

City of Carson Report to Mayor and City Council

May 1, 2012 New Business Discussion

SUBJECT: CONSIDERATION OF ORDINANCE NO. 12-1487, ESTABLISHING CITY TREE PRESERVATION AND PROTECTION AND AMENDING THE CARSON MUNICIPAL CODE

Submitted by Farrokh Abolfathi

Acting Development Services General Manager

Approved by David C. Biggs

City Manager

I. <u>SUMMARY</u>

On December 18, 2007, the City Council adopted Ordinance No. 07-1397, City Tree Preservation and Protection (Exhibit No.1). Staff is requesting that Council consider the need to amend this ordinance to better preserve and protect the City's trees and adjacent improvements.

II. <u>RECOMMENDATION</u>

WAIVE further reading and INTRODUCE Ordinance No. 12-1487, "AN ORDINANCE OF THE CITY OF CARSON, CALIFORNIA, ESTABLISHING CITY TREE PRESERVATION AND PROTECTION AND AMENDING THE CARSON MUNICIPAL CODE."

III. <u>ALTERNATIVES</u>

TAKE any other action that the City Council deems necessary and appropriate at this time.

IV. <u>BACKGROUND</u>

On December 18, 2007, the City Council adopted Ordinance No. 07-1397, City Tree Preservation and Protection (Exhibit No.1). Staff is requesting that Council consider the need to amend this ordinance to better preserve and protect the City's trees and adjacent improvements. Below are the significant revisions to the ordinance:

- Amend Section 6, to read as follows: "Businesses and residents are required to obtain a permit prior to planting of any trees within the City's right-of-way. Trees planted without a permit may be removed by the City at the discretion of the Manager or his/her designee, without any consent from businesses or residents that have planted the said tree(s)."
- Add subsection (c) to Section 22 to read as follows: "Where root pruning is needed within eight (8) feet of the trunk of the tree, removal of the tree shall be considered as an option if structural integrity of the tree will be compromised."

City of Carson

Report to Mayor and City Council

May 1, 2012

- Replace current Parkway Tree Master Plan list as shown on Exhibit "A" of the amended ordinance.
- Remove Exhibit "C" from previous Ordinance No. 07-1397.

The amendment to the current ordinance will enhance the quality control of the trimming and removal of existing trees and planting of new trees by businesses and residents as follows:

- A permit must be obtained from Public Works, prior to any removal of existing trees, to ensure that removal is warranted and that it will not impose any hazards to the public.
- A permit must be obtained from Public Works prior to any planting of new trees.
- Trees to be planted within the public right-of way shall conform to the revised Parkway Tree Master Plan list.

The Parkway Tree Master Plan list needs to be revised to reflect the trees suggested in the publication "Street Trees Recommended for Southern California", published by Street Trees Seminars, Inc. The trees currently on the list are not compatible with the typical tree planting areas city-wide and have high tendencies to damage adjacent improvements, such as sidewalks, curbs, and gutters.

Replacing these incompatible trees with trees with better root behaviors in limited spaces, will potentially reduce tripping hazards, water ponding, constant repairs of sidewalks, curbs, gutters, and imposition of other damages.

Other minor changes have been made to the ordinance for clarification and corrections in order to be in compliance with International Society of Arboricutlure (ISA) and American National Standard Institute (ANSI) standards.

V. <u>FISCAL IMPACT</u>

None.

VI. <u>EXHIBITS</u>

- 1. Minutes December 18, 2007, Item No. 28. (pg. 4)
- 2. City of Carson Ordinance No. 07-1397. (pgs. 5-26)
- 3. City of Carson Ordinance No. 12-1487. (pgs. 27-49)

G:\PUBLIC WORKS DIVISION\AGENDA REPORTS\2012\05-01-2012 CC Tree Ordinance Amendment.docx

Prepared by: Raymond Velasco, P.E. Acting Public Works Superintendent

TO:Rev04-23-12

City of Carson

Report to Mayor and City Council

May 1, 2012

Reviewed by:	
City Clerk	City Treasurer
Administrative Services	Development Services
Economic Development	Public Services

	Action taken by City Council
Date	Action

ITEM NO. (28) CONSIDERATION OF ORDINANCE NO. 07-1397-CARSON TREE ORDINANCE (DEVELOPMENT SERVICES)

This item was heard after Agency Item No. 10.

RECOMMENDATION for the City Council:

1. WAIVE further reading and Introduce Ordinance No. 07-1397, "AN ORDINANCE OF THE CITY OF CARSON, CALIFORNIA, APPROVING THE PRESERVATION AND PROTECTION FOR CITY TREES."

ACTION: WITH FURTHER READING WAIVED, it was moved to INTRODUCE Ordinance No. 07-1397, as read by title only, on motion of Williams, seconded by Davis-Holmes and unanimously carried by the following vote:

Ayes:

Mayor Dear, Mayor Pro Tem Santarina, Council Member Williams, Council

Member Gipson, and Council Member Davis-Holmes

Noes:

None

Abstain:

None

Absent:

None



ORDINANCE NO. 07-1397

AN ORDINANCE OF THE CITY OF CARSON, CALIFORNIA, APPROVING THE PRESERVATION AND PROTECTION FOR CITY TREES.

THE CITY COUNCIL OF THE CITY OF CARSON DOES ORDAIN AS FOLLOWS:

<u>Section 1.</u> The purpose of this ordinance is to preserve and protect the parkway trees of this City that are of aesthetic importance and to provide for the replacement of trees in order to maintain the community's natural environment. Trees are an important natural resource, and it is essential to the public peace, health, and welfare that such trees be protected from random removal, trimming, or damage.

Section 2. For the purpose of this ordinance, certain terms and words are hereby defined as follows:

- a) "Manager" means the Development Services General Manager of the Development Services Work Group overseeing the Public Works Division.
- b) "Parkway" means either the area between the curb and sidewalk within a fully improved street right-of-way, or that area extending from the curb towards the nearest parallel easement line in an area with no sidewalk, or any area within a street right-of-way in which a parkway tree is located.
- c) "City Tree" means a tree planted or caused to be planted by the City within the city right-of-way or city owned or maintained property.
- d) "Removal" means the uprooting, cutting, or severing of the main trunk of the tree, or any act, which causes the tree to die within six months.
- e) "Shrub" means woody vegetation of a woody plant having multiple stems and bearing foliage from the ground level up.
- f) "Tree" means any woody plant, including a palm, which has the potential of attaining a minimum height of fifteen (15) feet and has its canopy of foliage borne normally on a single trunk.
- g) "Tree Well" means a planting area found in an otherwise paved or concrete street right-of-way.

<u>Section 3.</u> Authority. The Manager or his or her designee is responsible for inspection, maintenance, planting, pruning, trimming, removal, replacement and care of all parkway trees subject to the review and supervision of the City Manager. Subject to said review, the Manager shall have the power to designate the kind or variety of trees and plants to be planted within any parkway of the City. The owners of property fronting on any street, alley or public place may petition the Manager to provide that such trees or plants shall be of a certain kind of variety, but the petition shall be advisory to the action of the Manager.



<u>Section 4.</u> Carson's tree population management plan shall be based primarily upon the City's adopted plan of parkway trees and Master Tree List. The Master Tree List will designate certain species of trees that may be planted within the City of Carson (Exhibit "A"). These particular types of trees are species that meet the following criteria:

- a) Species Hardiness. Based upon the trees adaptability to the region in term of its resistance to frost, freezing temperatures and heat.
- b) Drought Tolerance. Species with the ability to withstand long periods of drought are preferred.
- Durability and Wind Resistance. Species that are not brittle in nature and will tolerate the winds.
- d) Grow Space. The amount of parkway size available relative to the expected tree trunk circumference and root flare at maturity.
- e) Overhead Clearance. The potential for conflicts between the tree's canopy and overhead obstructions, such as utility lines, at the tree's mature height.
- f) Pest and Disease Resistance. Species that are resistant to insect and disease infestation are preferred.
- g) Subsurface growth habits. Species that do not surface root or have the potential to damage infrastructure
- h) Tolerance to a variety of irrigation practices. Species that will tolerate long periods of drought or abundant moisture are preferred.
- Soil qualities. Species that will tolerate the areas soil conditions are preferred.
- Cleanliness. Species that do not have an overabundance of fruit or flower litter are preferred.
- k) Species Selection. Species are chosen with regards to the appropriateness of their character. For example, a deciduous tree will be utilized in areas with very strong winter winds; providing a more stable specimen for severe conditions. Species that already exist in a particular area, have traditionally existed in that area, or are native to the region are preferred.
- Aesthetics and Shading. Trees that are aesthetically pleasing with showy flowers or attractive fall color, or that provide a good amount of shade are preferred.
- m) Availability. Trees that are readily available are preferred.



<u>Section 5.</u> **Maintenance**. The Public Works Division will develop and maintain a current inventory of all City owned trees, including detailed site characteristics and work histories for each tree. Tree records shall be updated on a routine basis. The Public Works Division shall be responsible for overseeing the planting of all City trees. The following guidelines and procedures have been developed to promote the health and safety of City trees from the time they are planted through maturity. These guidelines and procedures shall be required for any City maintained tree that is to be planted.

<u>Section 6.</u> Planting. The Public Works Division shall be responsible for administering planting of all trees in the public right-of-way. It shall be the objective of the City to plant all viable vacant sites located in the City public right-of-way, to honor all resident requests for new street trees in City owned locations, and to replace any City tree which has been removed with the provision that the remaining vacant site is viable for planting. Viable planting sites shall be based upon the following criteria:

- a) Spacing. There is adequate spacing present overhead, underground and radially to allow for the healthy, unimpeded growth of tree to it mature size. Specific examples of spacing conditions may make a site unsuitable for planting, which include: inappropriate canopy room between existing trees, proximity of a planting site to existing utilities creating potential conflicts and damage or inadequate width of the location's parkway for accommodating the tree's girth.
- b) Traffic Clearance. There is adequate line of sight visibility between normal vehicular or pedestrian traffic and necessary signage, street lights or views.
- c) Maintenance Resources. There is an adequate and consistent water source available.
- d) Funding. Funding will be requested every fiscal year budget for tree planting based on the need.

<u>Section 7.</u> Nursery Stock. The City shall make every effort to insure that it plants only vigorous, healthy trees which can easily be trained into an attractive natural form, with strong roots and good crown development. The City shall reserve the right to refuse any nursery stock that does not meet these standards, and may require any person who has planted such sub-standard trees, on City property or within the City right-of-way, to have these trees removed and replaced at the person's own expense. The specifications for acceptable nursery stock shall be as follows:

- All trees shall be selected from the City's master tree list and be no less than a 15 gallon mature tree.
- b) All trees shall be true to type or botanical name as ordered or showing on planting plans.



