

Gilman, Edward F., and Dennis G. Watson. "*Cinnamomum camphora*." (1993). June 15, 2017.
< http://hort.ufl.edu/database/documents/pdf/tree_fact_sheets/cincama.pdf>

Attachment C

Koelreuteria bipinnata Chinese Flame Tree

A yellow carpet of fallen petals, delicate leaflets which cast a mosaic of welcoming shade, and large clusters of persistent rose-colored, papery capsules all help to make Chinese Flame Tree a very popular landscape tree. This broad-spreading, deciduous tree reaches a height of 40 to 60 feet and eventually takes on a flat-topped, somewhat irregular silhouette. It is often used as a patio, shade, street, or specimen tree. The small, fragrant, yellow flowers appear in



very showy, dense, terminal panicles in early summer, and are followed in late summer or fall by large clusters of the two-inch-long "Chinese lanterns". These papery husks are held above the foliage and retain their pink color after drying and are very popular for use in everlasting flower arrangements. The bark on Chinese Flame-Tree is smooth and light brown when young, becoming ridged and furrowed as the tree matures.

Uses: residential street tree; tree has been successfully grown in urban areas where air pollution, poor drainage, compacted soil, and/or drought are common.

Height: 20 to 35 feet

Spread: 25 to 35 feet

Crown uniformity: irregular outline or silhouette

Crown shape: decurrent

Crown density: open

Growth rate: fast

Fruit characteristics: does not attract wildlife; no significant litter problem; persistent on the tree; showy

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; not particularly showy; should be grown with a single leader; no thorns

Pruning requirement: requires pruning to develop strong structure

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

Light requirement: tree grows in full sun

Soil tolerances: clay; loam; sand; acidic; alkaline; extended flooding; well-drained

Drought tolerance: high

Aerosol salt tolerance: moderate

Invasive potential: No entries found.

Verticillium wilt susceptibility: susceptible

Pest resistance: long-term health usually not affected by pests

Disease: No pests or diseases are of major concern. Root rot on old trees.

Resources:

Gilman, Edward F., and Dennis G. Watson. " *Koelreuteria bipinnata* ." (1993). June 15, 2017.

< http://hort.ifas.ufl.edu/database/documents/pdf/tree_fact_sheets/koebipa.pdf >

Attachment D

Jacaranda mimosifolia Jacaranda

Soft, delicate, fernlike, deciduous foliage and dense terminal clusters of lavender-blue, lightly fragrant, trumpet-shaped flowers make this large, spreading tree an outstanding specimen planting. The striking blooms can appear any time from April through August (most often May), and are sometimes present before the fresh, new, light green leaves appear in spring. Jacaranda may



flower best when grown in poor soil. Jacarandas can reach 25 to 40 feet in height with an equal or greater spread, and the bent or arching trunks are covered with light grey bark.

Uses: shade tree; specimen; residential street tree; no proven urban tolerance

Height: 25 to 40 feet

Spread: 45 to 60 feet

Crown uniformity: irregular outline or silhouette

Crown shape: decurrent , spreading; vase shape

Crown density: open

Growth rate: fast

Fruit characteristics: does not attract wildlife; inconspicuous and not showy; fruit, twigs, or foliage cause significant litter; persistent on the tree

Trunk/bark/branches: bark is thin and easily damaged from mechanical impact; droop as the tree grows, and will require pruning for vehicular or pedestrian clearance beneath the canopy; showy trunk; should be grown with a single leader; no thorns

Pruning requirement: requires pruning to develop strong structure

Breakage: susceptible to breakage either at the crotch due to poor collar formation, or the wood itself is weak and tends to break

Light requirement: tree grows in full sun

Soil tolerances: clay; loam; sand; slightly alkaline; acidic; well-drained

Drought tolerance: high

Aerosol salt tolerance: none

Invasive potential: little, if any, potential at this time

Pest resistance: long-term health usually not affected by pests

Diseases: Mushroom root rot is a problem on poorly-drained soil.

