PINE TREE REFORESTATION PROGRAM FOR RESIDENTIAL PARKWAYS
Introduction

Concerns expressed by members of the community regarding pine trees located in residential parkways initiated an analysis of these trees to determine the environmental, financial and aesthetic value to the City as well as the public and private property maintenance challenges associated with these trees. The Cerritos City Council directed the Property Preservation Commission (PPC) to complete a citywide pine tree evaluation that involved open forum public study sessions where community members were encouraged to express their opinions. Staff provided insight from the perspective of serving the community and addressing the needs of residents as well as a better understanding of urban forestry practices related to these majestic trees.

Through a series of public study sessions, the PPC discussed the issues and concerns with community members to gain a clear and complete understanding of the benefits these trees provide to the community and the challenges these trees present to residents. The PPC’s analysis included the careful review of City annual work-order statistics, maintenance records and tree removal requests specific to pine trees. Further, the PPC assessed tree maintenance associated expenses such as curb, gutter, sidewalk and street repair costs related to pine trees. While the PPC thoroughly studied the City’s pine trees in order to determine if a systematic removal and replacement program would be justified, the fundamental aspect contributing to the development of a pine tree reforestation plan was provided through community involvement and input during public meetings.

Upon careful deliberation of the issues connected with the City’s residential pine trees, the PPC concluded that the negative public and private property impacts many of these trees present to the community outweigh the environmental, aesthetic and economic benefits they provide. Therefore, the PPC resolved that a sensible pine tree reforestation program should be considered. The PPC also concluded that this program should not only meet the needs of the community, but be financially responsible as well.
Environmental Impact considerations:

A responsible reforestation plan must also consider the environmental impacts associated with the removal of mature trees, especially when considering the removal of large conifer trees like the Canary Island Pine tree. Large pine trees located in urban areas that are trimmed on a four to five year cycle, which is consistent with the Cerritos tree maintenance program, will afford the community with several positive environmental benefits. Large pines are essentially significant carbon dioxide storage facilities while at the same time providing oxygen to the surrounding area. These large trees also contribute to reduced energy consumption, resulting in lower utility costs in the warm season as they provide considerable shade to the nearby homes. Large evergreen conifer trees also assist with ground water storage. As rain is filtered and slowed down prior to collecting on the ground, the adjacent landscape area is better able to absorb the rainfall, thereby more effectively recharging the ground water table. Landscape areas where rain is allowed to fall at a natural rate without the benefit of mature tree foliage results in rainwater runoff to storm drains and reduced ground water storage.

The PPC also considered that a reforestation plan will include the planting of new parkway trees in replacement of the pines, which would gradually restore a portion of the lost canopy resulting from the pine removal. While the City’s pine trees afford the community with location specific ecosystems that result in lower individual energy demands, the new trees will gradually over time assist residents with property value and energy use benefits.

Community Impact Considerations:

Open space forestry strategies are not comparable to urban or community tree maintenance programs. Urban tree maintenance must not only take into consideration the accompanying public right-of-way costs and public safety concerns, but also quality of life issues facing the residents who live in and around mature trees. The goal of open format study sessions is to afford the community every opportunity to voice their opinions regarding a tree removal and replacement program.
Pine Tree Reforestation Plan

While the PPC has determined that some residents may experience burdens that outweigh the benefits pine trees provide, meeting the needs of all Cerritos residents necessitates an appreciation for those who strongly believe that the City’s pine trees add significant value to their neighborhoods. Upon reviewing annual pine tree removal requests over previous years, the PPC agreed that a systematic removal program of all residential parkway pine trees would not correctly address the needs of the entire community.

When considering the average yearly number of pine tree removal requests of approximately 50 (47 in 2018), an annual reforestation project generated by actual removal requests could be more accurately responsive to the community while maintaining a responsible environmental and financial position. Therefore, the PPC is recommending an annual pine tree reforestation plan that establishes a current year removal number based on the previous year’s actual number of removal requests. The PPC realizes that following the introduction of the pine tree reforestation program, removal requests may increase, however, an annual evaluation of this program would permit the City Council an opportunity to consider actual pine tree removal requests, the City’s financial position, evaluate citywide Capital Improvement Program priorities and appropriately fund a continuing reforestation program.

