

5 | URBAN FORESTRY STANDARDS

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5.1. Introduction

The following Urban Forestry Standards (standards) are the city's primary regulatory tool to provide for orderly protection of specified trees, to promote the health, safety, welfare, and quality of life for the residents of the city, to protect property values and to avoid significant negative impacts on adjacent properties. By ensuring preservation and protection through the following standards of care, these resources will remain significant contributions to the landscape, streets, and parks, and will continue to help define the unique character of Pacific Grove.

These Urban Forestry Standards establish specific technical standards and specifications necessary to implement the city's tree ordinance (Municipal Code Title 12, see Appendix A), and to achieve the city's tree preservation goals.¹ These goals are intended to provide consistent care and serve as benchmark indicators to measure achievement in the following areas:

- Ensure and promote preservation and restoration of the existing tree canopy cover within the city limits.
- Provide standards of maintenance required for protected and city-owned trees.
- Provide a standardized content for evidence based tree reports required by the city.
- Establish criteria for determining when tree risk exceeds community tolerance thresholds and management strategies need to be implemented in order to preserve public health, safety and welfare.
- Provide standards for the replacement of trees that are permitted to be removed.
- Increase the survivability of trees during and after construction events by providing protection standards and best management practices.
- Enforcement of these standards and associated regulations by authorized City staff and public safety personnel.

Comment [SH1]: Not consensus that this term is needed

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5.1.1 Required Practices

All of the standards described in this chapter are required practices unless noted otherwise (e.g. "recommended"). These required practices are to be

¹ Sections of this chapter were inspired by the City of Palo Alto's *Tree Technical Manual* (2001) for which the City of Pacific Grove is greatly appreciative. Other sources include the city's previous Tree Preservation and Protection ordinance (Chapter 12.16 of the Pacific Grove Municipal Code), professional input, and current best management practices.

implemented by the property owner, project applicant, contractor or designee - and are the minimum standards by which the care of a Protected Tree is to be administered. These Required Practices are considered reasonable measures that are consistent with best management practices in the tree care industry and are intended to promote healthy, structurally sound trees.

In all such cases, the Community Development Department, Public Works or City Arborist, if justified by field conditions such as conflict with utilities or a public nuisance, has the discretion to modify or add to any condition, practice or standard mentioned within the standards [with appropriate public notice](#).

Comment [SH2]: Not consensus that notice should be required in all circumstances

5.1.2 Recommended Practices

The Recommended Practices identified in this chapter are not mandatory. It should be noted, however, that a recommended practice may be required if it is so specified within the 'conditions of approval' for a development project or mitigation for injury or disturbance.

In all cases, the Director of Community Development, Public Works or City Arborist, if justified by changing field conditions such as conflict with utilities, has the discretion to modify, re-designate or add to any condition, practice or Standard mentioned within the standards.

5.1.3 Definitions

Certain terms that are unique to the arboricultural or construction industry are defined to provide a uniform understanding of the terms and concepts used and mentioned in this document. [The following definitions are also included in Appendix A --Pacific Grove Tree Ordinance](#), below.

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Comment [SH3]: Include in both places?

["Building Coverage" has the meaning assigned in Chapter 23.08 \(Zoning—Definitions\).](#)

["Community Tree Program Fund" means a dedicated city fund comprising donations, moneys appropriated by the city council, fines, Tree damage assessments, and in-lieu fees collected under the authority of this title and established by the city council in the city's master fee schedule. Community Tree Program Fund expenditures shall be used solely for the planting and maintenance of Street Trees and Trees on city property.](#)

["Development" has the meaning assigned in Chapter 23.08 \(Zoning—Definitions\).](#)

["Discretionary development approval" has the meaning assigned in Chapter 23.08 \(Zoning—Definitions\).](#)

["Feasible" means capable of being implemented, taking into account such factors as safety of persons and property, the environment, aesthetics, and economic considerations.](#)

["Hedge" means and includes any plant material, shrub or plant, when planted in a dense, continuous line or area, as to form a thicket or barrier.](#)

"High-Risk Tree" means an imminent hazard or threat to the safety of persons or property.

"Invasive Tree" means a Tree that is not Native to the Monterey Peninsula and that has the ability to thrive and spread aggressively on the Peninsula. They tend to disrupt the natural habitat, squeeze out native plants and animals, and reduce biodiversity.