Resources:

Gilman, Edward F., and Dennis G. Watson. "Jacaranda mimosifolia." (1993). June 15, 2017. <
<http://hort.ufl.edu/trees/JACMIMA.pdf>>

Attachment E

Schinus terebinthifolius Brazilian Pepper

This is a highly invasive species that has proved to be a serious weed in South Africa, Florida and Hawaii. *Schinus terebinthifolius* is dioecious, has high ecological plasticity, short life cycle and very rapid growth rate. First seed production may occur at 3 years. The flowers are insect pollinated and seed production is high. Flowering occurs in September to early November. Fruit ripening follows immediately between December and February. Seed dispersal is by animals, particularly birds and mammals including raccoons and possums which account for a major component of dispersal in the USA.



Height: 20 to 40 feet

Spread: 15 to 25 feet

Plant habit: decurrent

Plant density: moderate

Growth rate: fast

Fruit characteristic: attracts birds; persists on the plant

Trunk/bark/branches: Light green or light brown, Exfoliating furrow bark as it matures. ; no thorns; not particularly showy

Light requirement: plant grows in part shade/part sun

Soil tolerances: alkaline; extended flooding; sand; loam; clay; acidic

Drought tolerance: high

Soil salt tolerances: good

Invasive potential: highly invasive

Pests: include whitefly, citrus pyralid, citrus weevil, red-banded thrips, citrus flat mite, reniform nematode and Brazilian peppertree seed chalcid

Diseases: armillaria root rot and Eutypa dieback.

Resources:

SelecTree. "*Schinus terebinthifolius* Tree Record." 1995-2017. Jun 15, 2017.

< <https://selectree.calpoly.edu/tree-detail/schinus-terebinthifolius> >

Orwa C, A Mutua, Kindt R, Jamnadass R, S Anthony. 2009 Agroforestry Database: a tree reference and selection guide version 4.0 <<http://www.worldagroforestry.org/sites/treedbs/treedatabases.asp>>

<http://www.worldagroforestry.org/treedb/AFTPDFS/Schinus_terebinthifolius.PDF>

Attachment F

Harpephyllum caffrum Kaffir Plum

Its drooping leaves and heavy rounded crown makes for a good shade tree. New growth is red. Its sour, plum-like fruit is used to make jams, jellies and wine.

Height: 40 to 50 feet

Spread: 40 to 50 feet

Plant habit: decurrent

Plant density: moderate

Growth rate: fast

Fruit characteristic:

attracts birds and wildlife, Red dupes fruiting in summer

Trunk/bark/branches: Dark brown or light grey, rough, no thorns

Light requirement: plant grows in part shade/part sun

Soil tolerances: slightly acidic to neutral soil pH, loam or sand.