- All trees shall have a fairly straight trunk with a good taper and good branch distribution vertically, laterally and radially.
- d) All trees shall be healthy, have a form typical for the species or cultivar, be well rooted, and shall be properly trained.
- e) The root ball of all trees shall be moist throughout and the crown shall show no sign of moisture stress.
- f) All trees shall comply with Federal and State laws requiring inspection for plant diseases and pest infestations.
- g) No tree shall be accepted that has been severely topped, headed back, pollarded or lion-tailed.
- h) No tree shall be accepted that has co-dominant stems or excessive weak branch attachments that cannot be trained out without jeopardizing the natural form of the species.
- i) No tree shall be accepted that is root bound, shows evidence of girdling or kinking roots, or has "knees" (roots) protruding above the soil.

Section 8. Planting and Staking. Unless otherwise approved by the Public Works Division, all City trees shall be planted using materials that meet the following criteria:

- a) Tree Stakes. Shall be two (2) sturdy, eight to ten (8'-10') feet long lodge pole pine stakes. Stakes will be placed on the outer edge of the root ball on either side of the tree, perpendicular to prevailing winds. If larger trees are planted and require guying, International Society of Arboriculture standards shall be adhered to.
- b) Staking Ties. Shall be sixteen (16") inch to eighteen (18") inch rubber cinch ties to be fastened to each stake with galvanized roofing nails. Ties will be pulled around the tree's trunk in a manner which supports the topheaviness of the canopy, but is loose enough to allow for free movement of the tree in the wind.
- c) Trunk Guards. An approved trunk guard shall be placed around the base of the trunk just above the soil grade. A trunk guard to deter mechanical damage, as a result of wounds inflicted on a tree's trunk by such devices as weed whips and lawnmowers.
- d) Root Barrier. Root Barrier shall be fabricated from a high density and high compact plastic such as polyvinyl chloride, ABS or polyethylene and have a minimum thickness of 0.06 inch. The plastic shall have 1/2" 3/4" high raised vertical ribs on the inner surface spaced not more than 6"-8" apart.



e) Wood Chip Mulch. A four (4") inch uniform layer of City approved wood chip mulch shall be placed within the planting basin of the tree. A pace of three (3") inches shall be left between the tree's stem and the much layer to allow airflow and to restrict moisture from remaining static around the base of the trunk.

<u>Section 9.</u> Planting Specifications. All trees must conform to the Authorized List of Carson Trees (Exhibit "A"). All trees shall be in a minimum 15-gallon size container and be standard (not multi-trunk). All trees shall be symmetrical, typical for a variety and species, healthy, vigorous, and free from plant disease and insect pests and shall have a healthy and normal root system free from being root bound. All trees shall be subject to the inspection and approval of the General Manager or his or her designee. All trees shall be planted in accordance with these specifications.

Section 10. Most nursery tree stock in California is sold in a containerized form. The following guidelines are specifics for containerized stock. If utilizing bare root or balled and burlapped trees, refer to the appropriate International Society of Arboriculture (ISA) guidelines for planting instructions.

- a) All trees shall be planted immediately after the planting container has been removed. Containers shall not be cut or otherwise damaged prior to delivery of trees to the planting area.
- b) The planting hole is one of the most important factors in establishing a healthy tree. Measure the width and depth of the root ball prior to digging. The diameter of the planting hole shall be dug at least two (2) times wider than that of the root ball. The depth of the planting hole shall be dug slightly shallower than the depth of the root ball to allow for the top two (2") inch es of the root crown to remain above the finished grade.
- c) Before placing the tree into the planting hole, tamp down the base of the hole to allow the tree to stand straight and to avoid the potential of the tree settling below the finished grade. Scarify or scrape the sides of the planting hole to break down any glazing or compaction that may have occurred as a result of digging.
- d) Position the tree in the hole so that the tree stands upright and the top of the root crown in slightly exposed above the grade. Backfill the planting hole with clean, native soil no higher than halfway up the root ball. Slightly tamp the soil to remove air pockets, but be sure not to compact the soil too much. Complete the backfilling to the finish grade. Once again, tamp the soil slightly to remove air pockets.
- e) Form a watering basin out of backfill material, approximately six (6") inches high, around the drip line of the tree. Remove all nursery stakes, ties, and ribbons from the tree, and install the planting and staking materials as specified. Give the tree an initial deep watering. Fill watering basin as many times as necessary to completely saturate root ball.



f) Tree stakes and ties should be removed from the tree within two years after planting, or when the circumference of the tree's trunk is equal to or exceeds the circumference of the stakes.

Section 11. All newly planted trees shall be placed on a schedule to receive young tree maintenance immediately after a completion of a planting program. See section 13

<u>Section 12.</u> Pruning. The Public Works Division shall be responsible for administering and scheduling pruning of all City trees. All City trees shall be pruned on a regular basis using professionally accepted standards, as established by the . All City trees shall be pruned in a manner that will encourage good development while preserving their health, structure and natural appearance. Topping, heading back, stubbing, lion tailing or pollarding of public trees is prohibited

- a) "Thinning" sometimes called "drop-crotching" in mature trees, shall be the standard pruning technique for City trees. A thinning cut is the removal of a branch at its point of origin, or the shortening of a branch to a lateral that is large enough to assume the terminal role.
- b) When removing a live branch, pruning cuts should be made just outside the branch bark ridge and collar. This location of cut is in contrast to a "flush cut" which is made inside the branch bark ridge and collar. Flush cuts should be avoided because they result in a larger wound and expose trunk tissues to the possibility of decay. If no collar is visible, the angle of the cut should approximate the angle formed by the branch bark ridge and trunk.
- c) When removing a dead branch, the final cut should be made just outside the branch bark ridge and collar of live callus or wound wood tissue. If the collar has grown out along the branch stub, only the dead stub should be removed; the live collar should remain intact.
- d) If it is necessary to reduce the length of a branch, he final cut should be made just beyond (without violating) the branch bark ridge of the branch being cut to. The remaining branch should be no less than one third (1/3) the diameter of the branch being removed, and with enough foliage to assume the terminal role.
- e) Pruning cuts should be clean and smooth, leaving the bark at the edge of the cut firmly attached to the wood. A three-cut process, sometimes referred to as "jump-cutting", should be used to remove larger limbs in order to avoid stripping or tearing of the bark, and to minimize wounding.

Section 13. Training Young Trees. Properly trained trees will develop into structurally strong trees well suited for their surrounding environment. These trees should require little corrective pruning as they mature. Young trees that reach a large mature size should have a sturdy, tapered trunk with well-spaced branches that are smaller in diameter than the trunk. Each City tree shall be scheduled for training at



least once within the first three years after being planted, as art of a Young Tree Maintenance Program. The Young Tree Maintenance Program shall entail evaluating the overall condition of the tree, cleaning out of any dead wood and pruning the tree in such a manner as to develop good structure, checking to insure stakes and ties are providing adequate support for the tree, and examining the watering basin to verify that the tree is receiving adequate water.

<u>Section 14.</u> Pruning Mature Trees. As trees mature, their need for structural pruning should decrease. Pruning should then focus on maintaining tree structure, form, health and appearance. This shall be accomplished through one of the three methods described below:

- a) Crown Cleaning–or cleaning out, is the removal of dead, , broken, diseased, crossing, weakly attached, and low-vigor branches from a tree's crown; as well as the elimination of water sprouts, sucker growth and foreign materials from the entire tree.
- b) Crown Restoration—is intended to improve structure and appearance of trees that have sprouted vigorously after being broken, topped or severely pruned using heading cuts. One o three sprouts, on main branch stubs, should be selected to form a natural appearing crown. The more vigorous sprouts may need to be thinned or cut to a lateral to control length growth or ensure adequate attachment for the size of the sprout. Crown restoration may require several pruning over a number of years. Crown restoration shall be completed as is necessary, based upon the specific condition and circumstances surrounding the tree.
- Crown Thinning—is the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of the tree, reduces weight on heavy limbs, distributes ensuing invigoration throughout the tree and helps retain the tree's natural form. When thinning the crown of matures trees, no more than twenty percent (2%) of the tree's live growth should be removed. In slower growing, or particularly sensitive species (such as native Oaks), no more than ten percent (10%) of live growth should be removed. Trees shall always be thinned to their natural form, and should retain well-spaced inner lateral branches with foliage. Trees and branches so pruned will have mechanical stress more evenly distributed along the branch and throughout the tree.

Section 15. Pruning Cycles. Frequency of pruning is also important to a tree's health. The City of Carson is divided into twenty-one (21) trimming zones, for purposes of scheduling tree trimming in the City's public right-of-way (Exhibit "F"). The City's objective is to service seven (7) zones annually within a three (3) year trim cycle. Scheduling is at the discretion of the Public Works Division. Every tree in each zone shall be pruned when that particular zone is being serviced. If a resident requests tree pruning before or after their zone is serviced, it shall be at the discretion of the Public Works Division to schedule. Hazardous conditions shall be evaluated and attended to as soon as possible.



Section 16. Street and Sidewalk Clearance. Street and sidewalk clearance standards shall be achieved through crown raising. Crown raising is the removal of lower branches in order to provide clearance for vehicles, pedestrians and bicyclists. Only those branches that must be removed to achieve the established height clearance standards shall be pruned. All such pruning cuts shall be thinned back to the nearest lateral found above the set minimum height standard. Where possible, young or developing trees should be maintained in such a manner that at least one half (1/2) of the foliage should be on branches that originate in the lower two thirds (2/3) of the tree. Similarly, branches should have even distribution of foliage along their lengths. This will ensure a well-formed, tapered structure and will uniformly distribute stress within the tree. All City trees shall be maintained to the height clearance specifications established below:

- Over sidewalks or park paths, limbs shall be raised to a minimum of seven (7') feet and a maximum of eight (8') feet from grade to first lateral branch. In locations where no sidewalks exist, limbs may be retained below this minimum elevation as long as they conform to the natural shape of the species. In locations where City street trees are set back from, or do not interfere with, sidewalk traffic, limbs may also be retained below this minimum height specification.
- b) Over residential or collector streets, limbs shall be raised gradually from eight (8') feet at curb to thirteen (13') feet over traffic lanes from the grade to wood giving the appearance of an arch rather than an angle.
- c) Over arterial streets, limbs shall be raised to fourteen (14') feet from grade to first lateral branch. A major arterial street may require a higher maximum over central traffic lanes for existing mature canopy-forming limbs.
- Visibility clearance for streetlights or signage shall be achieved through "windowing" through the foliage of a tree, rather than severely raising or reducing it crown. Only those branches that need to be removed to attain the visibility clearance desired shall be pruned. All such pruning cuts shall be thinned back to the nearest lateral found away from the structure that is to be cleared.