Therefore, based on previous annual pine tree removal requests, the PPC is recommending a year-one funding allocation for the removal of 50 residential parkway pine trees. This funding request would also accommodate the necessary public right-of-way improvements, which might include curb, gutter, sidewalk and street repair as well as parkway root removal, irrigation repairs, grading and turf seed installation.

Qualification for this program would require that a property be free of any Municipal Code property maintenance violations, that only the property owner, not a tenant may apply for tree removal and that only the pine tree(s) located directly adjacent to the applicants property may be requested for removal.
Data Collection/Inventory

Inspections were completed at each pine tree location and a comprehensive inventory was established pinpointing each pine tree based on its global latitude and longitude location or GPS position. The surrounding growing conditions, which include proximity of parkway utilities, the condition of the adjacent street, sidewalk, curb and gutter, were also evaluated. The pine tree inventory also gave staff the opportunity to conduct general health and safety assessments of the City’s pine trees. The current number of Canary Island Pine trees within the City totals 4,442. The number of pine trees located in residential parkways, including arterial parkways directly adjacent to residential properties totals 2,950.

Approved Street Tree Palette for Residential Parkways

A palette of recommended residential parkway trees is simply a list of trees with the fewest faults that are considered to be suitable specific to given site conditions. The City of Cerritos planned for and constructed five-foot wide parkways throughout the residential areas. Therefore, the trees selected for residential forestation have growth characteristics, in terms of overall height and spread, maintenance requirements and environmental compatibility that are appropriate when considering existing planting conditions.

The approved residential street tree list will undergo frequent evaluation and modification as certain varieties of trees may fall to disease and as tree growers are continuously propagating new tree species that could be suitable for the City’s existing residential parkways. The goal of creating a street tree list for residential parkways was to maximize the lifespan by carefully matching the tree to the planting condition. In addition, diversity of species and growth characteristics, such as color, texture, fall color and flowering accent was important when considering the City’s ongoing beautification efforts.
Cost Analysis

Pine tree removal from a City residential parkway typically involves more than simply removing the tree and stump. The tree removal project usually includes the removal of the surface root system that can extend throughout the parkway area. It may also include removal and replacement of curb, gutter and sidewalk as well as patching of the asphalt in the street adjacent to the tree. There can also be a significant amount of landscape restoration, which could consist of soil export, irrigation repair, soil compaction/grading and turf seed installation.

Therefore, a pine tree removal project is divided into three separate construction phases or components:

1. Tree/stump removal and replacement of new parkway tree
   [$1,500 for tree and stump removal, $200 for tree replacement including root-barrier]

2. Curb, gutter, sidewalk and street repair or replacement
   [20 lineal-feet of curb and gutter at $940, 100 square-feet of sidewalk at $800, and 200 square-feet of asphalt at $1,400]

3. Parkway landscape/irrigation restoration and surface root removal
   [150-200 square-feet at $5,400]

The Public Works Department recently completed a residential street rehabilitation project that covered one-half square mile in area that included several locations requiring curb, gutter and sidewalk replacement in addition to street repaving. In order to complete the necessary public right-of-way improvements, seventy-three parkway trees were removed and replaced, fifty-nine of which were pine trees.

Based upon this and other previous public right-of-way improvement and tree removal projects, staff estimates that nearly 60% of all pine tree residential parkway locations will require all three phases of construction/restoration. Further, staff estimates that approximately 100 square-feet of sidewalk, 20 lineal-feet of curb and gutter and 200 square-feet of asphalt replacement will be necessary.
Estimated Annual Project Costs: Year-One

Consistent with previous average annual pine tree removal requests, the PPC is recommending that the initial year of the Cerritos pine tree reforestation program begin with the removal and replacement of fifty residential parkway pine trees.