Drought tolerance: high

Soil salt tolerances: good

Invasive potential: little

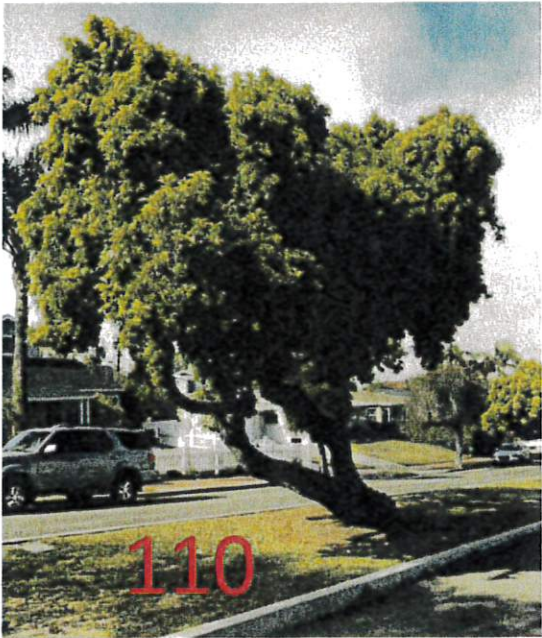
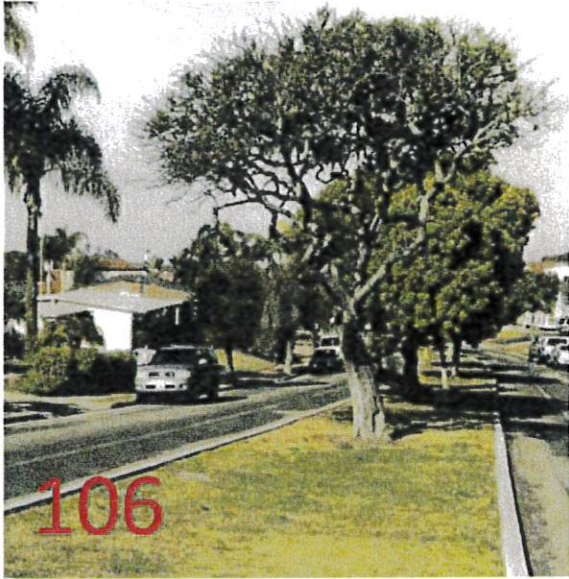
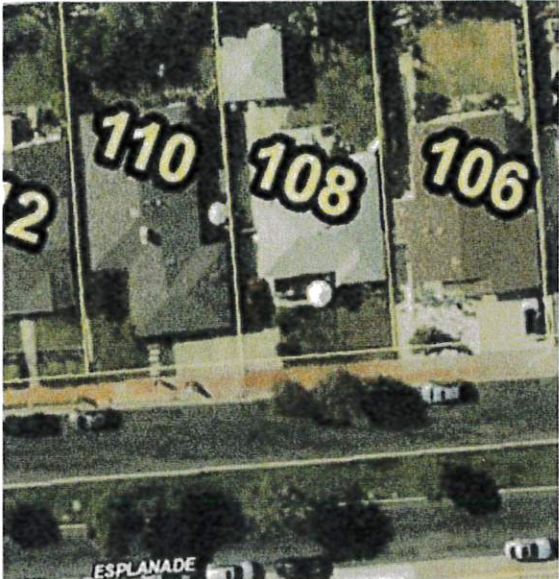
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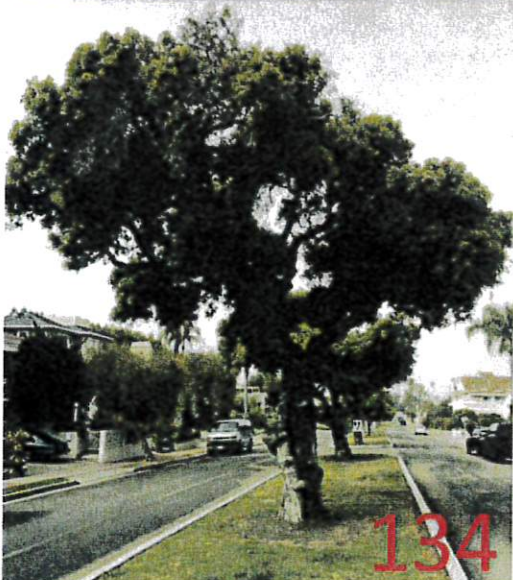