Section 17. Utility Clearance. Line-clearance tree workers must be trained safely around high voltage conductors. The United States Occupational Safety and Health Act (OSHA) and the American National Standards Institute (ANSI) have established minimum distances to be maintained by tree workers from electrical conductors. All line-clearance work involving City trees shall adhere to these standards, as well as the utility pruning standards established by the ISA and the Utility Arborists Association (UAA).

<u>Section 18.</u> The following guidelines are designed to maintain the required clearance of City trees from high voltage lines with a minimum of resprouting and fewer pruning cycles and the cost of the maintenance:



- a) A tree's growth under utility lines is most economically managed by lateral or directional pruning (thinning cuts). Directional pruning is the removal of a branch to the trunk or a significant lateral branch growing away from the conductor. Heading cuts (topping), on the other hand, encourages vigorous sprouting and increases the frequency of pruning cycles and the cost of maintenance.
- b) All trees in the public right-of-way should be examined for hazards before commencing with line-clearance work. Hangers and dead wood should be removed. Where possible, the tree should be allowed to attain normal height, with crown development maturing away from high voltage conductors. To achieve clearance, pruning should be restricted to removal of branches at crotches within the tree's crown.
- c) As few pruning cuts as are reasonable should be used to achieve the required clearance.
- d) When the pruning of a branch will result in the loss of more than one half (1/2) of the foliage on the branch, it should be removed to the parent stem.
- e) Precautions shall be taken to pre-cut large limbs to avoid stripping or tearing the bark, and minimize unnecessary wounding. Heavy limbs should be lowered on ropes to avoid damaging bark on limbs and trunks below.
- f) The placement of pruning cuts shall be determined by anatomy, structure and branching habit. Limbs should not be arbitrarily cut off based on a pre-established clearing limit.
- g) Final drop-crotch cuts should be made outside the branch bark ridge on the main stem or lateral branch. The remaining branch shall be no smaller than one third (1/3) the diameter of the portion being removed. The removed portion should be pruned out to direct the remaining growth away from conductors.

Section 19. The Edison Co. is currently administering line clearance in the City of Carson. Every effort has been made to work in cooperation with the Edison Co. The City has shown concern and requested that proper pruning techniques are adhered to by the Edison Co. whenever possible. An example of a situation where proper pruning techniques would not be followed would be with a tree that has grown above the utility lines and must be topped to achieve clearance. With a situation such as this every effort must first be made to drop-crotch or directional prune the tree. As few branches as possible will be topped. When this situation occurs, removal and replacement of the evaluated on an individual basis. Because palms are killed when topped, every effort sale of tree.



<u>Section 20.</u> Root Pruning. The root system of a tree is one of its most important physiological components. Roots are the main source of water and mineral absorption for the tree, they provide a foundation and stability, and they act as one of the principal storage areas for food. The proper pruning of a tree's roots when necessary is as important as the proper pruning of a tree's crown.

Section 21. Whenever possible, the City, utility companies or contractors shall avoid removing any of a tree's root system. In instances where there exists a need to install subsurface structures or utilities, such as irrigation lines or block wall footings, every effort shall be made to avoid encroachment within the drip line of a tree. If it becomes necessary to excavate within a tree's drip line, every effort, if cost efficient, shall be made to tunnel under or through out the tree's root system with a minimal amount of pruning, rather than to trench across the tree's roots.

<u>Section 22.</u> When root removal becomes necessary for the installation and/or repair of hardscape, such as sidewalks, driveway approaches or curb and gutters, and other utilities, two methods shall be employed by the City to eradicate invasive or encroaching roots. These two methods are specified below:

- a) Selective Root Pruning is the removal of specific offending roots which are directly interfering with a work area. When pruning out selective roots, great care shall be given to retain as much root surface as possible, including sufficient buttress root dispersal around the radius of the tree. To oots shall be cut back at least four (4") inches away from new hardscape to the nearest node. Pruning cuts shall be made clean and smooth with minimal crushing or tearing of the remaining root.
- b) Root Shaving is the removal of a small portion of a nonessential buttress root or general root with a diameter of four (4") inches or greater. Roots will be shaved to allow for at least two (2") inches of clearance between the root and the new hardscape. Shaving cuts shall be made clean and smooth with no crushing or tearing of the remaining root; root shaving shall be undertaken at the discretion of the Public Works Division.

<u>Section 23.</u> Certified Arborist. Any City-contracted tree company shall be required to have in their employment a full-time, permanent Certified Arborist, as accredited by the International Society of Arboriculture (ISA). This person shall be responsible for ensuring that the contractor's crews are performing work according to the City specifications.

<u>Section 24.</u> Contractor Qualifications. Any person, firm or corporation engaged in the business of trimming or removing any parkway tree shall carry commercial general liability and property damage, auto and workers' compensation insurance at a minimum limit of \$1 million each. The insurance certificates must be on file with Risk Management Department and the City Clerk.

<u>Section 25.</u> Removal. The Public Works Division will trim or remove any public owned tree or plant, including any part thereof, regardless of the location, if it is determined by the Manager, that removal is necessary to eliminate any hazard or risk to



public safety or property. The following are conditions permitting removal by the Manager or his or her designee:

- Where the tree, foliage or any limb, or the shrub or plant, is interfering with a primary structure, and there is no feasible alternative to mitigate the interference;
- b) Where a written determination has been made, after a visual inspection and evaluation, that the tree is so diseased or damaged that it is no longer viable or it is a threat to property or to other trees;
- Where the tree is so poorly formed due to stunted growth that its preservation would not result in any substantial benefit to the community;
- d) Where the tree interferes with utility services, or any street or highway, and no reasonable alternative exists other than removal or trimming of the tree;
- Where the tree is a potential safety hazard due to the risk of it falling and its structural instability cannot be remedied; or where any other risk to persons or property is presented;
- f) Where the tree is causing damage to improvements including, but not limited to, any building foundation, retaining wall, roadway/driveway, sidewalk/curb patio, deck or is interfering with the use and enjoyment of property;
- g) Where the tree is host to an organism which is parasitic to another species of tree thereby endangered by the parasite; or
- h) Where the tree belongs to a species which is known to be pyrophitic or highly flammable and/or has been identified as a public safety hazard.

<u>Section 26.</u> A City tree shall be removed only if it meets one of the above stated conditions. If a resident does not agree with staff's decision on a removal request, they may appeal to the Development Services General Manager. The Public Works Division will provide interested residents with information on the City appeal process. The City Manager and City Council will serve as the appeal body for the Development Services General Manager decisions.

Section 27. Inspection. The Manager or his or her designee may inspect any parkway tree or plant or any tree or plant standing on any private property which overhangs or projects over or into any street, park, alley or public place of the City, to determine whether it or any part of it is in such condition as to constitute a safety hazard public place. However, nothing herein shall authorize the Manager to enter private property without the consent of the owner or lawful possessor of the property, unless otherwise permitted by law.



<u>Section 28.</u> Development/Construction. All Parkway trees planted in a new subdivision shall be in accordance with the Parkway Tree Guidelines and shall be paid for by the sub divider, unless otherwise provided by the City Council. The City Council may require any sub divider to pay all cost of proper parkway tree planting along the streets of any new subdivision before approving any subdivision map

Section 29. The Manager shall determine during the project review process whether and to what extent conditions or measures will be required to protect parkway trees during construction. This decision shall be based upon the proximity of the construction activity to parkway trees. The conditions and protective measures include, but are not limited to the following:

- a) The parkway trees shall be enclosed by chain link fencing with a minimum height of five feet or by another protective barrier approved by the commencement of work.
- b) Barriers shall be placed at least five feet outside the drip line of parkway trees. The Manager, if appropriate to the species and the adjacent construction activity, may approve a lesser distance.
- c) The Manager shall make no grade changes within the protective barriers without prior approval. Any roots greater than two inch in diameter, which are damaged or exposed, shall be cleanly saw cut and covered with soil in conformance with ISA standards.
- d) Excavation or landscape preparation within the protective barriers shall be limited to the use of hand tools and small hand-held power tools and shall not be used at a depth that could cause root damage to the parkway tree.
- e) No attachments or wires other than those of protective or non-damaging nature shall be attached to a parkway tree.
- No equipment or debris or any kind shall be placed within the protective barriers. No fuel, paint, solvent, oil, thinner, asphalt, cement, grout or any enter within the protective barrier.
- g) If access within the protective barrier around a parkway tree is required during the construction process, the route shall be covered with a six-inch at the conclusion of the construction.
- H) When the existing grade around a parkway tree is to be raised, drain tiles shall be laid over the soil to drain liquids away from the trunk, as determined by the Manger or his or her designee. The number of drains shall depend up on the soil material. Lighter sandy soil and porous gravelly material require fewer drains than heavy non-porous soils like clay. Dry wells shall be large enough to allow for maximum growth of the



tree trunk. Dry well walls shall be constructed of materials that permit passage of air and water.

- When the existing grade around a parkway tree is to be lowered, either by terracing or by a retaining wall, a combination may be used to lower grades, as determined by the Manager or his or her designee. With either method, the area within the drip line shall be left at the original grade. The retaining wall shall be porous to allow for aeration.
- j) Parkway trees that have been destroyed or have received major damage during construction shall be replaced prior to final inspection and subject to the Manager's direction and approval as to size, variety and species.

<u>Section 30.</u> Hardscape. In keeping with the City's policies for protecting and preserving the health and well being of our urban forest while providing for the safety of our citizens, the following guidelines have been established for correcting potentially hazardous situations that result from tree roots disturbing nearby hardscape.

Section 31. There are several factors that must be considered in determining the course of action necessary for addressing hardscape damage concerns that involve City trees. These actions are driven by the extent of the damages, and whether the damages are located on private property. The Public Works Division shall inspect all hardscape damage. If the hardscape concerns include potential damage to private property, the matter shall be referred to the Development Services General Manager for evaluation. Upon initial inspection of the area, staff must determine what courses of action is necessary to respond to the problem. The following are the most commonly occurring hardscape problems, and the courses of actions that shall be employed to rectify them:

- a) Hardscape damage is within the public right-of-way and will require a temporary asphalt ramp, followed by permanent repair of the area at a later date. Generally, an asphalt ramp should be installed if there exists a deviation in the concrete that is greater than three-fourths (3/4) of an inch.
- b) Hardscape damage within public right-of-way but is of such a minor nature that the damaged area can be "ground down" by a concrete grinding machine. Any deviation in the concrete of less than one-half (1/2") of an inch should be able to be rectified by grinding the raised lip down to grade. If necessary, permanent repair of the area should be scheduled for a later date.
- c) Hardscape damage within public right-of-way, but the nature of the damages cannot be rectified by temporary measures. Thus, permanent repair of the area will need to be scheduled based upon the potential damages for creating a public safety hazard.
- d) Hardscape damages are on private property and thereby cannot be addressed by the City. However, there are clear-cut indications that at least some of the damages that have occurred are a direct result of a tree



in the public right-of-way. Thus, the resident may have reason to file a claim for damages with the City. If the resident does elect to file a claim, the Manager or his or her designee shall be responsible for evaluating the damaged area and submitting a tree assessment report to the City Clerk for inclusion with the claim file.