"Lower Canopy Tree" means a tree of a species that tends to be less than 40 feet tall at maturity. Lower Canopy Trees tend to have leaves and needles larger and softer than those of Upper Canopy Trees, better able to catch the available light and with less need to defend against the buffeting of the wind and rain. Most Lower Canopy Trees, including the ornamentals and fruit trees, are not native to the Monterey peninsula.

"Native Tree" means a species that was common on the Monterey Peninsula prior to the arrival of Europeans. These Trees, such as the Monterey pine and Monterey cypress, co-evolved over a very long period with other plants, animals, fungi, and microbes, to form the complex network of mutually reliant relationships found in the Peninsula's native ecosystems.

"Parks" means and includes all Parks to which names have been given by action of the city council.

"Person" and "Persons" means and includes any all individuals, partnerships, firms, associations, corporations, governmental agencies, and other legal entities, and the agents, employees, and representatives thereof.

"Plant" means and includes all other plant material, non-woody, annual, or perennial in nature, not necessarily hardy.

"Protected Tree" means those Trees as defined in Section 12.16.100 and described in more detail in the Urban Forestry Standards.

"Prune" or "Pruning" means to Remove dead growth, tip live branches, thin live foliage, or a combination. Pruning does not include topping.

"Prune Substantially" or "Substantial Pruning" shall apply to both above-surface and underground cutting or Removal. With reference to branches, either term shall mean cutting or Removal of more than 25 percent of the live branches of the entire Tree within a 12-month period; or Removal of foliage so as to cause the unbalancing of a Tree; and/or cutting or Removal of any live limb with a diameter of 6 inches or greater or a circumference of 19 inches or greater at any point on such limb. With reference to roots, either term shall mean cutting or Removal of any root 4 inches or greater in diameter.

"Public property" means and includes all grounds, other than Streets or Parks, owned by or leased to and under the control of the city of Pacific Grove or other governmental agency.

"Public Trees" means all Street Trees and all other Trees located on Public Property.

"Qualified Professional" means a Person who possesses the credentials, degrees, or qualifications that support the resource-specific skill required to adequately prepare and submit Tree Reports, including:

- A Person designated by the International Society of Arboriculture as a: Certified Arborist; Municipal Specialist; Board Certified Master Arborist; or Certified Tree Risk Assessor.
- A Person designated by the American Society of Consulting Arborists as a: Registered Consulting Arborist.
- A degreed Forest Ecologist.

"Remove" or "Removal" means any of the following:

- Complete Removal, such as cutting to the ground or extraction, of a Tree.
- Taking any action foreseeably leading to the death of a Tree or permanent damage to its health; including but not limited to excessive pruning, cutting, girdling, poisoning, overwatering, unauthorized relocation or transportation of a Tree, or trenching, excavating, altering the grade, or paving within the Tree Protection Zone.

"Review Authority" means the city official or body responsible for reviewing and making decisions on permit requests, either initially or on appeal.

"Root Crown" means the zone of transition between the Tree trunk and supporting roots.

"Shrub" means and includes any woody perennial plant, normally low, several-stemmed, and capable of being shaped and pruned without injury, within the area planted.

"Snag" means mean a dead tree, generally ranging between 12 and 30 feet high, from which the top and a majority of the branches have been removed, in order to provide wildlife habitat.

"Street" means and includes all land lying between the boundaries of property abutting on all public Streets, boulevards, alleys and walks.

"Street Tree" means any Tree whose trunk is located all or primarily within the Street easement or on public property between the Street right of way and a Street-facing property.

"Substantial Pruning"—see "Prune substantially."

"Suitable" shall mean appropriate to the situation, taking into account: safety of persons and property; environmental values such as wind break, soil erosion, and wildlife habitat; Tree density; Tree health; aesthetic results; and economic factors.

"Tree" means any woody plant that has a trunk four inches or more in diameter at four and one-half feet (54 inches) above natural grade level. For purposes of this title, a multi-trunk Tree shall be considered a single Tree and the circumference of that Tree shall be the sum of the circumferences of the trunks of that Tree.

"Tree Protection Zone" means that area around each Protected Tree whose outer edge is a circle, the radius of which equals the trunk diameter in inches (at 54 inches above grade) times 1.5 with the resulting product measured in feet (e.g., 8 inches x 1.5 = 12 feet), or the outer edge of the Tree's leaf canopy, whichever is larger.

"Tree Report" means a Tree assessment report meeting the standards specified in prepared by a Qualified Professional.

