

CITY OF PALO ALTO  
**TREE TECHNICAL MANUAL**  
STANDARDS AND SPECIFICATIONS

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**SECTION 6.00 TREE REPORTS**

INTRODUCTION

An arborist report is needed for development projects and tree removal permits. The report must be prepared by a certified arborist for the applicant and submitted to the City for the purpose of providing accurate information and opinion regarding the condition, welfare, maintenance, preservation or value of a *protected or designated* tree.

Required Practices

**A. When a written report is required**

Generally, there are two circumstances in which tree reports are required: 1) when a tree removal permit is sought, and 2) to complete and verify a site plan, assess tree impacts and establish tree protection for property development when within the dripline of a *protected or designated tree*. Types of report formats are: *Letter Report, Tree Survey, Tree Protection and Preservation Plan* and *Tree Appraisal*.

**B. Who may prepare the report**

The tree report is to be prepared by a certified arborist retained by the applicant or property owner. This person shall possess a current ISA certification (*see Certified Arborist, Section 1.00*); be a member of the American Society of Consulting Arborists; or a member of good standing in another nationally recognized tree research, care, and preservation organization.

**6.05 REPORT FOR INDIVIDUAL TREE REMOVAL PERMIT**

Required Practices

**A. Tree Removal Permit**

The procedure (*see Tree Removal Checklist, Appendix M and Removal of Regulated Trees, Section 3.05*) involves three steps which must be completed and approved to *remove a protected tree*. The information contained within the application will be reviewed by the City Arborist for written response within approximately 10 working days.

**B. Submittals**

For this purpose, the following information is to be submitted to the City for review:

- ▶ A completed application for the protected tree removal (delivered to the City of Palo Alto, Development Center, 285 Hamilton Avenue, Palo Alto, CA 94301)
- ▶ A filing fee (\$145) for review and records management. (FY Fee Schedule Application fee - \$125, records management \$20)
- ▶ An arborist report prepared by a certified arborist

**C. Written authorization**

To *remove* a publicly-owned tree (*street tree*), the property owner shall first have obtained written permission from Public Works Operations or City Arborist. For a *protected tree* on private property, the permit from the Planning Division must be on site when the tree is being removed. For a *designated tree* in property development, the approved plans serve as the approval and no separate written permit is needed.

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Required Practices

## 6.10 TYPE OF REPORT: LETTER FORMAT

### A. Letter Report

A brief format is acceptable for (1) and (2) below, and can generally be used for assessing one or two trees. The report is to be on letterhead stationery of the individual preparing the report, including their ISA Certification number.

#### 1. Removal

If for a tree *removal* (i.e., an application request for a single tree removal only, not in connection with a property development), the report shall provide information and determination whether the tree is dead, hazardous or constitutes a nuisance under PAMC Section 8.04.050 (2).

#### 2. Development

If for development on a single family residential lot (not a subdivision), the report shall also clearly indicate whether or not any *protected* or *designated tree* is so close to the 'building area or building footprint' that it will be killed or permanently injured by disturbance. The report must make specific recommendations to protect and preserve the tree during the course of construction that are consistent with the specifications within this *Manual* (see *Tree Protection & Presentation Report, Section 6.30*).

Required Practices

## 6.15 LETTER REPORT - SUBMITTALS

### A. Standard information

All letter reports shall contain the following information: Arborist name and certification number; purpose of the report and for whom; site address; date of the inspection(s); a to-scale diagram of the tree(s) location, accurate size of the trunk diameter (measurement taken at 54-inches above natural grade); perimeter of leaf canopy; proximity to structures; condition of the tree health (and/or decay presence), condition of the tree structure, imminent danger of failing (ISA Hazard Rating, see *appendix C*); interface with utility services; conclusion and recommendation(s), photographs (encouraged) and Tree Protection Instructions (if needed).

### B. Specific situations

Other conditions may require the following additional information on an as-needed basis if requested by the reviewing City staff: tree protection plans; appraised value (see *Tree Appraisal, Section 6.40 below*); and any other supporting information, photographs, diagrams, etc. that may be necessary.

Required Practices

## 6.20 TYPE OF REPORT: TREE SURVEY FORMAT

A more extensive 'Tree Survey Report' is required for all development projects except those identified in Section 6.10 above. The report shall inventory all trees that are greater than 4-inches in diameter (measured at 12-inches above natural grade) on site, including trees to be removed, relocated and retained on the property (including trees on neighboring properties that overhang the project site) and all *street trees* in the right-of-way within 30-feet of the project site (see *Tree Disclosure Statement, Appendix I*). In addition to information required in a letter report, the Tree Survey Report, shall include an inventory of the trees, site plan, appraised value (see *Appraisals, Section 6.40 below*) of the trees and any other information pertinent to the project.

## 6.25 SURVEY REPORT - SUBMITTALS

### A. Items to include

All Tree Survey Reports shall contain the following information: Arborist name and certification number; cover letter; title page; table of contents (if necessary); purpose of the report and for whom; site address; date of the inspection(s); site plan (showing each tree location by number that correlates with the tree inventory on plans; tree inventory data (include tree species, size, health, structure, etc. for all trees on the project site, including those to be removed (tables may be used); condition of the trees (include information with respect to health, structure, decay, imminent danger of falling, existing property lines, structures and utility services) conclusion, recommendation(s) and rated for suitability for preservation. The report shall include a separate list of all *protected trees* with location numbers. If necessary, other supporting information, photographs, diagrams, etc. may be required or provided.

### B. Appraised Value

The monetary value that each tree contributes to the real estate value of the property shall be determined and listed separately within the Tree Survey Report. The formula used should be noted (*see Tree Appraisal, Section 6.40 below*).

## 6.30 TREE PROTECTION AND PRESERVATION REPORT

All *protected or designated trees* to be retained on a development site shall be shown on approved sets of civil, building and landscape plans and shall be protected during the construction process. A *Tree Protection and Preservation Plan* submitted for review by the Planning Division is required when trees to be saved may be *injured by disturbance*. The tree preservation plan shall assume compliance with standards in Section 2.00 of this *Manual* (*see Protection of Trees During Construction, Section 2.00*). In addition, the following submittal information must be included in the report:

### A. Scope & Construction Phasing

The *tree protection and preservation plan* shall identify, but not be limited to, written recommendations for the health and long-term welfare of trees that are to be followed during the following distinct phases and conditions: pre-construction; during construction, post construction, demolition activities; methods of avoiding injury, damage treatment and inspections. Schedules shall be included.

### B. Tree Protection Zone

The *tree protection and preservation plan* shall establish a tree protection zone (TPZ) for each tree to be fenced and clearly outline site-specific measures for protection of the trees during construction and describe a plan for continued maintenance of those trees after construction. After project approval, any changes to the protection measures must be approved in writing, by the *City Arborist*. The tree protection plan shall include the following *site plan* elements:

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Required Practices

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### 6.35 SITE PLAN

Required Practices

#### A. Disclosure of all trees on and near the site

The property owner or designee shall provide accurate information to the project arborist to develop the tree protection measures and to enable accurate recommendations to insure their survival. This *site plan* shall accurately show the surveyed location, species, size of trunk and leaf canopy; show the dripline of any neighboring trees that may overhang the site and *street trees* that are within 30-feet on each side of the project (see *Tree Disclosure Statement, Appendix I*). Failure to show a tree on the plans and later determined to be affected by construction may require the work to stop until mitigation can be agreed upon by the property owner and the City.

#### B. Plans submitted to the City

In addition to the above information, final improvement plans shall include and show the following information: show the *tree protection zone* of any tree to be retained and denote a 5-foot chain link type fencing around the protected zone of each tree or group of trees (to be clearly identified as such on all plans as a bold-dashed line); permeable paving located within the dripline area; approved utility pathways; grade changes; surface and subsurface drainage and aeration systems to be used; walls, tree wells, retaining walls and grade change barriers, both temporary and permanent; landscaping and irrigation within dripline of trees.

#### C. Plans must show tree protection

Protective tree fencing identified within the arborist report, both written and diagrammatic, shall be clearly shown as a bold, dashed line on the approved site plans submitted for demolition, grading, construction, building permit or any other aspects that are relevant to the project.

### 6.40 TREE APPRAISAL

Required Practices

Landscape value may contribute from seven to 20-percent of the real estate property value. An individual tree has an inherent value to the real estate that can be determined by an appraisal prepared by a certified arborist. An appraisal is a process for determining a monetary opinion of the value of a tree as it relates to either the property, a group of trees and/or the immediate community. A qualified *certified arborist* is required to determine this value, and must exercise good and fair judgment by adjusting the basic value by the tree's condition and location. There are two methods to determine tree value; (1) the Replacement Method, based upon the size and availability of the replacement tree or, (2) the Trunk Formula Method, if the tree cannot be replaced (e.g. not sufficient room on site or it is too large to replace). In all cases, the type of formula used must be identified.

### 6.45 APPRAISAL METHODS

Required Practices

The certified arborist must prepare the appraisal by using the most current edition of (1) the *'Guide for Plant Appraisal'*, published by the Council of Tree and Landscape Appraisers, and (2) the most recent *'Form for Northern California'* established by the International Society of Arboriculture.

#### A. The Replacement Cost Method

Applies to smaller trees with a trunk size up to 4-inches in diameter or, 48-inch box size trees (replaceable.) For this method, the appraised value shall be determined by combining: price quote + transportation + planting + other costs and applying the condition and location value to the tree. The sum of these is the appraised replacement cost.

**B. The Trunk Formula Method**

Applies to trees that are too large for practical replacement (transplanting) and shall be appraised by: determining the basic tree value and adjusting this value by a condition and location ratings. The appraised value shall be determined by using the most recent edition of the *'Guide for Plant Appraisal'*, published by the Council of Tree and Landscape Appraisers. The Trunk Formula or Replacement Method Forms for Northern California established by the International Society of Arboriculture must be used to compute the appraised value. All trees with a stem larger than 4-inches in diameter when measured at 12-inches above natural grade shall be calculated in this manner. (See *Determining the tree value, Section 3.25*).

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END OF SECTION