- e) Hardscape damages are on private property and thereby cannot be addressed by the City, and there exists no clear-cut indication that a City tree is the source of damages. Thus, the resident will be responsible for excavation of the damaged area, for the purpose of exposing any invasive roots, should they wish to file a claim for damages with the City.
- f) Hardscape damage is on private property, and is clearly caused by a City owned street tree, in the public right-of-way.
- Upon excavation of the area, it is the resident's responsibility to contact the Public Works Division and schedule an evaluation and assessment of the damage. The Manager's designee shall be responsible for submitting this assessment report to the City Clerk for inclusion with the resident's claim.
- h) Once a course of action has been determined, staff shall be responsible for providing written notification to the involved parties informing them of staff's findings and of what measures they or the City will need to take to rectify the problem.

<u>Section 32.</u> The general policy that shall be observed when repairing or replacing hardscape adjacent to a public right-of-way tree is that the health and integrity of the tree shall be taken into consideration before work commences. Every effort shall be made to protect the tree from root or trunk damage.

<u>Section 33.</u> Several alternatives are available for accommodating the installation of new hardscape without severely infringing upon a tree's root system. The Public Works Division shall first evaluate any hardscape installation that may involve the removal of an extensive portion of a tree's root system. If it is determined by the Public Works Division that the removal of the offending roots might jeopardize public safety or the health or integrity of the tree, then one of the following alternatives should be considered:

- a) Off-Set. An offset is the tapering or reduction of a sidewalk's size down to a width no less than forty-eight (48") inches.
- b) Ramping. A sidewalk may be constructed to ramp over offending roots, as long as the slope of the grade does not exceed one (1') foot of elevation change within a span of twelve (12') linear feet.
- c) Reconfiguration. Sidewalks do not need to be constructed in a straight line. If the public easement can accommodate it, a sidewalk may be reconfigured to curve around a tree in a suitable manner.



d) Removal. If no other hardscape installation alternative is feasible, a tree may be removed, as long as it complies with the Tree Removal criteria established in this manual.

Section 34. Interference With Work. No person shall interfere, or cause any person to interfere with, the Manager or persons acting under his or her authority while engaged in planting, mulching, pruning, spraying, treating, trimming or removing any parkway tree, shrub or plant or in the removal of any stone, cement or other substance or plant material from or adjacent to the trunk of any parkway tree. No person shall injure or destroy any parkway tree by any means, including, but not limited to the following:

- Constructing concrete, asphalt, brick or gravel sidewalk or otherwise filling up the ground area around any tree so as to substantially shut off air, light, or water from its roots;
- Piling building equipment, material or any other substance around any tree so as to cause injury;
- Pouring, spraying or depositing any deleterious substance around any tree or on the surrounding ground, lawn or sidewalk;
- Posting of any sign, poster, notice or other object on any tree, tree stake or guard;
- e) Causing any wire charged with electricity to come in contact with any tree;
 or
- f) Causing any fire or burning near or around any tree.

Section 35. Penalties. It shall be unlawful for any person, firm, partnership or corporation to violate any provision of or to fail to comply with any of the requirements of this Ordinance. Any person, firm, partnership of corporation violating any provision of this Ordinance or failing to comply with any of its requirements shall be deemed guilty of a misdemeanor and upon conviction thereof shall be subject to a fine. One Thousand Dollars (\$1,000), by imprisonment not exceeding six (6) months, or both. Each and every person, firm, partnership, or corporation shall be deemed guilty of a separate offense for each and every day or any portion thereof during which any violation of any of the provision of this Ordinance is committed, continued or permitted by such person, firm, partnership or corporation, and shall be subject to penalties and imprisonment provided in this Section.

- a) In the event more than one tree subject to the provisions of this Chapter is located adjacent to a parcel of property, each tree that is removed or trimmed shall be considered a separate violation.
- b) Removal trimming of any parkway tree or plant is a misdemeanor and shall require replacement within sixty days of notice by the City. Such replacement shall be in accordance with the Parkway tree Guidelines.



c) Violation of this Chapter during construction activity may result in an immediate stop-work order issued by the City.

<u>Section 36.</u> The violation of any of the provisions of this manual shall constitute a nuisance and may be abated by the City through a civil process by means of a restraining order, preliminary or permanent injunction or in any other manner provided for by law for the abatement of nuisances.

Section 37. If any provision(s) of this ordinance or the application thereof to any person or circumstances is held invalid or unconstitutional by any court of competent jurisdiction, such invalidity or unconstitutionally shall not affect any other provision or application, and to this end the provisions of this ordinance are declared to be severable. The City Council hereby declares that they would have adopted this ordinance and each section, subsection, sentence, clause, phrase, part or portion thereof, irrespective of the fact that any one or more sections, subsections, clauses, phrases, part or portions thereof be declared invalid or unconstitutional.

Section 38. The Ordinance No. 06-1347 is approved for introduction and first reading on December 18, 2007 and adoption at the second hearing on January 15, 2008.

<u>Section 39.</u> The City Clerk shall certify to the adoption of this Ordinance and shall transmit copies of the same to the applicant. The City Clerk shall publish the adopted Ordinance pursuant to California Government Code 36933 within fifteen days of its adoption.

Section 40. The Ordinance shall become effective thirty (30) days after the second reading approval date.

PASSED, APPROVED AND ADOP	TED THIS DAY OF
ATTEST:	MAYOR JIM DEAR
CITY CLERK HELEN S. KAWAGOE APPROVED AS TO FORM:	
CITY ATTORNEY	



EXHIBIT "A"

PARKWAY TREE MASTER PLAN

Bauhinia Purpurea	Orchid Tree
Cupaniopsis Anacvardioides	Carrot Wood
Ficus Nitida	Laurel Fig
3. Ficus Benjamina	Weeping Fig
Liquidambar Styraciflua	Sweet Gum
Liquidambar otyrania Magnolla Grandiflora	So. Magnolia
6. Cinnamomum Camphora	Camphor Tree
7. Pinus Canariensis	Canary Island Pine
8. Pittosporum Viridifollum	Cape Pittosporum
9. Podocarpus Gracilior	Fern Pine
10.Cocos Plumosa	Queen Palm
11. Tristania Conferta	Brisbane Box
12. Lagerstroemia Indica	Crape Myrtle
12. Lagorationnia mana	

Note: These trees are the only City approved species for parkways.



EXHIBIT "B"

CITY OF CARSON PUBLIC WORKS DIVISION Permit to Remove Street Trees

Date:*
, do hereby request authorization from the City of Authorized business representative property owner Carson to remove street tree(s) from within the public easement along the
property atstreet Name/Addresses
in accordance with all City specifications. Said work will begin on,
and will be completed by
I further agree to bear all costs and liabilities connected with the approved removal
project; and that, any contractor used to complete this project is licensed by the City of
Carson to do approved work; and that the approved work will be performed by a certified
Carson to do approved work, and that are synthesis and the synthesis of the control of the contr
workman like fashion.
Name of Contractor Certified Arborist #
Signature of Permit Recipient Date
Authorized Representative Signature Date
Print Name Title





EXHIBIT "C"

CITY OF CARSON PUBLIC WORKS DIVISION

Claim for Damage or Injury

NOTE: Certain procedures governing the filing of claims for money or damages are set forth in Title I, Division 3.6, Part 3 (Sections 900, et seq) of the Government Code, State of California. This Claim for Damage or Injury has been prepared in accordance with California Government Code, Section 910.4. When this form is used, please submit to the City Clerk's Department, City Hall, 701 E. Carson Street, Carson, CA 90745.

he City Clerk's Department, Oity Ham, 4	[] Amendment to Previous Claim
] Original Filing	[] Americanova
	Address (City, State & Zip Code)
Name of Claimant	
Address to Send Notices	Telephone Number (Include Area Code)
Address to Send Notices	
Place of Occurrence of Damage or Injury	Date of Occurrence of Damage or Injury
Place of Occurrence of Damage or injury incurred so far General description of damage or injury incurred so far	as it is known at the time of presenting this claim:
General description of damage of injury	
If submitting PHOTOGRAPHS, PLEASE ATTACK	ority or their respective employees sales
injury? (Include names of employees if known):	
Amount claimed, including the estimated amount known at the time of presentation of this claimed (Attach estimate or invoices, if possible	nt of any prospective damage or injury, insofar as may be m, together with the basis of computation of the amoung
claimed (Attach estimate of invoices, in part	\$
	\$
Names and address of known witnesses to da	mage or injury:
	Date
Signature of Claimant	·



EXHIBIT "D"

CITY OF CARSON PUBLIC WORKS DIVISION Permit to Prune Trees

Date:	*
processors property officer	by request authorization from the City of
Carson to prune street tree(s) along	
Street Na	ame/Addresses in
accordance with all City specifications. Said wo	ork will begin on and
will be completed by	Date
I further agree to bear all costs and liabilities co	onnected with the approved removal
project; and that, any contractor used to comple	ete this project is licensed by the City of
Carson to do approved work; and that the appr	oved work will be performed by a certified
tree worker based on City Standards; and that,	all work will be performed in a timely and
workman like fashion.	
Signature of Permit Recipient	Date
Authorized Representative Signature	Date
Print Name	Title

*PERMIT EXPIRES 60 CALENDAR DAYS FROM THE ABOVE DATE



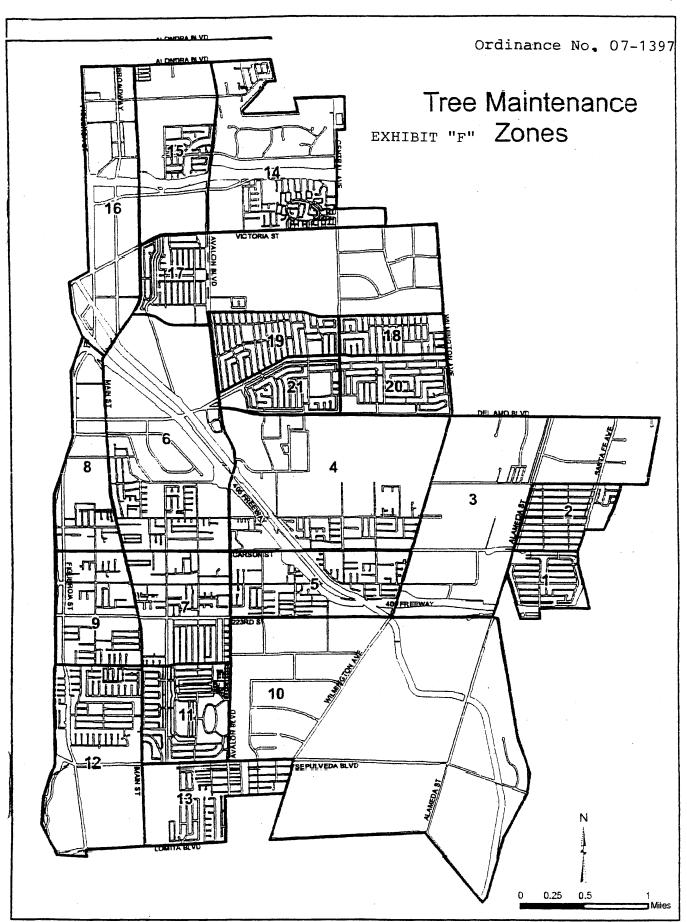
EXHIBIT "E"