"Tree Service Contractor" means any Person providing tree trimming and removal services for a fee or other consideration.

"Upper Canopy Tree" means a Tree of a species that tends to be taller than 40 feet at maturity and is able to thrive (when mature) in circumstances providing greater direct exposure to the sun and wind. The leaves and needles of the upper canopy tree are often tough, to withstand drying without damage when moisture is less readily available. Upper Canopy Trees Native to the Monterey peninsula include Monterey pine, Monterey cypress, Monterey cypress, Monterey pine, and Torrey pine. Upper canopy trees provide shelter and shade for species lower in the canopy and on the ground.

"Urban Forestry Standards" means the regulations issued to implement this title, as found in the eponymous chapter of the Urban Forest Management Plan.

5.1.4 Coastal Zone Standards

The Local Coastal Program (LCP) Land Use Plan policies apply to tree management practices in the Coastal Zone. The LCP Land Use Plan is an element of the City's General Plan. Development of this Urban Forest Management Plan is a recommended action of both the General Plan and the LCP Land Use Plan. Within the coastal zone area of the City, the LCP Land Use Plan shall take precedence over the General Plan and Urban Forest Management Plan where policies are similar or conflict. All development projects must take into consideration the LCP Land Use Plan as well as the UFMP requirements. If policies within this plan overlap or conflict, the policy that is the most protective of coastal resources shall take precedence.

The coastal zone of Pacific Grove contains several land habitats that are considered environmentally sensitive in the LCP Land Use Plan, including the shoreline pine forest/sand dune association and the pine/eucalyptus overwintering habitat of the Monarch butterfly. Policies in the LCP Land Use Plan that address the urban forest include, but are not limited to:

- Designing new development in the Asilomar Dunes area (bounded by Asilomar Avenue, Lighthouse Avenue, and the boundary of Asilomar State Park) to protect existing and restorable native dune plant habitats, as well as the native oaks and pine forest which stabilize the inland edge of the high dunes along Asilomar Avenue southwards from the vicinity of its intersection with Pico Avenue.
- Designing new development within the scenic forest-front area along Asilomar Avenue to minimize loss of native Monterey pine and oak forest, and to retain public views towards the inland face of the high dunes.

- Retaining the scenic native forest within Asilomar Conference Grounds, along Asilomar Avenue, and within the abandoned railroad right-of-way, shall, to the maximum feasible degree.
- Protecting, or, when necessary, replanting, landscape trees which contribute to the scenic views in the City's coastal zone.

5.1.5 Assumptions and Limiting Conditions

- No responsibility is assumed by the City of Pacific Grove for matters legal in character regarding these standards. Any legal description that may be provided is assumed to be correct.
- Care has been taken to obtain reasonable information from reliable sources for these standards.
- Visual aids within the standards, such as sketches, diagrams, graphs, photos, are not necessarily to scale and should not be construed as engineered data for construction.
- These standards have been crafted to conform to current standards of care, best management practices, evaluation and appraisal procedures, diagnostic and reporting techniques and sound arboricultural practices.

5.2. Pacific Grove's Protected Trees

5.2.1 Pacific Grove Municipal Code

Title 12 protects specific trees on public or private property from removal or disfigurement. The standards establishes procedures and regulations for the purpose of encouraging the preservation of trees. Trees that fall within the following categories are considered "Protected Trees", and must be maintained in accordance with the standards and regulations described in this chapter. A permit from the Planning or Public Works Department is required prior to removal or substantial pruning of a Protected Tree. Trees that are not in any of these categories may be maintained or removed without city review or approval.

Comment [SH4]: Defined term

Deleted: alteration

5.2.1.1 Protected Trees

Trees of the most importance to the community, because of their species, heritage, location, significant benefits or other factor shall be designated in the community's interest as Protected Trees. In making this determination, the City recognizes that it is identifying a shared responsibility regarding these resources. Suitable species planted in appropriate sites benefit both the owner of the property they grow on and the community as a whole. All property owners – both public and private – share a common responsibility for management of the City's overall urban forest, with special reference to Protected Trees.

The following tree species are protected in the City of Pacific Grove. All Protected Trees that require a permit for substantial pruning or removal are 6 inches or greater in diameter (measured at 54 inches above natural grade).

Comment [SH5]: Recommendation to protect all tree species, not just native ones, based on tree size such as greater than six inches in diameter at 54" – UFAC consensus?

