

6.0 Tree Evaluation for Hazard and Economical Value

Introduction

Evaluation of trees for possible hazards and removal is critical if we are to provide a safe environment in our city parks. A Certified Arborist in the DRP's Forestry Division performs the evaluation and must consider risk management and liability. Unlike in the natural forest where a tree manager might permit a tree with a history of branch failure to continue to be retained, in a public area the manager must call for tree removal in order to eliminate the possibility of injury. If a tree was identified as a hazard, the DRP is responsible if the tree fell and caused injury.

Because of the value of trees to neighborhoods, if a tree is to be removed the reason for removal is made public. Trees beautify neighborhoods, provide energy savings, offer a pleasant park setting for recreational activities, and add value to the property. Research shows that trees add 15 to 25 percent to property values.

6.10 Hazardous Trees

All trees have the potential to fail, but only a relatively few actually do so. In establishing criteria to evaluate trees for hazard, a focus is given to trees in urban areas, recognizing the unique combinations of species and site characteristics found in cities. Documentation of tree hazard assessment is kept in the Forestry Work Order System. For *Protected Trees*, the ISA Tree Hazard Evaluation Form (Appendix L) is completed.

6.10.1 Emergency Removal of Hazardous Trees

If in the judgment of the Arborist of the Forestry Division, a tree poses an immediate threat to life or public safety, it is removed immediately. If the tree is *Protected Tree*, documentation (including digital photos) will follow after the hazard has been mitigated.

6.10.2 Criteria Determining Hazardous Trees

For a tree to be considered hazardous, the following criteria must exist:

- A) The tree has a defect that creates an unreasonable risk of branch, stem or root failure.

- B) A "target" must be present, and if the tree fails, damage to property or personal injury/death could result.

6.10.3 Public Notification

Removal of any trees, other than hazardous, within the limits of DRP Department must follow the Tree Removal Procedure (Appendix J). The Notification Protocol must precede removal of large number of trees for Large Scale Tree Removal Projects (Appendix K); the document contained in this appendix informs respective Council Districts and the public by the posting of notification signs on trees two weeks prior to their removal.

6.20 Tree Appraisal

Values of trees are subjective—it is difficult to appraise the true worth of a tree. The DRP applies the following three methods of tree appraisal:

A) Trunk Formula - This method is used the most in the urban forest evaluations and when the plant is removed and too large to be replaced. The method evaluates a tree by determining its basic value and then adjusting it by the tree's condition and location. This method allows for special circumstances such as trees with historical, cultural, or size considerations.

Appraised Value = Basic Value x Condition x Location. Appraised value uses the cost of replacing the largest locally available plant and adjusting for the size difference and the condition and location of the appraised tree.

B) Cost of Repair - This method assesses the cost of tree damage and calculates the expenses to perform any treatments including pruning, fertilizing, watering, aeration, alleviation of compacted soil, other soil improvements, and insect and disease treatments.

C) Cost of Cure - This method is similar to the Cost of Repair method, but it calculates the expenses necessary to bring a damaged tree as close to its original condition as possible.