CITY OF CARSON PUBLIC WORKS DIVISION Permit to Plant Street Trees

Date:	*
I,,do hereb	by request authorization from the City of
Carson to plantstreet tree(s) from within t	he public easement along the property at
Street Name/Addresses	•
In accordance with all City specifications, I will,	within 60 days of said request install the
current, designated street tree:	
Botanical Name	().
I further agree to bear all costs and liabilities connec	
that, any contractor used to complete this project is I	icensed by the City of Carson to do approved
work.	
Upon completion of the entire project, I shall relinqui	sh the ownership and responsibility for said
tree(s) to the City of Carson.	
Signature of Permit Recipient	Date
Authorized Representative Signature	Date
Print Name	Title

*PERMIT EXPIRES 60 CALENDAR DAYS FROM THE ABOVE DATE







ORDINANCE NO. 12-1487

AN ORDINANCE OF THE CITY OF CARSON, CALIFORNIA, ESTABLISHING CITY TREE PRESERVATION AND PROTECTION AND AMENDING THE CARSON MUNICIPAL CODE

THE CITY COUNCIL OF THE CITY OF CARSON DOES ORDAIN AS FOLLOWS:

<u>Section 1.</u> The purpose of this ordinance is to preserve and protect the parkway trees of this City that are of aesthetic importance and to provide for the replacement of trees in order to maintain the community's natural environment. Trees are an important natural resource, and it is essential to the public peace, health, and welfare that such trees be protected from random removal, trimming, or damage.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 2 to read as follows:

<u>Section 2.</u> For the purpose of this ordinance, certain terms and words are hereby defined as follows:

- a) "Manager" means the Development Services General Manager of the Development Services Work Group overseeing the Public Works Division.
- b) "Parkway" means either the area between the curb and sidewalk within a fully improved street right-of-way, or that area extending from the curb towards the nearest parallel easement line in an area with no sidewalk, or any area within a street right-of-way in which a parkway tree is located.
- c) "City Tree" means a tree planted or caused to be planted within the city right-of-way or city owned or maintained property.
- d) "Removal" means the uprooting, cutting, or severing of the main trunk of the tree, or any act, which causes the tree to die within six months.
- e) "Shrub" means woody vegetation of a woody plant having multiple stems and bearing foliage from the ground level up.
- f) "Tree" means any woody plant, including a palm, which has the potential of attaining a minimum height of fifteen (15) feet and has its canopy of foliage borne normally on a single trunk.
- g) "Tree Well" means a planting area found in an otherwise paved or concrete street right-of-way.

<u>Section 3.</u> Authority. The Manager or his or her designee is responsible for inspection, maintenance, planting, pruning, trimming, removal, replacement and care of all parkway trees subject to the review and supervision of the City Manager. Subject to said review, the Manager shall have the power to designate the kind or variety of trees and plants to be planted within any parkway of the City. The owners of property fronting on any street, alley or public place may petition the Manager to provide that such trees.



or plants shall be of a certain kind of variety, but the petition shall be advisory to the action of the Manager.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 4 to read as follows:

<u>Section 4.</u> Carson's tree population management plan shall be based primarily upon the City's adopted plan of parkway trees and Parkway Tree Master Plan. The Parkway Tree Master Plan will designate certain species of trees that may be planted within the City of Carson (Exhibit "A"). These particular types of trees are species that meet the following criteria:

- a) Species Hardiness. Based upon the trees adaptability to the region in term of its resistance to frost, freezing temperatures and heat.
- b) Drought Tolerance. Species with the ability to withstand long periods of drought are preferred.
- c) Durability and Wind Resistance. Species that are not brittle in nature and will tolerate the winds.
- d) Grow Space. The amount of parkway size available relative to the expected tree trunk circumference and root flare at maturity.
- e) Overhead Clearance. The potential for conflicts between the tree's canopy and overhead obstructions, such as utility lines, at the tree's mature height.
- f) Pest and Disease Resistance. Species that are resistant to insect and disease infestation are preferred.
- g) Subsurface growth habits. Species that do not tend to surface root or have a high potential to damage infrastructure
- h) Tolerance to a variety of irrigation practices. Species that will tolerate long periods of drought or abundant moisture are preferred.
- i) Soil qualities. Species that will tolerate the areas soil conditions are preferred.
- j) Cleanliness. Species that do not have an overabundance of fruit or flower litter are preferred.
- k) Species Selection. Species are chosen with regards to the appropriateness of their character. For example, a deciduous tree will be utilized in areas with very strong winter winds; providing a more stable specimen for severe conditions. Species that already exist in a particular area, have traditionally existed in that area, or are native to the region are preferred.



- Aesthetics and Shading. Trees that are aesthetically pleasing with showy flowers or attractive fall color, or that provide a good amount of shade are preferred.
- m) Availability. Trees that are readily available are preferred.

<u>Section 5.</u> **Maintenance**. The Public Works Division will develop and maintain a current inventory of all City owned trees, including detailed site characteristics and work histories for each tree. Tree records shall be updated on a routine basis. The Public Works Division shall be responsible for overseeing the planting of all City trees. The following guidelines and procedures have been developed to promote the health and safety of City trees from the time they are planted through maturity. These guidelines and procedures shall be required for any City maintained tree that is to be planted.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 6 to read as follows:

<u>Section 6.</u> Planting. The Public Works Division shall be responsible for administering planting of all trees in the public right-of-way. Businesses and residents are required to obtain a permit prior to planting of any trees within the City's Right-Of-Way. Trees planted without permit may be removed by the City at the discretion of the Manager or his/her designee, without any consent from businesses or residents that have planted the said tree(s). It shall be the objective of the City to plant all viable vacant sites located in the City public right-of-way, to honor all resident requests for new street trees in City owned locations, and to replace any City tree which has been removed with the provision that the remaining vacant site is viable for planting. Viable planting sites shall be based upon the following criteria:

- a) Spacing. There is adequate spacing present overhead, underground and radially to allow for the healthy, unimpeded growth of tree to it mature size. Specific examples of spacing conditions may make a site unsuitable for planting, which include: inappropriate canopy room between existing trees, proximity of a planting site to existing utilities creating potential conflicts and damage or inadequate width of the location's parkway for accommodating the tree's girth.
- b) Traffic Clearance. There is adequate line of sight visibility between normal vehicular or pedestrian traffic and necessary signage, street lights or views.
- c) Maintenance Resources. There is an adequate and consistent water source available.
- funding. Funding will be requested every fiscal year budget for tree planting based on the need.

<u>Section 7.</u> Nursery Stock. The City shall make every effort to insure that it plants only vigorous, healthy trees which can easily be trained into an attractive natural form, with strong roots and good crown development. The City shall reserve the right to refuse any nursery stock that does not meet these standards, and may require any



person who has planted such sub-standard trees, on City property or within the City right-of-way, to have these trees removed and replaced at the person's own expense. The specifications for acceptable nursery stock shall be as follows:

- a) All trees shall be selected from the City's master tree list and be no less than a 15 gallon mature tree.
- b) All trees shall be true to type or botanical name as ordered or showing on planting plans.
- c) All trees shall have a fairly straight trunk with a good taper and good branch distribution vertically, laterally and radially.
- d) All trees shall be healthy, have a form typical for the species or cultivar, be well rooted, and shall be properly trained.
- e) The root ball of all trees shall be moist throughout and the crown shall show no sign of moisture stress.
- f) All trees shall comply with Federal and State laws requiring inspection for plant diseases and pest infestations.
- g) No tree shall be accepted that has been severely topped, headed back, pollarded or lion-tailed.
- h) No tree shall be accepted that has co-dominant stems or excessive weak branch attachments that cannot be trained out without jeopardizing the natural form of the species.
- i) No tree shall be accepted that is root bound, shows evidence of girdling or kinking roots, or has "knees" (roots) protruding above the soil.

<u>Section 8.</u> Planting and Staking. Unless otherwise approved by the Public Works Division, all City trees shall be planted using materials that meet the following criteria:

- a) Tree Stakes. Shall be two (2) sturdy, eight to ten (8'-10') feet long lodge pole pine stakes. Stakes will be placed on the outer edge of the root ball on either side of the tree, perpendicular to prevailing winds. If larger trees are planted and require guying, International Society of Arboriculture standards shall be adhered to
- b) Staking Ties. Shall be sixteen (16") inch to eighteen (18") inch rubber cinch ties to be fastened to each stake with galvanized roofing nails. Ties will be pulled around the tree's trunk in a manner which supports the top-heaviness of the canopy, but loose enough to allow for free movement of the tree in the wind.
- c) Trunk Guards. An approved trunk guard shall be placed around the base of the trunk just above the soil grade. A trunk guard is used to deter



mechanical damage, as a result of wounds inflicted on a tree's trunk by such devices as weed whips and lawnmowers.

- d) Root Barrier. Root Barrier shall be fabricated from a high density and high compact plastic such as polyvinyl chloride, ABS or polyethylene and have a minimum thickness of 0.06 inch. The plastic shall have 1/2" 3/4" high raised vertical ribs on the inner surface spaced not more than 6"-8" apart.
- e) Wood Chip Mulch. A four (4") inch uniform layer of City approved wood chip mulch shall be placed within the planting basin of the tree. A space of three (3") inches shall be left between the tree's stem and the much layer to allow airflow and to restrict moisture from remaining static around the base of the trunk.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 9 to read as follows:

<u>Section 9.</u> Planting Specifications. All trees must conform to the Authorized List of Carson Trees (Exhibit "A"). All trees shall be in a minimum 15-gallon size container and be standard (not multi-trunk). All trees shall be symmetrical, typical for a variety and species, healthy, vigorous, and free from plant disease and insect pests and shall have a healthy and normal root system free from being root bound. All trees shall be subject to the inspection and approval of the General Manager or his/her designee. All trees shall be planted in accordance with these Specifications.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 10 to read as follows:

<u>Section 10.</u> Most nursery tree stock in California is sold in a containerized form. The following guidelines are specifics for containerized stock. If utilizing bare root or balled and burlapped trees, refer to the appropriate International Society of Arboriculture (ISA) guidelines for planting instructions.