Deleted: alteration

Deleted: 36 inches in circumference

Oak

All Coast live oak (*Quercus agrifolia*)

The Coast live oak leaf (left) is oval-shaped with stiff prickly points.



Cypress

All Monterey cypress (*Cupressus macrocarpa*)

Monterey cypress columnar or cone-shaped when young, but becomes broad and spreading with age. The bark is fibrous and rough. The leaves are lemon scented, bright green, scale-like, 2-5 mm long.



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Pine

All Monterey pine (*Pinus radiata*)

The Monterey pine grows to between 15–30 m (49–98 ft) in height in the wild, but up to 60 m (200 ft) in cultivation in optimum conditions, with upward pointing branches and a rounded top. The leaves ('needles') are bright green, in clusters of three. The bark is fissured and dark grey to brown.



Deleted: and Torrey pine (*Pinus torreyana*)

Coast Redwood

All Coast redwood (*Sequoia sempervirens*)

The "leaves" of the Coast redwood are needle-like and flat, measuring about half an inch long. The bark is quite thick, has a reddish color and quite fibrous.



Comment [SH6]: Not consensus that Redwoods are native or that they should be protected if limiting Protected Trees by species.

5.2.1.2 Monarch Butterfly Habitat Trees

All trees growing in and within 100 yards of Monarch Grove Sanctuary and George Washington Park, defined as follows:

- Monarch Grove Sanctuary. That portion of land bordered on the east and west by Ridge Road and Grove Acre Avenue, respectively, on the south by Short Street, and on the north by the northerly boundary of assessor's parcel numbers 006-361-30-031, -032, -033, and -034, extended from Grove Acre easterly to Ridge Road.
- George Washington Park. That portion of land bordered on the east and west by Alder Street and Melrose Avenue, respectively, on the north by Pine Avenue, an on the south by the imaginary extension of Junipero Avenue westerly from Alder to Melrose Avenue.

Pruning or removal of trees in designated Monarch Butterfly Habitat Trees shall be prohibited except as prescribed in the Monarch Grove Sanctuary Management Plan or upon a finding by the City Council that such is necessary for proper maintenance of the site or for public health, safety or welfare.

Pruning or removal of trees in designated Monarch Butterfly Habitat Trees, or within 100 yards of any boundary of such site, shall be prohibited during the months of October through April unless deemed necessary by the city council for public health, safety or welfare, as required by City Code.

Private property owners surrounding the Monarch Grove Sanctuary are encouraged to plant trees to serve as windbreaks.

5.2.1.3 Public Trees

All trees growing within the public street right-of-way, outside of private property. In some cases, property lines lie several feet behind the sidewalks. A permit from the Public Works Department is required prior to any work on or within the tree protection zone of a public tree. [See Figure 2-7, Public Lands and Open Space.](#)

Standards to be followed in planting, maintaining, pruning, and removing trees on public property (other than street trees) include the following:

1. Planting shall occur at reasonably constant rates over time so as to ensure continual renewal of the urban forest.
2. The appropriate variety of tree species shall be planted, so as to ensure no single event (e.g., species-specific disease) can harm a large proportion of the urban forest.
3. Native trees shall be preferred, except where special circumstances warrant otherwise (e.g., a proportion of eucalyptus trees in the Monarch Sanctuary).
4. Best management practices shall be employed at all times. The standards to which the city adheres shall be as high as or higher than the standards that owners of private property within the city are expected to adhere. [Best management practices should avoid conflicts with utilities and infrastructure, further discussed in Section 5.6.6.](#)

Comment [SH7]: Add a size requirement for removal of Public trees (>6" diameter?)

Deleted: (publicly-owned)

Comment [SH8]: Need to clarify appropriate street tree species, based on location

Comment [SH9]: Definition added above and to ordinance

5.2.1.4 Designated Trees

All trees, regardless of species, when substantial pruning or removal is associated with a development project, that are specifically designated by the city to be saved and protected on a public or private property which is subject to discretionary development review; such as a variance, architectural review, site and design, subdivision, etc. Approval from the Community Development Department is required to remove a Designated Tree.

Comment [SH10]: UFAC concern with who should be the appropriate Department or staff for approving tree removal associated with development.

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5.2.1.5 Significant Trees

Add category for large trees that are not native or in a Protected tree category and develop a registry of significant trees (based on age, location, or size?) for protection.