**50 residential parkway pine trees to be removed in year-one**

Cost of 40% of the removals without public right-of-way improvements

<table>
<thead>
<tr>
<th>Number of pine trees to be removed in year-one</th>
<th>Average cost to remove and replace with root barrier included per location</th>
<th>Average cost for pine tree removal and replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 Trees</td>
<td>$1,700</td>
<td>$34,000</td>
</tr>
<tr>
<td>(40% of year-one total of 50 pine trees)</td>
<td>($1,500 tree &amp; stump removal $200 for replacement tree)</td>
<td></td>
</tr>
</tbody>
</table>

Cost of 60% of the removals with public right-of-way improvements

<table>
<thead>
<tr>
<th>Number of pine trees to be removed in year-one</th>
<th>Average cost to remove and replace with root barrier included per location</th>
<th>Average cost for curb, gutter, sidewalk &amp; street replacement</th>
<th>Average cost for parkway landscape restoration and surface root removal</th>
<th>Average cost for pine tree removal and replacement</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Trees</td>
<td>$1,700</td>
<td>$3,140</td>
<td>$5,400</td>
<td>$307,200</td>
</tr>
<tr>
<td>(60% of year-one total of 50 pine trees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total year-one project cost

<table>
<thead>
<tr>
<th>Total number of pine trees to be removed in year-one</th>
<th>Total year-one project cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 pine trees</td>
<td>$341,200</td>
</tr>
</tbody>
</table>
Cercis Canadensis
"Eastern Redbud"

Height: 25-35 ft.
Spread: 25-35 ft.
Deciduous
Showy Pink Flowers

Chionanthus Retusus
"Chinese Fringe Tree"

Height: 15-20 ft.
Spread: 10-15 ft.
Deciduous
Showy White Flowers

Proposed
Street Trees for
Residential Parkways
Chitalpa Tashkentensis
"Chitalpa"

Height: 20–25 ft.
Spread: 20–25 ft.
Deciduous
Showy Pink Flowers

Geijera Parviflora
"Australian Willow"

Height: 20–25 ft.
Spread: 15–20 ft.
Evergreen

Proposed
Street Trees for
Residential Parkways
Gleditsia Triacanthos
"Honey Locust"

Height: 35–50 ft.
Spread: 25–35 ft.
Deciduous

Lagerstroemia Indica
"Crape Myrtle"

Height: 15–20 ft.
Spread: 10–15 ft.
Deciduous
Showy Flowers in a Variety of Colors
**Laurus Nobilis, Saratoga**
"Sweet Bay"

- Height: 20–35 ft.
- Spread: 20–35 ft.
- Evergreen
- Small White Flowers

**Lophostemon Confertus**
"Brisbane Box"

- Height: 30–40 ft.
- Spread: 20–25 ft.
- Evergreen
- Small White Flowers

**Proposed Street Trees for Residential Parkways**
MAGNOLIA SPECIES
"MAGNOLIA"

HEIGHT: 30–4 ft.
SPREAD: 20–30 ft.
EVERGREEN
SHOWY WHITE FLOWERS

PISTACIA CHINENSIS
"CHINESE PISTACHE"

HEIGHT: 30–45 ft.
SPREAD: 25–35 ft.
DECIDUOUS
Podocarpus Macrophyllus
"Yew Pine"
Height: 25–45 ft.
Spread: 15–20 ft.
Evergreen

Podocarpus Henkelii
"Long Leaf Yellow Wood"
Height: 25–45 ft.
Spread: 15–20 ft.
Evergreen
Pyrus Calleryana, Aristocrat
“ARISTOCRAT PEAR”

Height: 30–40 ft.
Spread: 15–20 ft.
Deciduous
Showy White Flowers

Quercus Rubra
“RED OAK”

Height: 30–40 ft.
Spread: 10–20 ft.
Deciduous

PROPOSED
Street Trees for
Residential Parkways
Sapium Sepiferum
"Chinese Tallow Tree"

Height: 30–40 ft.
Spread: 20–30 ft.
Deciduous

Spathodea Campanulata
"African Tulip Tree"

Height: 30–40 ft.
Spread: 20–40 ft.
Evergreen
Showy Red Flowers

Proposed
Street Trees for
Residential Parkways
Handroanthus Heptaphyllus
"Pink Trumpet Tree"

Height: 30–40 ft.
Spread: 20–30 ft.
Deciduous
Showy Pink Flowers
**Sophora Secundiflora**
"Texas Mountain Laurel"

- **Height:** 15–25 ft.
- **Spread:** 10–15 ft.
- **Evergreen**
- **Showy Violet-Blue Flowers**

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**Stenocarpus Sinuatus**
"Fire Wheel Tree"

- **Height:** 20–30 ft.
- **Spread:** 10–15 ft.
- **Evergreen**
- **Showy Red Flowers**

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**Proposed Street Trees for Residential Parkways**
**Pyrus Betulifolia**
"Dancer Pear"

Height: 15–25 ft.
Spread: 10–20 ft.
Deciduous
Showy White Flowers

**Fraxinus Angustifolia**
"Raywood Ash"

Height: 25–35 ft.
Spread: 20–25 ft.
Deciduous
Showy Fall Color
City of Cerritos

20 District Tree Maintenance Map
Cerritos Pine Trees in District Zone 1
(total 345 pine trees)

Residential Pine Trees: 131

Legend
- Pine Tree
Cerritos Pine Trees in District Zone 2
(total 111 pine trees)
Residential Pine Trees: 41

Legend
- Pine Tree
Cerritos Pine Trees in District Zone 5
(total 131 pine trees)
Residential Pine Trees: 96
Cerritos Pine Trees in District Zone 6
(total 217 pine trees)
Residential Pine Trees: 166

Legend
- Pine Tree
Cerritos Pine Trees in District Zone 7
(total 394 pine trees)
Residential Pine Trees: 316

Legend
• Pine Tree
Cerritos Pine Trees in District Zone 13
(total 394 pine trees)

Residential Pine Trees: 84
Cerritos Pine Trees in District Zone 14 (total 119 pine trees)

Residential Pine Trees: 69
Cerritos Pine Trees in District Zone 15
(total 238 pine trees)
Residential Pine Trees: 228
Cerritos Pine Trees in District Zone 17
(total 313 pine trees)
Residential Pine Trees: 266
Cerritos Pine Trees in District Zone 18
(total 147 pine trees)
Residential Pine Trees: 120

Legend
- Pine Tree

91
Cerritos Pine Trees in District Zone 19
(total 207 pine trees)
Residential Pine Trees: 148
Tree Maintenance District No. 1

Beach Street

Dory Circle

Chitalpa Tashkentensis, “chitalpa”
Deciduous

Eric Avenue

Islandia Avenue

Gleditsia Triacanthos, “Honey Locust”
Deciduous

Joanna Avenue

Lucas Street

Laurus nobilis, Saratoga, “Sweet Bay”
Evergreen
Tree Maintenance District No. 1

Melissa Street

Sampan Circle

Magnolia Species, “Magnolila”
Evergreen

Spinaker Street

Studebaker Road

Pistacia Chinensis, Chinese Pistache”
Deciduous

Sunny Ridge Lane

166th Street

Laurus Nobilis, Saratoga, “Sweet Bay”
Evergreen
Tree Maintenance District No. 2
San Gabriel Avenue

Laurus Nobilis, Saratoga, "Sweet Bay"
Evergreen

Tree Maintenance District No. 3
Artesia Blvd.

Magnolia Species, "Magnolia"
Evergreen
Tree Maintenance District No. 3

Graystone Avenue

*Cercis Candensis, “Eastern Redbud”*  
Deciduous

177th Street

*Geijera Parviflora, “Australian Willow”*  
Evergreen
Tree Maintenance District No. 4
San Gabriel Avenue

Gleditsia Triacanthos, “Honey Locust”
Evergreen

Tree Maintenance District No. 5
Elmira Court

Lagerstroemia Indica, “Crape Myrtle”
Deciduous
Tree Maintenance District No. 5

Eloise Street

Lophostemon Confertus, "Brisbane Box"
Evergreen

Wiersma Avenue

Podocarpus Henkelii, "Long Leaf Yellow Wood"
Evergreen

Yearling Street

Sapium Sepiferum, "Chinese Tallow Tree"
Deciduous
Tree Maintenance District No. 6

Bos Street

Boston Lane

Spathodea Campanulata, “African Tulip Tree”
EVERGREEN

Chamblee Avenue

Concord Street

Handroanthus Heptaphyllus, “Pink Trumpet Tree”
Deciduous

Lusk Avenue

Stenocarpus Sinuatus, “Fire Wheel Tree”
EVERGREEN
Tree Maintenance District No. 6