- a) All trees shall be planted immediately after the planting container has been removed. Containers shall not be cut or otherwise damaged prior to delivery of trees to the planting area.
- b) The planting hole is one of the most important factors in establishing a healthy tree. Measure the width and depth of the root ball prior to digging. The diameter of the planting hole shall be dug at least two (2) times wider than that of the root ball. The depth of the planting hole shall be dug slightly shallower than the depth of the root ball to allow for the top one (1") inch of the root crown to remain above the finished grade.
- c) Before placing the tree into the planting hole, tamp down the base of the hole to allow the tree to stand straight and to avoid the potential of the tree settling below the finished grade. Scarify or scrape the sides of the planting hole to break down any glazing or compaction that may have occurred as a result of digging.



- d) Position the tree in the hole so that the tree stands upright and the top of the root crown in slightly exposed above the grade. Backfill the planting hole with clean, native soil no higher than halfway up the root ball. Slightly tamp the soil to remove air pockets, but be sure not to compact the soil too much. Complete the backfilling to the finish grade. Once again, tamp the soil slightly to remove air pockets.
- e) Form a watering basin out of backfill material, approximately six (6") inches high, around the drip line of the tree. Remove all nursery stakes, ties, and ribbons from the tree, and install the planting and staking materials as specified. Give the tree an initial deep watering. Fill watering basin as many times as necessary to completely saturate root ball.
- f) Tree stakes and ties should be removed from the tree within two years after planting, or when the circumference of the tree's trunk is equal to or exceeds the circumference of the stakes.

<u>Section 11.</u> Young Tree Maintenance Schedule. All newly planted trees shall be placed on a schedule to receive young tree maintenance immediately after a completion of a planting program. See section 13.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 12 to read as follows:

<u>Section 12.</u> Pruning. The Public Works Division shall be responsible for administering and scheduling pruning of all City trees, otherwise all other trimming is prohibited, unless a permit is obtained. All City trees shall be pruned on a regular basis using professionally accepted standards, as established by the International Society of Arboculture (ISA) Best Management Practice and ANSI Pruning Standards, whichever is more protective of tree preservation. All City trees shall be pruned in a manner that will encourage good development while preserving their health, structure and natural appearance, Shearing, topping, heading back, stubbing, lion tailing or pollarding of public trees is prohibited, except in accordance with ISA standards.

- a) "Thinning" sometimes called "drop-crotching" in mature trees, shall be the standard pruning technique for City trees. A thinning cut is the removal of a branch at its point of origin, or the shortening of a branch to a lateral that is large enough to assume the terminal role.
- b) When removing a live branch, pruning cuts should be made just outside the branch bark ridge and collar. This location of cut is in contrast to a "flush cut" which is made inside the branch bark ridge and collar. Flush cuts should be avoided because they result in a larger wound and expose trunk tissues to the possibility of decay. If no collar is visible, the angle of the cut should approximate the angle formed by the branch bark ridge and trunk.
- c) When removing a dead branch, the final cut should be made just outside the branch bark ridge and collar of live callus or wound wood tissue. If the



- collar has grown out along the branch stub, only the dead stub should be removed; the live collar should remain intact.
- d) If it is necessary to reduce the length of a branch, the final cut should be made just beyond (without violating) the branch bark ridge of the branch being cut to. The remaining branch should be no less than one third (1/3) the diameter of the branch being removed, and with enough foliage to assume the terminal role.
- e) Pruning cuts should be clean and smooth, leaving the bark at the edge of the cut firmly attached to the wood. A three-cut process, sometimes referred to as "jump-cutting", should be used to remove larger limbs in order to avoid stripping or tearing of the bark, and to minimize wounding.

Section 13. Training Young Trees. Properly trained trees will develop into structurally strong trees well suited for their surrounding environment. These trees should require little corrective pruning as they mature. Young trees that reach a large mature size should have a sturdy, tapered trunk with well-spaced branches that are smaller in diameter than the trunk. Each City tree shall be scheduled for training at least once within the first three years after being planted, as part of a Young Tree Maintenance Program. The Young Tree Maintenance Program shall entail evaluating the overall condition of the tree, cleaning out of any dead wood and pruning the tree in such a manner as to develop good structure, checking to insure stakes and ties are providing adequate support for the tree, and examining the watering basin to verify that the tree is receiving adequate water.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 14 to read as follows:

<u>Section 14.</u> Pruning Mature Trees. As trees mature, their need for structural pruning should decrease. Pruning should then focus on maintaining tree structure, form, health and appearance. This shall be accomplished through one of the three methods described below:

- a) Crown Cleaning–or cleaning out, is the removal of dead, dying, broken, diseased, crossing, weakly attached, and low-vigor branches from a tree's crown; as well as the elimination of water sprouts, sucker growth and foreign materials from the entire tree.
- b) Crown Restoration—is intended to improve structure and appearance of trees that have sprouted vigorously after being broken, topped or severely pruned using heading cuts. One of three sprouts, on main branch stubs, should be selected to form a natural appearing crown. The more vigorous sprouts may need to be thinned or cut to a lateral to control length of growth or ensure adequate attachment for the size of the sprout. Crown restoration may require several pruning over a number of years. Crown restoration shall be completed as is necessary, based upon the specific condition and circumstances surrounding the tree.



Crown Thinning—is the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of the tree, reduces weight on heavy limbs, distributes ensuing invigoration throughout the tree and helps retain the tree's natural form. When thinning the crown of matures trees, no more than twenty five percent (25%) of the tree's live growth should be removed. In slower growing, or particularly sensitive species (such as native Oaks), no more than ten percent (10%) of live growth should be removed. Trees shall always be thinned to their natural form, and should retain well-spaced inner lateral branches with foliage. Trees and branches so pruned will have mechanical stress more evenly distributed along the branch and throughout the tree.

Section 15. Pruning Cycles. Frequency of pruning is also important to a tree's health. The City of Carson is divided into twentyone (21) trimming zones, for purposes of scheduling tree trimming in the City's public right-of-way (Exhibit "F"). The City's objective is to service seven (7) zones annually within a three (3) year trim cycle. Scheduling is at the discretion of the Public Works Division. Every tree in each zone shall be pruned when that particular zone is being serviced. If a resident requests tree pruning before or after their zone is serviced, it shall be at the discretion of the Public Works Division to schedule. Hazardous conditions shall be evaluated and attended to as soon as possible.

Section 16. Street and Sidewalk Clearance. Street and sidewalk clearance standards shall be achieved through crown raising. Crown raising is the removal of lower branches in order to provide clearance for vehicles, pedestrians and bicyclists. Only those branches that must be removed to achieve the established height clearance standards shall be pruned. All such pruning cuts shall be thinned back to the nearest lateral found above the set minimum height standard. Where possible, young or developing trees should be maintained in such a manner that at least one half (1/2) of the foliage should be on branches that originate in the lower two thirds (2/3) of the tree. Similarly, branches should have even distribution of foliage along their lengths. This will ensure a well-formed, tapered structure and will uniformly distribute stress within the tree. All City trees shall be maintained to the height clearance specifications established below:

- Over sidewalks or park paths, limbs shall be raised to a minimum of seven (7') feet and a maximum of eight (8') feet from grade to first lateral branch. In locations where no sidewalks exist, limbs may be retained below this minimum elevation as long as they conform to the natural shape of the species. In locations where City street trees are set back from, or do not interfere with, sidewalk traffic, limbs may also be retained below this minimum height specification.
- b) Over residential or collector streets, limbs shall be raised gradually from eight (8') feet at curb to thirteen (13') feet over traffic lanes from the grade to wood giving the appearance of an arch rather than an angle.
- c) Over arterial streets, limbs shall be raised to fourteen (14') feet from grade to first lateral branch. A major arterial street may require a higher



maximum over central traffic lanes for existing mature canopy-forming limbs.

Visibility clearance for streetlights or signage shall be achieved through "windowing" through the foliage of a tree, rather than severely raising or reducing it crown. Only those branches that need to be removed to attain the visibility clearance desired shall be pruned. All such pruning cuts shall be thinned back to the nearest lateral found away from the structure that is to be cleared.

Section 17. Utility Clearance. Line-clearance tree workers must be trained safely around high voltage conductors. The United States Occupational Safety and Health Act (OSHA) and the American National Standards Institute (ANSI) have established minimum distances to be maintained by tree workers from electrical conductors. All line-clearance work involving City trees shall adhere to these standards, as well as the utility pruning standards established by the ISA and the Utility Arborists Association (UAA).

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 18 to read as follows:

<u>Section 18.</u> Clearance Guidelines. The following guidelines are designed to maintain the required clearance of City trees from high voltage power lines with a minimum of resprouting and fewer pruning cycles and the cost of the maintenance:

- a) A tree's growth under utility lines is most economically managed by lateral or directional pruning (thinning cuts). Directional pruning is the removal of a branch to the trunk or a significant lateral branch growing away from the conductor. Heading cuts (topping), on the other hand, encourages vigorous sprouting and increases the frequency of pruning cycles and the cost of maintenance.
- All trees in the public right-of-way should be examined for hazards before commencing with line-clearance work. Hangers and dead wood should be removed. Where possible, the tree should be allowed to attain normal height, with crown development maturing away from high voltage conductors. To achieve clearance, pruning should be restricted to removal of branches at crotches within the tree's crown.
- c) As few pruning cuts as are reasonable should be used to achieve the required clearance.
- d) When the pruning of a branch will result in the loss of more than one half (1/2) of the foliage on the branch, it should be removed to the parent stem.
- e) Precautions shall be taken to pre-cut large limbs to avoid stripping or tearing the bark, and minimize unnecessary wounding. Heavy limbs should be lowered on ropes to avoid damaging bark on limbs and trunks below.



- f) The placement of pruning cuts shall be determined by anatomy, structure and branching habit. Limbs should not be arbitrarily cut off based on a pre-established clearing limit.
- g) Final drop-crotch cuts should be made outside the branch bark ridge on the main stem or lateral branch. The remaining branch shall be no smaller than one third (1/3) the diameter of the portion being removed. The removed portion should be pruned out to direct the remaining growth away from conductors.