5.3. Removal, Replacement and Planting of Trees

A Protected Tree may not be removed without city review and approval, except in certain emergencies. The purpose of city review is to verify that the removal is allowed under city regulations and requirements, and to prevent unnecessary tree removal. For standards related to High Risk Trees, see Section 5.2.

This section describes the type and size of tree required for replacement, and the planting techniques to be used. It also describes how to determine the replacement value of a tree that cannot be replaced in its original location, and the circumstances in which the city may require a bond, in the amount of the appraised value of the trees to be preserved, to be posted to assure the survival of trees during development projects.

Comment [SH11]: Further discussion needed, concern about administration and practicality of bonding

The substantial pruning, of any Protected tree that does not conform to the most current American National Standards Institute (ANSI) A-300 Standards or International Society of Arboriculture Best Management Practices shall require a City permit. This includes excessive pruning, topping or pruning that damages branch structure, crown shape and/or stability beyond repair.

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Deleted: (pruning)

Comment [SH12]: Consider a separate section on pruning and clarify when it can be done without a permit

5.3.1 Tree Removal

5.3.1.1 Allowable Removal

A permit is required to remove or substantially prune a Protected Tree, except in emergency situations outlined in high risk trees (see below).

Comment [SH13]: Add criteria for removal of multiple trees under 6" diameter (consensus?)

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5.3.1.2 Tree Removal Criteria

Standards and criteria to be observed during tree removal and substantial pruning are as follows:

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1. A tree shall not be removed or substantially pruned for the primary purpose of securing or improving a view, for acquiring more sunlight or air, or to reduce litter.

2. A tree that serves as part of the windbreak system, or assists in drainage or the avoidance of soil erosion, or serves as a component of a wildlife habitat, is to be preserved if at all feasible.

3. No tree can be pruned to an extent that destroys its identity as a tree, unless conditions for removal exist.

4. Tree Condition criteria:

a) The tree is dead with no living foliage and in falling would conceivably strike a use area, personal/public property or a Protected tree.

Comment [SH14]: Clarify that dead branches can be removed without a permit, if less than "substantial" pruning

b) The tree poses a high risk to the immediate area that cannot be mitigated through prescriptive treatments.

c) Tree Risk Assessment Level (defined in Section 5.2) is greater than 6 and alternative risk reduction treatments have been considered, are not feasible, or would not mitigate the risk to an acceptable level, including:

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i) Risk reduction pruning

ii) Cabling or bracing

Comment [SH15]: This should be voluntary, not required

iii) Propping

iv) Relocating the target

d) The tree is irretrievably infested with insects that vector disease or result in mortality and may infect/attack adjacent trees that cannot be preventatively treated.

e) The tree is infected with Pitch Canker and crown damage exceeds 50% of total canopy volume.

Comment [SH16]: Change to 90% - not consensus

5. Trees that are causing or starting to cause significant damage to hardscape (house foundations, driveways, retaining walls, patios etc.), utility service lines or infrastructure (streets, curb, sidewalk, storm drain etc) that cannot be mitigated with cost effective, low risk, remedial solutions (see Section 6.6 – Trees and Infrastructure).

6. Trees identified as a nuisance and causing illness or emotional distress as verified by a Medical Doctor.

7. Trees with high pollen counts that cause incurable allergies if verified by a Medical Doctor.

Comment [SH17]: Criteria not consensus

8. Trees with heavy cones or fruit drop that cannot be reasonably cleaned or targets relocated.

9. Trees in densely planted areas where thinning is the proper forestry practice.

Comment [SH18]: Criteria not consensus

10. Healthy trees with equal sized trees or full appraised value as mitigation.

11. Invasive species as identified by Landscape Trees for Pacific Grove, California Invasive Plant Council and/or the California Invasive Species Advisory Committee.

12. The visual prominence and function of each tree on the site will be considered prior to a decision on the removal or substantial pruning.
13. The City Arborist may refer permit applications to the Natural Resources Commission for review and recommendation.
14. Trees of unusually large size, high visibility, or extraordinary aesthetic quality may be required to be replaced by specimen trees as deemed appropriate by the City Arborist.
15. All work done under a permit shall be performed according to the standards of the International Society of Arboriculture.

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Comment [SH19]: Criteria not consensus – clarify types of situations where this may occur

5.3.2 Tree Replacement

In order to maintain and enhance current benefits and canopy coverage levels, replacement of removed trees shall be required to restore the size, benefits and functions of the removed tree(s).

At the discretion of the City Arborist, replacement tree planting may occur offsite, on public lands when lot size or the property owner does not support tree planting.

Comment [SH20]: Not consensus

Required tree replacement may also be achieved by paying in-lieu fees to the Pacific Grove Tree Fund.

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Replacement trees species may be selected from Landscape Trees for Pacific Grove, A Guide to Selection, Planting and Care, incorporated herein.

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Comment [SH21]: Consider revising this document to only list prohibited or discouraged trees. Don't require replacement of same species if not right tree in right place

5.3.2.1 When Tree Replacement is Required

The following conditions determine whether or not a protected or designated tree must be replaced:

Protected Trees

If the city authorizes removal of a protected tree because it is dead, dangerous, or a nuisance, as verified and documented in the field, tree replacement is required but no fee will be charged. In all other cases, the tree must be replaced.

Comment [SH22]: Not consensus that a permit or notice should be required for dead tree removal

Deleted: no

Monarch Butterfly Habitat Trees

See Section 12.16.100(2) of the Pacific Grove Municipal Code.

Public Trees

If the city authorizes removal of a Public Tree in connection with a development project or city funded improvement project, it shall specify the replacement requirements in the permit authorizing removal. In no case shall the replacement be less than the existing number of trees.

Designated Trees

When authorizing removal of a Designated Tree, the City Arborist shall require tree replacement if it is necessary or desirable to implement the intent of the original

site design. The number and nature of the replacement trees will be determined by the City Arborist, taking into consideration the value of the tree removed and the site design.

5.3.2.2 Tree Replacement Criteria

Tree Species and Placement

The right tree in the right place maximizes the net benefits to the property owner and community and minimizes the risks associated with trees. Inappropriate tree selection and placement is often the underlying cause for trees that become high risk, are prone to breakage, or develop recurring pest or disease problems. Inadequate planting sites are often responsible for poor tree growth and survival, or excessive hardscape damage.

Number of Trees

Residential Properties

The community benefits when properties -- both public and private -- share equitably in the burden of providing Protected Trees. Meeting the tree canopy coverage goals established in this UFMP applies to both public and private property owners. Thus, the following minimum standards are established as best representing the nature and scope of tree replacement:

Table 5-1: Tree Canopy Coverage Goals for Residential Properties

Lot Size (SF)	Upper Canopy Trees	Lower Canopy Trees
Up to 4,000	0-1	1-2
4,001-6,000	2	2-3
6,001-8,000	3	3-4
Over 8,000	As determined by the appropriate Review Authority	As determined by the appropriate Review Authority

Comment [SH23]: Further discussion needed. Clarify that this is the rule, not the exception. Need to add requirement to document and validate any deviations from these standards. Add maximum number of trees to be replaced?

Comment [SH24]: Quantify?

Commercial and Public Properties

One tree per 30 feet of frontage, with a minimum of two trees, if space is available.

These tree density-per-lot standards are intended to achieve a mixed, healthy forest, and may be adjusted by the City Arborist or Review Authority in individual circumstances, taking into consideration individual site constraints and opportunities.

Parking Lots

Three trees per 25 spaces or in conjunction with low impact development landscaping for stormwater management.

Comment [SH25]: Insert pictures to illustrate

Other Considerations

While the above Standard shall serve as a general threshold for tree replacement, the City Arborist shall determine the final tree replacement

Comment [SH26]: Concern about the amount of arborist discretion – not consensus

requirements (number, size, species and placement) based on the following factors and taking into consideration the needs of the property owner:

- The tree canopy coverage target as described in this UFMP
- Neighborhood, use or district objectives
- Existing canopy coverage on the lot
- Land use
- Lot size
- Available space
- Topography and soil conditions
- Stormwater management
- Viewshed protection
- Long-term health potential of the replaced tree
- Existing infrastructure and potential for adverse impacts
- Adjacent properties and uses
- Condition of the removed tree. **Dead trees do not require replacement.** Diseased or structurally unsound trees may be replaced at lower levels.

Comment [SH27]: Reconsider – not consensus

Native species are required as replacement trees on lots greater than 4,000 square feet. On lots less than 4,000 square feet, replacement tree species should be selected from the most recent edition of the *Landscape Trees for Pacific Grove – A Guide to Selection, Planting and Care*. The replacement trees may be the same species or may be another species that is considered by the City Arborist to be more suitable for the location.

Comment [SH28]: Encourage? Not consensus

Comment [SH29]: Remove? Further discussion needed

In order to maintain the existing coniferous tree cover, particularly in the area between Sunset Drive and Seventeen Mile Drive, replacement planting are required to be with pitch canker resistant Monterey pines if available and where feasible. Otherwise, Monterey cypresses and other species of pines as recommended by the City Arborist may be used.

5.3.2.3 Alternatives When Trees Cannot Be Replaced on Site

Comment [SH30]: Delete entire section? Not consensus

In some circumstances, crowding or other physical constraints make it impossible or undesirable to replace a tree on site. In that case, the value of the tree shall be a fixed fee based on size.

Deleted: determined using the most recent edition of the *Guide for Plant Appraisal* published by Council of Tree and Landscape Appraisers or the *Form for Northern California* established by the International Society of Arboriculture

Once the value has been determined, that sum of money (an in-lieu fee) will be deposited in a city-maintained Tree Fund to be used, as approved by the City Arborist: 1) to provide additional trees elsewhere on the site; 2) to add or replace Public trees or other public landscaping in the vicinity, 3) to add trees or other landscaping to other city property, 4) to assess and mitigate high-risk trees, 5) to execute tree replanting consistent with the goals and implementation strategies identified in this UFMP.

Deleted: Trust

5.3.2.4 Maintenance and Monitoring of Replacement Trees

The City Arborist shall verify replacement trees have been replanted or in-lieu fees collected within 60 days of permit issuance or prior to final building inspection, for tree removal associated with development projects.

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Locations of replacement tree plantings for both public and private properties shall be verified, with photographic documentation or in the field, identified on map (in GIS) and input to the City Tree Inventory database by the City Arborist, or their designee.

Deleted:

Deleted: six (6) month intervals for a period of five years

Comment [SH31]: Also require monitoring at year 10? Not consensus

Deleted: new subdivision

To ensure the survivability, proper growth and maintenance in perpetuity of the replacement trees, success criteria is defined to meet an 100% survival rate, implemented as follows:

Deleted: The value of the tree will be determined using the most recent edition of the *Guide for Plant Appraisal* published by Council of Tree and Landscape Appraisers.¶

A qualified professional shall monitor the newly planted tree at a one year and five year interval.

Deleted: 5.3.2.7 Public Trees and Adjacent Private Property Owners¶

- Tree health and growth rates will be assessed.
- Trees suffering poor growth rates or declining health will be identified.
- Invigoration treatments will be provided.
- Dead trees or trees in an irreversible state of decline will be replaced with the next larger container size.
- At the end of the five-year period the status of replacement plantings will be assessed to make certain that success criteria has been met and all mitigation trees planted are performing well.
- The "Qualified Professional" shall submit by annual monitoring reports to the City Arborist in order to verify replacement trees are viable.

Public Tree plantings will be considered first from the perspective of the people passing on or using the streets, the benefits to storm water management, the extension of pavement life as a result of the shade they provide, and from the other broader community benefits. Of secondary consideration is the enhancement, embellishment, or other benefits to the properties abutting the street.¶

No Public Tree shall be planted, topped, substantially pruned, transplanted, removed, or otherwise damaged, without the approval of Public Works Superintendent. Planting of Public Trees shall be in conformance with an approved landscaping street plan, where applicable.¶

The city is responsible for maintaining all Public Trees along city streets not planted by private property owners.¶

A property owner's responsibility for Public Tree maintenance of trees planted by the property owner includes irrigation, pruning, keeping the right-of-way planting area free from weeds, debris, or other obstructions inimical to public safety and/or contrary to the street tree plan, and otherwise maintain such areas in a neat, clean, and orderly manner. ¶

Any person intending to use material for the planting of tarpaper, plastic, or other impermeable material over the ground, or the use of materials or chemicals intended to permanently sterilize the soil of these areas, shall seek out the advice and proper installation and/or application of these materials from an expert or consultant prior to planting.¶

Private property owners may remove any dead, high risk, or diseased tree not protected by this section, or device necessary for the protection thereof, from public streets along street frontages on or adjacent to their property.¶

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5.3.2.6 Tree Planting in New Subdivisions

Before any street improvements in any major development of real property in the city are accepted by the City Council, the applicant shall pay to the city the total cost for purchasing and planting of all trees to be planted along all streets.

After receipt of payment, the city will plant the trees at the proper time as determined by the City Arborist, but not more than 3 months following issuance of the final building permit.