Nicholas Avenue

Sophora Secundiflora, “Texas Mountain Laurel”
Evergreen

Sheryl Avenue

Fraxinus Angustifolia, “Raywood Ash”
Deciduous

Yearling Circle

Pyrus Betulifolia, “Dancer Pear”
Deciduous
Tree Maintenance District No. 7

Albert Avenue

Almadin Avenue

Athene Drive

Chionanthus Retusus, “Chinese Fringe Tree” Evergreen

Avenida Barcelona

Avenida Pamplona

Bos Street

Chitalpa Tashkentensis, “Chitalpa” Deciduous

Degas Place

Eberle Street

Fagen Avenue

Pistacia Chinensis, “Chinese Pistache” Deciduous

Recommended Replacement Trees per Street and District
Tree Maintenance District No. 7

Georgina Circle

Horst Avenue

Monet Place

Podocarpus Macrophyllus, “Yewe Pine” Evergreen

Plaza De Cordoba

Poseidon Avenue

Silva Place

Quercus Rubra, “Red Oak” Deciduous

Smokie Lane

Wendy Street

Handroanthus Heptaphyllus, “Pink Trumpet Tree” Deciduous
Tree Maintenance District No. 8

Claretta Avenue

Eckleson Street

Podocarpus Macrophyllus, "Yewe Pine"
Evergreen

Hawaiian Avenue

Miles Street

Quercus Rubra, "Red Oak"
Deciduous

Sequoia Avenue

Star Way

Handroanthus Heptaphyllus, "Pink Trumpet Tree"
Deciduous
Tree Maintenance District No. 8

Stefani Avenue

Thornlake Avenue

Lagerstroemia Indica, “Crape Myrtle”
Deciduous

Valencia Street
Viarna Street

Sapium Sepiferum, “Chinese Tallow Tree”
Deciduous

Recommended Replacement Trees per Street and District
Tree Maintenance District No. 9

Squaw Valley Way

Magnolia Species, "Magnolia" Evergreen

Tree Maintenance District No. 10

Bigelow Street

Brazil Street

Spathodea Campanulata, "African Tulip Tree" Evergreen
Tree Maintenance District No. 10

Espinheira Drive

Pires Avenue

Pyrus Betulifolia, “Dancer Pear”
Deciduous

Ridge Crest Lane

Vickie Avenue

Cercis Canadensis, “Eastern Redbud”
Deciduous

Recommended Replacement Trees per Street and District
Tree Maintenance District No. 11

Alfred Avenue

Bechard Place

Chionanthus Retusus, "Chinese Fringe Tree"
Deciduous

Cantrece Street

Caravel Place

Chitalpa Tashkentensis, "Chitalpa"
Deciduous

Caravel Street

Cortner Avenue

Gleditsia Triacanthos, "Honey Locust"
Deciduous
Tree Maintenance District No. 11

De Voss Avenue

Guadalajara Circle

Sophora Secundiflora, "Texas Mountain Laurel"
Evergreen

Stefani Avenue

Susan Place

Pistacia Chinensis, "Chinese Pistache"
Deciduous
Tree Maintenance District No. 12

Alexander Avenue

Arabella Drive

Laurus Nobilis, Saratoga, "Sweet Bay" Evergreen

Arabella Street

Caravel Street

Chitalpa Tashkentensis, "Chitalpa" Deciduous

Church Street

Clydepark Avenue

Cercis Canadensis, "Eastern Redbud" Deciduous
Tree Maintenance District No. 12

Droxford Street

Pinewood Circle

Geijera Parviflora, “Australian Willow”
Evergreen

Pires Avenue

Vickie Avenue

Gleditsia Triacanthos, “Honey Locust”
Deciduous

Vikings Way

Quercus Rubra, “Red Oak”
Deciduous

Recommended Replacement Trees per Street and District
Tree Maintenance District No. 13