Section 19. The Edison Co. is currently administering line clearance in the City of Carson. Every effort has been made to work in cooperation with the Edison Co. The City has shown concern and requested that proper pruning techniques are adhered to City has shown concern and requested that proper pruning techniques are adhered to by the Edison Co. whenever possible. An example of a situation where proper pruning techniques would not be followed would be with a tree that has grown above the utility lines and must be topped to achieve clearance. With a situation such as this every effort must first be made to drop-crotch or directional prune the tree. As few branches as possible will be topped. When this situation occurs, removal and replacement of the tree is at the discretion of the Public Works Division. Palm trees in particular shall be topped, every effort evaluated on an individual basis. Because palms are killed when topped, every effort shall be made to remove and replace tree and when possible obtain compensation for sale of tree.

Section 20. Root Pruning. The root system of a tree is one of its most important physiological components. Roots are the main source of water and mineral absorption for the tree, they provide a foundation and stability, and they act as one of the principal storage areas for food. The proper pruning of a tree's roots when necessary is as important as the proper pruning of a tree's crown.

Section 21. Whenever possible, the City, utility companies or contractors shall avoid removing any of a tree's root system. In instances where there exists a need to install subsurface structures or utilities, such as irrigation lines or block wall footings, every effort shall be made to avoid encroachment within the drip line of a tree. If it becomes necessary to excavate within a tree's drip line, every effort, if cost efficient, shall be made to tunnel under or through the tree's root system with a minimal amount of pruning, rather than to trench across the tree's roots.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 22 to read as follows:

Section 22. When root removal becomes necessary for the installation and/or repair of hardscape, such as sidewalks, driveway approaches or curb and gutters, and other utilities, two methods shall be employed by the City to eradicate invasive or encroaching roots. These two methods are specified below:

a) Selective Root Pruning is the removal of specific offending roots which are directly interfering with a work area. When pruning out selective roots, great care shall be given to retain as much root surface as possible, including sufficient buttress root dispersal around the radius of the tree. Roots shall be cut back at least four (4") inches away from new hardscape.

- to the nearest node. Pruning cuts shall be made clean and smooth with minimal crushing or tearing of the remaining root.
- Root Shaving is the removal of a small portion of a nonessential buttress root or general root with a diameter of four (4") inches or greater. Roots will be shaved to allow for at least two (2") inches of clearance between the root and the new hardscape. Shaving cuts shall be made clean and smooth with no crushing or tearing of the remaining root; root shaving shall be undertaken at the discretion of the Public Works Division.
 - c) Where root pruning is needed within eight (8) feet of the trunk of the tree, removal of the tree shall be considered as an option if structural integrity of the tree will be compromised.
- Section 23. Certified Arborist. Any City-contracted tree company shall be required to have in their employment a full-time, permanent Certified Arborist, as accredited by the International Society of Arboriculture (ISA). This person shall be responsible for ensuring that the contractor's crews are performing work according to the City specifications.
- Section 24. Contractor Qualifications. Any person, firm or corporation engaged in the business of trimming or removing any parkway tree shall carry commercial general liability and property damage, auto and workers' compensation insurance at a minimum limit of \$1 million each. The insurance certificates must be on file with Risk Management Department and the City Clerk.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 25 to read as follows:

- <u>Section 25.</u> Removal. The Public Works Division will trim or remove any public owned tree or plant, including any part thereof, regardless of the location, if it is determined by the Manager or his/her designee that removal or trimming is necessary to eliminate any hazard or risk to public safety or property. The following are conditions permitting removal:
 - a) Where the tree, foliage or any limb, or the shrub or plant, is interfering with a primary structure, and there is no feasible alternative to mitigate the interference;
 - b) Where a written determination has been made, after a visual inspection and evaluation, that the tree is so diseased or damaged that it is no longer viable or it is a threat to property or to other trees;
 - Where the tree is so poorly formed due to stunted growth that its preservation would not result in any substantial benefit to the community;
 - d) Where the tree interferes with utility services, or any street or highway, and no reasonable alternative exists other than removal or trimming of the tree;



- Where the tree is a potential safety hazard due to the risk of it falling and its structural instability cannot be remedied; or where any other risk to persons or property is presented;
- f) Where the tree is causing damage to improvements including, but not limited to, any building foundation, retaining wall, roadway/driveway, sidewalk/curb, patio, and/or deck or is interfering with the use and enjoyment of property;
- g) Where the tree is host to an organism which is parasitic to another species of tree thereby endangered by the parasite; or
- h) Where the tree belongs to a species which is known to be pyrophitic or highly flammable and/or has been identified as a public safety hazard.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 26 to read as follows:

<u>Section 26.</u> Removal When – Appeal. A City tree shall be removed only if it meets one of the above stated conditions. If a resident does not agree with staff's decision on a removal request, they may appeal to the Manager. The Public Works Division will provide interested residents with information on the City appeal process. The City Manager and City Council will serve as the appeal body for the Development Services General Manager decisions.

Section 27. Inspection. The Manager or his or her designee may inspect any parkway tree or plant or any tree or plant standing on any private property which overhangs or projects over or into any street, park, alley or public place of the City, to determine whether it or any part of it is in such condition as to constitute a safety hazard or impediments to the progress or vision of anyone traveling in the street, park, alley or public place. However, nothing herein shall authorize the Manager to enter private property without the consent of the owner or lawful possessor of the property, unless otherwise permitted by law.

Section 28. Development/Construction. All Parkway trees planted in a new subdivision shall be in accordance with the Parkway Tree Guidelines and shall be paid for by the sub divider, unless otherwise provided by the City Council. The City Council may require any sub divider to pay all cost of proper parkway tree planting along the streets of any new subdivision before approving any subdivision map

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 29 to read as follows:

Section 29. Protective Measures for Trees During Construction. The Manager or his/her designee shall determine during the project review process whether and to what extent conditions or measures will be required to protect parkway trees during construction. This decision shall be based upon the proximity of the construction activity to parkway trees. The conditions and protective measures include, but are not limited to the following:



- a) The parkway trees shall be enclosed by chain link fencing with a minimum height of five feet or by another protective barrier approved by the Manager prior to the issuance of grading or building permit and prior to commencement of work.
- b) Barriers shall be placed at least five feet outside the drip line of parkway trees. The Manager, if appropriate to the species and the adjacent construction activity, may approve a lesser distance.
- c) There shall be no grade changes within the protective barriers without prior approval. Any roots greater than two inch in diameter, which are damaged or exposed, shall be cleanly saw cut and covered with soil in conformance with ISA standards.
- d) Excavation or landscape preparation within the protective barriers shall be limited to the use of hand tools and small hand-held power tools and shall not be used at a depth that could cause root damage to the parkway tree.
- e) No attachments or wires other than those of protective or non-damaging nature shall be attached to a parkway tree.
- f) No equipment or debris or any kind shall be placed within the protective barriers. No fuel, paint, solvent, oil, thinner, asphalt, cement, grout or any other construction chemical shall be stored or allowed in any manner to enter within the protective barrier.
- g) If access within the protective barrier around a parkway tree is required during the construction process, the route shall be covered with a six-inch mulch bed in the drip line area, and the area shall be aerated and fertilized at the conclusion of the construction.
- When the existing grade around a parkway tree is to be raised, drain tiles shall be laid over the soil to drain liquids away from the trunk, as determined by the Manger or his or her designee. The number of drains shall depend up on the soil material. Lighter sandy soil and porous gravelly material require fewer drains than heavy non-porous soils like clay. Dry wells shall be large enough to allow for maximum growth of the trunk. Dry well walls shall be constructed of materials that permit passage of air and water.
 - When the existing grade around a parkway tree is to be lowered, either by terracing or by a retaining wall, a combination may be used to lower grades, as determined by the Manager or his or her designee. With either method, the area within the drip line shall be left at the original grade. The retaining wall shall be porous to allow for aeration.
 - j) Parkway trees that have been destroyed or have received major damage during construction shall be replaced prior to final inspection and subject to the Manager's direction and approval as to size, variety and species.



<u>Section 30.</u> Hardscape. In keeping with the City's policies for protecting and preserving the health and well being of our urban forest while providing for the safety of our citizens, the following guidelines have been established for correcting potentially hazardous situations that result from tree roots disturbing nearby hardscape.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 31 to read as follows:

Section 31. Damage. There are several factors that must be considered in determining the course of action necessary for addressing hardscape damage concerns that involve City trees. These actions are driven by the extent of the damages, and whether the damages are located on private property. The Public Works Division shall whether the damages are located on private property. The Public Works Division shall whether the damages are located on private property include potential damage to inspect all hardscape damage. If the hardscape concerns include potential damage to private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation. Upon initial private property, the matter shall be referred to the Manager for evaluation.

- a) Hardscape damage is within the public right-of-way and will require a temporary asphalt ramp, followed by permanent repair of the area at a later date. Generally, an asphalt ramp should be installed if there exists a deviation in the concrete that is greater than three-fourths (3/4) of an inch.
- b) Hardscape damage within public right-of-way but is of such a minor nature that the damaged area can be "ground down" by a concrete grinding machine. Any deviation in the concrete of less than one-half (1/2") of an inch should be able to be rectified by grinding the raised lip down to grade. If necessary, permanent repair of the area should be scheduled for a later date.
 - c) Hardscape damage within public right-of-way, but the nature of the damages cannot be rectified by temporary measures. Thus, permanent repair of the area will need to be scheduled based upon the potential damages for creating a public safety hazard.
 - d) Hardscape damages are on private property and thereby cannot be addressed by the City. However, there are clear-cut indications that at addressed by the City. However, there are clear-cut indications that at addressed by the City. However, there are clear-cut indications that at addressed by the City. Thus, the resident may have reason to file a in the public right-of-way. Thus, the resident may have reason to file a claim, claim for damages with the City. If the resident does elect to file a claim, claim for damager or his or her designee shall be responsible for evaluating the damaged area and submitting a tree assessment report to the City Clerk for inclusion with the claim file.
 - e) Hardscape damages are on private property and thereby cannot be addressed by the City, and there exists no clear-cut indication that a City tree is the source of damages. Thus, the resident will be responsible for excavation of the damaged area, for the purpose of exposing any invasive roots, should they wish to file a claim for damages with the City.

- f) Hardscape damage is on private property, and is clearly caused by a City owned street tree, in the public right-of-way.
- Upon excavation of the area, it is the resident's responsibility to contact the Public Works Division and schedule an evaluation and assessment of the damage. The Manager's designee shall be responsible for submitting this assessment report to the City Clerk for inclusion with the resident's claim.
- h) Once a course of action has been determined, staff shall be responsible for providing written notification to the involved parties informing them of staff's findings and of what measures they or the City will need to take to rectify the problem.

Section 32. Repairing or Replacing Hardscape. The general policy that shall be observed when repairing or replacing hardscape adjacent to a public right-of-way tree is that the health and integrity of the tree shall be taken into consideration before work commences. Every effort shall be made to protect the tree from root or trunk damage.