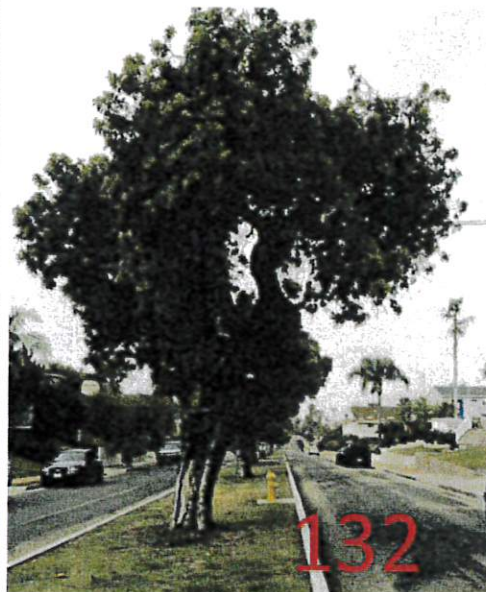
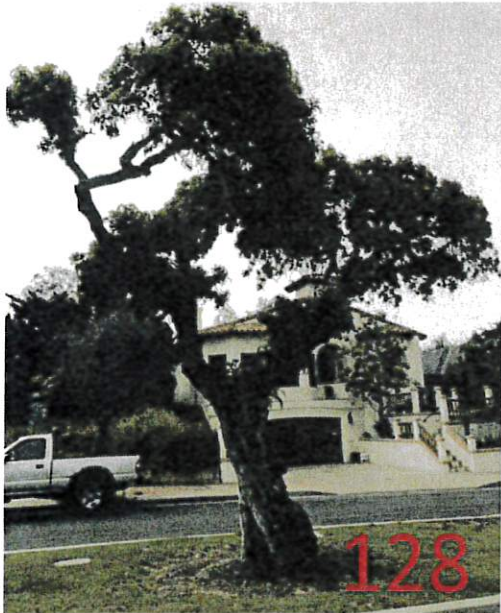
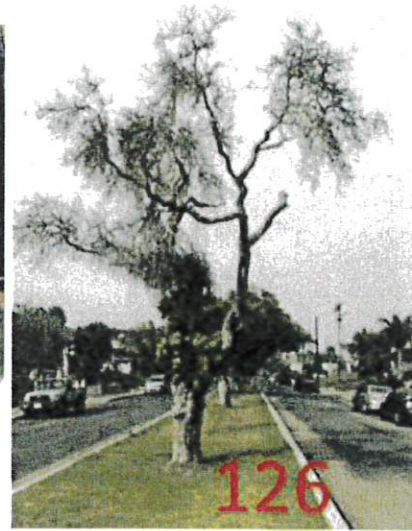
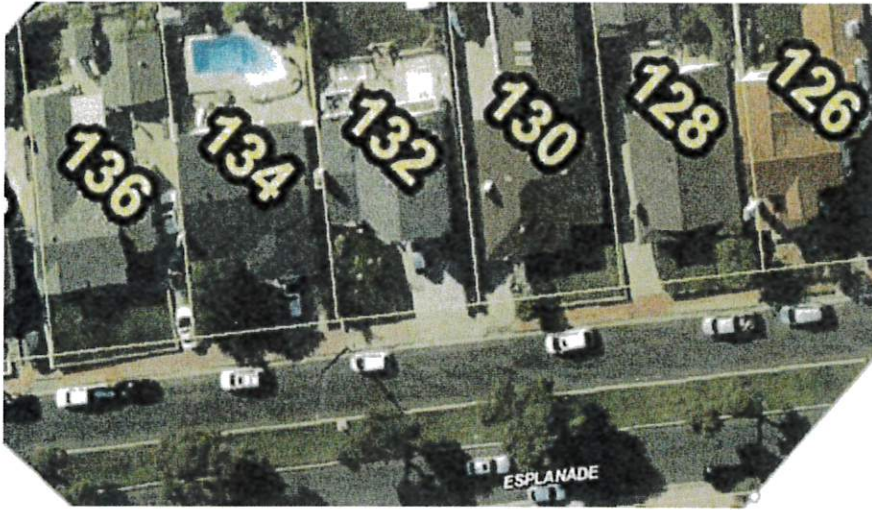
Resources: SelecTree. "*Harpephyllum caffrum* Tree Record." 1995-2017. Jun 15, 2017.

< <https://selectree.calpoly.edu/tree-detail/harpephyllum-caffrum> >

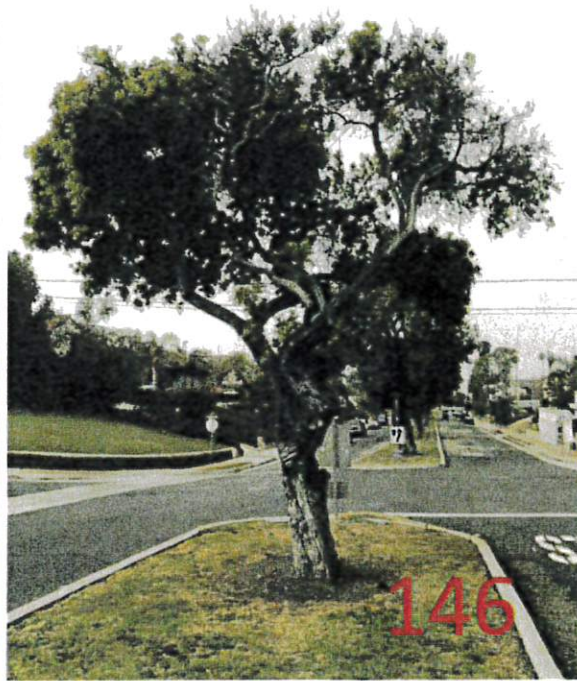
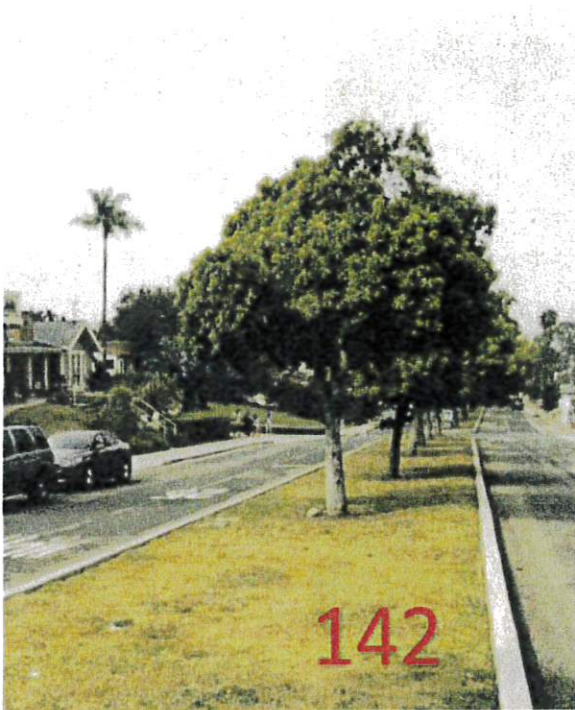
ESPLANADE TREE REMOVALS



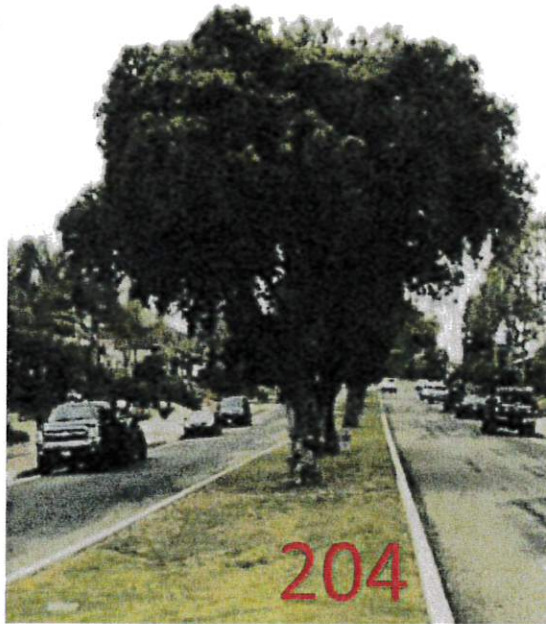
ESPLANADE TREE REMOVALS



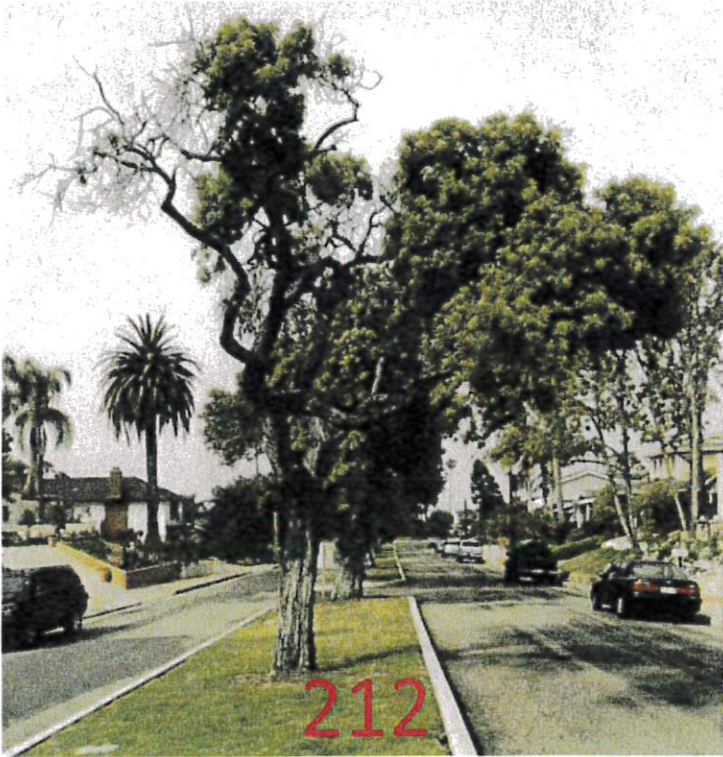
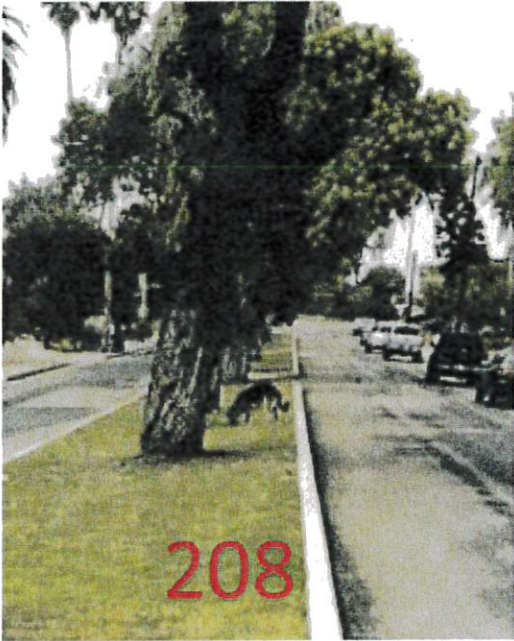
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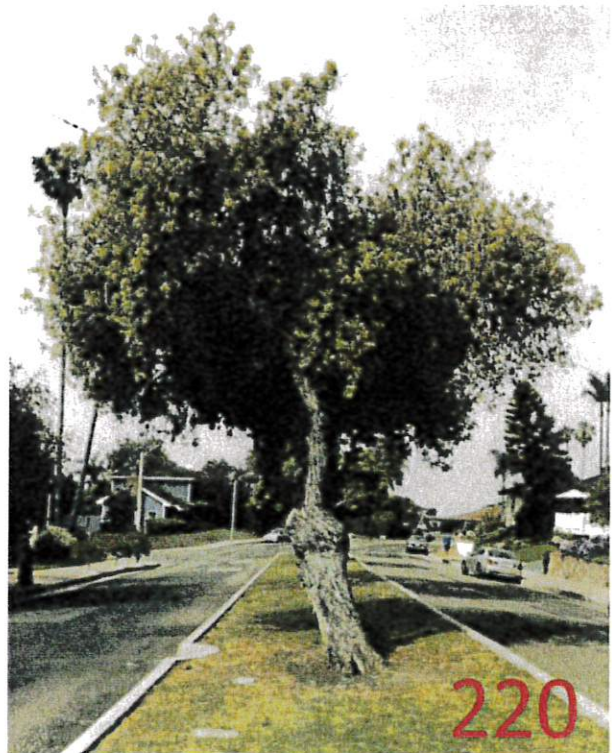
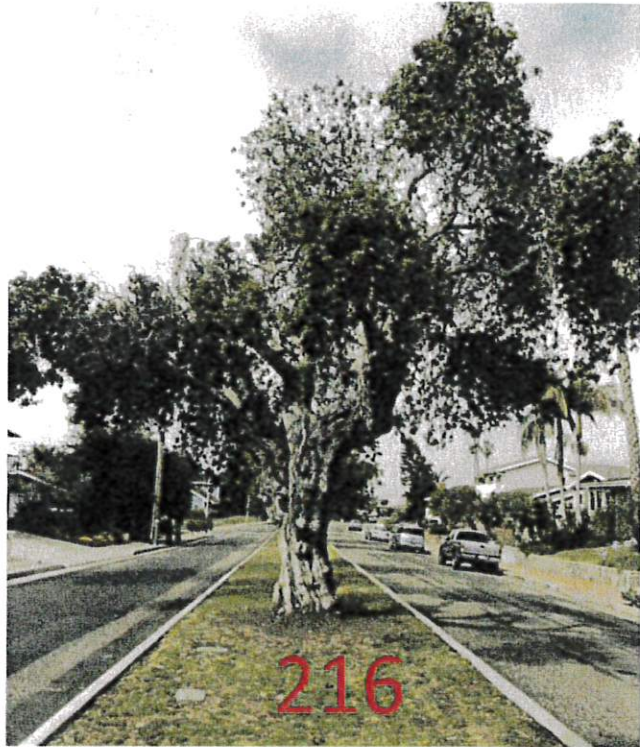
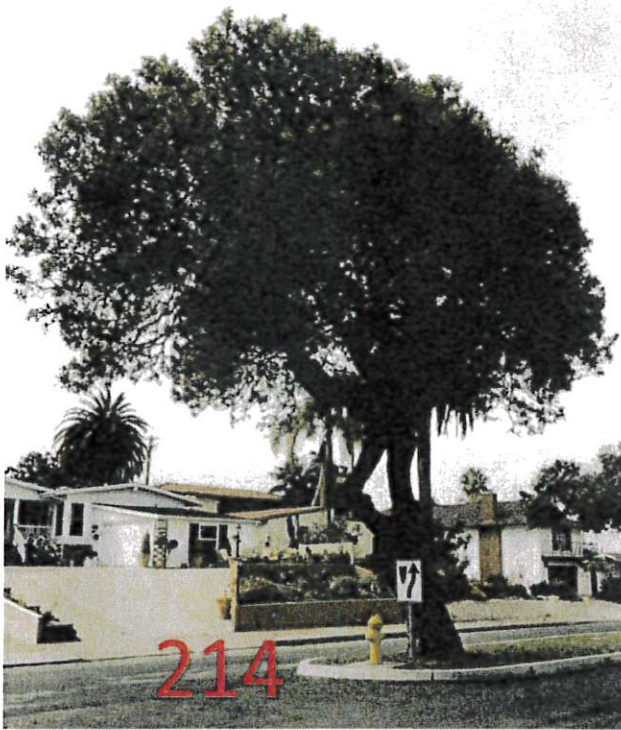
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