Felson Street

Niagara Avenue

Fraxinus Angustifolia, "Raywood Ash"
Deciduous

Sybrandy Avenue

Yosemite Street

Magnolia Species, "Magnolia"
Evergreen
Tree Maintenance District No. 14

Ashworth Street

Destino Place

Geigeria Parviflora, "Australian Willow"
Evergreen

Glenda Street

Point Arena Place

Lophostemon Confertus, "Brisbane Box"
Evergreen

Point Arguello Place

Point Conception Place

Spathodea Campanulata, "African Tulip Tree"
Evergreen
Tree Maintenance District No. 14

San Simeon Street

Sonora Avenue

Chionanthus Retusus, “Chinese Fringe Tree”
Deciduous

Veracruz Street

Vickie Avenue

Sophora Secundiflora, “Texas Mountain Laurel”
Evergreen
Tree Maintenance District No. 15

Acoro Street

Ashworth Place

*Cercis Canadensis, "Eastern Redbud"
Deciduous

Ashworth Street

Caliente Place

*Lagerstroemia Indica, "Crape Myrtle"
Deciduous

Caliente Avenue

Carnaby Street

*Sapium Sepiferum, "Chinese Tallow Tree"
Deciduous
Tree Maintenance District No. 15

De Oro Circle

Destino Street

**Fraxinus Angustifolia, “Raywood Ash”**
Deciduous

Elgers Street

Leslie Avenue

**Handroanthus Heptaphyllus, “Pink Trumpet Tree”**
Deciduous

Stowers Avenue

**Pyrus Calleryana, Aristocrat, “Aristocrat Pear”**
Deciduous

Recommended Replacement Trees
Per Street and District
Tree Maintenance District No. 16

Abana Street

Aclare Street

Gleditsia Triacanthos, "Honey Locust"
Deciduous

Artesia Blvd.

Alexander Avenue

Pyrus Betulifolia, "Dancer Pear"
Deciduous

Beach Street

Gerritt Avenue

Pistacia Chinensis, "Chinese Pistache"
Deciduous
Tree Maintenance District No. 16

Holmes Circle

Leslie Avenue

Lagerstroemia Indica, "Crape Myrtle"
Deciduous

Moorebrook Avenue

Palm Place

Fraxinus Angustifolia, "Raywood Ash"
Deciduous

Palm Street

Park Street

Handroanthus Heptaphyllus, "Pink Trumpet Tree"
Deciduous
Stenocarpus Sinuatus, “Fire Wheel Tree”
Deciduous

Chionanthus Retusus, “Chinese Fringe Tree”
Deciduous
Tree Maintenance District No. 17

Artesia Blvd.

Beach Street

Gleditsia Triacanthos, "Honey Locust"
Deciduous

Ironbark Drive

Leal Avenue

Laurus Nobilis, Saratoga, "Sweet Bay"
Evergreen

Lucas Street

Maurice Court

Podocarpus Macrophyllus, "Yew Pine"
Evergreen

Recommended Replacement Trees
Per Street and District
Tree Maintenance District No. 17

Monte Cristo Avenue

Oak Crest Street

Magnolia Species, "magnolia" Evergreen

Palm Street

Westgate Avenue

Handroanthus Heptaphyllus, "Pink Trumpet Tree" Deciduous
Tree Maintenance District No. 18

Artesia Blvd.

Barnhill Lane

Pistacia chinensis, "Chinese Pistache"
Deciduous

Elaine Avenue

Napa Circle

Sapium sebiferum, "Chinese Tallow Tree"
Evergreen

Palm Street

Fraxinus angustifolia, "Raywood Ash"
Evergreen
Tree Maintenance District No. 19

Ashcreek Road

Bubbling View Circle

Geijera Parviflora, "Australian Willow" Evergreen

Canyon Creek Road

Cherry Crest Circle

Podocarpus Henkelii, "Long Leaf Yellow Wood" Evergreen

Cherry Fall Lane

Cottonwood Drive

Sophora Secundiflora, "Texas Mountain Laurel" Evergreen
Tree Maintenance District No. 19

Glen Creek Road

Mountain Creek Road

Cercis Canadensis, "Eastern Redbud"
Deciduous

Redwood Drive

Spring Park Lane

Chionanthus Retusus, "Chinese Fringe Tree"
Deciduous

Tree Maintenance District No. 20

Langfield Avenue

Pyrus Betulifolia, "Dancer Pear"
Evergreen