Section 33. New Hardscape Installation. Several alternatives are available for accommodating the installation of new hardscape without severely infringing upon a tree's root system. The Public Works Division shall first evaluate any hardscape installation that may involve the removal of an extensive portion of a tree's root system. If it is determined by the Public Works Division that the removal of the offending roots might jeopardize public safety or the health or integrity of the tree, then one of the following alternatives should be considered:

- a) Off-Set. An offset is the tapering or reduction of a sidewalk's size down to a width no less than forty-eight (48") inches.
- b) Ramping. A sidewalk may be constructed to ramp over offending roots, as long as the slope of the grade does not exceed one (1') foot of elevation change within a span of twelve (12') linear feet.
- c) Reconfiguration. Sidewalks do not need to be constructed in a straight line. If the public easement can accommodate it, a sidewalk may be reconfigured to curve around a tree in a suitable manner.
- d) Removal. If no other hardscape installation alternative is feasible, a tree may be removed, as long as it complies with the Tree Removal criteria established in this Chapter.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 34 to read as follows:

<u>Section 34.</u> Interference With Work. No person shall interfere, or cause any person to interfere with, the Manager or persons acting under his or her authority while engaged in planting, mulching, pruning, spraying, treating, trimming or removing any parkway tree, shrub or plant or in the removal of any stone, cement or other substance or plant material from or adjacent to the trunk of any parkway tree. No person shall



injure or destroy any parkway tree by any means, including, but not limited to the following:

- a) Constructing concrete, asphalt, brick or gravel sidewalk, raised planter or otherwise filling up the ground area around any tree so as to substantially shut off air, light, or water from its roots, or detrimentally restrict root growth.
- Piling building equipment, material or any other substance around any tree so as to cause injury;
- Pouring, spraying or depositing any deleterious substance around any tree or on the surrounding ground, lawn or sidewalk;
- Posting of any sign, poster, notice or other object on any tree, tree stake or guard;
- e) Causing any wire charged with electricity to come in contact with any tree;
 or
- f) Causing any fire or burning near or around any tree.

Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 35 to read as follows:

Section 35. Penalties for violation of Ordinance. It shall be unlawful for any person, firm, partnership or corporation to violate any provision of or to fail to comply with any of the requirements of this Ordinance. Any person, firm, partnership of corporation violating any provision of this Ordinance or failing to comply with any of its requirements shall be deemed guilty of a misdemeanor and upon conviction thereof shall be subject to a fine One Thousand Dollars (\$1,000.00) or the diminishment of the trees value as set forth in the current edition of the Guide Per Plant Appraisal (Council of Tree and Landscape Appraiser, 10th Edition) whichever is greater, by imprisonment not exceeding six (6) months, or both. Each and every person, firm, partnership, or corporation shall be deemed guilty of a separate offense for each and every day or any portion thereof during which any violation of any of the provision of this Ordinance is committed, continued or permitted by such person, firm, partnership or corporation, and shall be subject to penalties and imprisonment provided in this Section.

- a) In the event more than one tree subject to the provisions of this Chapter is located adjacent to a parcel of property, each tree that is removed or trimmed shall be considered a separate violation.
- b) Removal or trimming of any parkway tree or plant is a misdemeanor and shall require replacement within sixty days of notice by the City. Such replacement shall be in accordance with the Parkway tree Guidelines.
- Violation of this Chapter during construction activity may result in an immediate stop-work order issued by the City.



<u>Section 36.</u> Violation – Nuisance – Abatement. The violation of any of the provisions of this manual shall constitute a nuisance and may be abated by the City through a civil process by means of a restraining order, preliminary or permanent injunction or in any other manner provided for by law for the abatement of nuisances.

<u>Section 37.</u> If any provision(s) of this ordinance or the application thereof to any person or circumstances is held invalid or unconstitutional by any court of competent jurisdiction, such invalidity or unconstitutionally shall not affect any other provision or application, and to this end the provisions of this ordinance are declared to be severable. The City Council hereby declares that they would have adopted this ordinance and each section, subsection, sentence, clause, phrase, part or portion thereof, irrespective of the fact that any one or more sections, subsections, clauses, phrases, part or portions thereof be declared invalid or unconstitutional.

<u>Section 38.</u> The City Clerk shall certify to the adoption of this Ordinance and shall transmit copies of the same to the applicant. The City Clerk shall publish the adopted Ordinance pursuant to California Government Code 36933 within fifteen days of its adoption.

Section 39. The Ordinance shall become effective thirty (30) days after the second reading approval date.

PASSED, APPROVED AND ADOPT	ED THIS DAY OF
ATTEST:	MAYOR JIM DEAR
CITY CLERK DONESIA L. GAUSE	
APPROVED AS TO FORM:	
CITY ATTORNEY	



Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Exhibit "A" to read as follows:

EXHIBIT "A"

PARKWAY TREE MASTER PLAN

PARKWAY TREE N	MASTER PLAN	
	Common Name Mi	nimum root area
Botanical Name	Queen palm	3'
1.) Syagurus romanzoffianum	King palm	2'
Archontophoenix cunninghamiana_	Crepe myrtle	3'
3.) Lagerstroemia indica	Brisbane box	6'
4.) Tristania/Lophostemon conferta	Orchid tree	6'
5.) Bauhinia purpurea	Yew Pine	8'
6.) Podocarpus gracilior	Cheesewood tree	6
7.) Pittosporum viridiflorum		3'
8.) Stenocarpus sinuatus	Firewheel tree	3,
9.) Cercis occidentalis	Redbud	4'
10.) Persea 'Haas'	Haas Avocado*	3'
11.) Psidium guavava	Guava*	3 4'
12.) Callistemon viminalis	Weeping Bottlebrush	
13.) Phoenix dactylifera	True Date palm (arter	rials) 4'
14.) Trachycarpus fortunei	Windmill palm	2'
15.) Tabebuia heterophylla	Pink Trumpet tree	3'
15.) Tapepula Helerophylia	Chinese Pistache	5'
16.) Pistacia chinensis	(fruitless varieties)	
and the state of t	Australian Willow	5'
17.) Geijera parvifolia	Strawberry tree	5'
18.) Arbutus unedo	Gold Medallion tree	4'
19.) Cassia leptophylla	London Plane tree	8'
20.) Platanus acerifolia	LUMON I MINO HOO	

^{*}City will not supply - Resident must purchase

Certain trees on this list require more room and most streets have designated trees.

Note: These trees are the only City approved species for parkways. Alternate trees will be considered, subject to approval from the Manager or his/her designee.



Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Exhibit "B" to read as follows:

EXHIBIT "B"

CITY OF CARSON PUBLIC WORKS DIVISION Application For Permit to Remove Street Trees

Date:	*
,, do herek	by request authorization from the City of
Carson to remove street tree(s) from with	in the public easement along the
property atStreet Na	ame/Addresses
in accordance with all City specifications. Said	work will begin on,
and will be completed by	
that, any contractor used to complete this	connected with the approved removal project; an project is licensed by the City of Carson to dwill be performed by a certified tree worker base erformed in a timely and workman like fashion.
Name of Contractor	Certified Arborist No.
Signature of Permit Recipient	Date
Authorized City Representative Signature	Date
Print Name	Title

*PERMIT EXPIRES 60 CALENDAR DAYS FROM THE ABOVE DATE



Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by omitting Exhibit "C" to read as follows:

EXHIBIT "C" Omit this page CITY OF CARSON PUBLIC WORKS DIVISION

Claim for Damage or Injury

NOTE: Certain procedures governing the filing of claims for money or damages are set forth in Title I, Division 3.6, Part 3 (Sections 900, et seq) of the Government Code, State of California. This Claim for Damage or Injury has been prepared in accordance with California Government Code, Section 910.4. When this form is used, please submit to the City Clerk's Department, City Hall, 701 E. Carson Street, Carson, CA 90745.

[] Original Filing	[] Amendment to Previous Claim
1.1-13	
Name of Claimant	Address (City, State & Zip Code)
Name of Statistics	
Address to Send Notices	Telephone Number (Include Area Code)
Place of Occurrence of Damage or Injury	Date of Occurrence of Damage or Injury
General description of damage or injury incurred so far	as it is known at the time of presenting this claim:
If submitting PHOTOGRAPHS, PLEASE ATTACH	H TWO (2) SETS
Author City Agency Author	ority or their respective employees caused the damage of
injury?	
(Include names of employees if known):	
Amount claimed, including the estimated amount	t of any prospective damage or injury, insofar as may be
known at the time of presentation of this claim	i, together with the basis & semperature
claimed (Attach estimate or invoices, if possible)	
	\$
	•
Names and address of known witnesses to dam	rage or injury
Names and address of known withesses to dame	age or many:
/	
Signature of Claimant	Date
Old Hard Co. C.	•



Notwithstanding the provisions of this section, the City Tree Preservation and Protection is hereby amended by amending Exhibit "D" to read as follows:

EXHIBIT "C"

CITY OF CARSON PUBLIC WORKS DIVISION Application For Permit to Prune Trees

Date:_		<u>*</u>	
,, C	do hereby rec	uest authorization fro	om the City of
Carson to prune street tree(s) alor	ng		in
accordance with all City specifications.	Street Name/Addre		, and
will be completed by	- -;		
I further agree to bear all costs and lia that, any contractor used to complet approved work; and that the approved on City Standards; and that, all work w	te this projed I work will be	ct is licensed by the performed by a cer	tified tree worker based
Name of Contractor		Certified Arborist No	D.
Signature of Permit Recipient		Date	
Authorized City Representative Signa	ature	Date	
Print Name		Title	

*PERMIT EXPIRES 60 CALENDAR DAYS FROM THE ABOVE DATE



Notwithstanding the provisions of this section, the City Tree Preservation and Protection is hereby amended by amending Exhibit "E" to read as follows:

EXHIBIT "D"

CITY OF CARSON PUBLIC WORKS DIVISION Application For Permit to Plant Street Trees

Authorized business representative/ property owner, do hereby	request authorization from the City of
arson to plantstreet tree(s) from within the	public easement along the property at
Street Name/Addresses	
n accordance with all City specifications, I will, w	ithin 60 days of said request install the
current, designated street tree:	
	(Common Name
that, any contractor used to complete this pro- approved work. Upon completion of the entire responsibility for said tree(s) to the City of Carso	e project, I shall relinquish the ownership
Name of Contractor	Certified Arborist No.
Name of Contractor Signature of Permit Recipient	
	Certified Arborist No.

*PERMIT EXPIRES 60 CALENDAR DAYS FROM THE ABOVE DATE



Notwithstanding the provisions of Section 3900, the City Tree Preservation and Protection is hereby amended by amending Section 2 to read as follows:

