



Tree Conflict Resolution Policy

**for Sidewalks, Hardscape Infrastructure
and Stormwater Conveyance Features**

June 2017



City of Eugene

Tree Conflict Resolution Policy for Sidewalks, Hardscape Infrastructure and Storm Water Conveyance Features

Introduction

Policy Goals and Objectives

The following policy is supported through existing City tree and sidewalk codes and Federal Americans with Disabilities Act (ADA) requirements.

Goals:

- **Accessibility and Health:** To provide safe and useable sidewalks as defined by ADA design standards and city sidewalk code and design specifications.
- **Environment:** To protect and preserve trees and soil assets whenever possible. To plant and establish the right tree in the right place and to ensure storm water conveyance.
- **Efficiency:** Strive to preserve existing assets, when repair or removal is performed, re-establish safe walkable surfaces and tree canopy in an expedient manner.

Objectives:

- Explore sustainable strategies that allow trees and infrastructure/sidewalks to coexist and add value to the community.
- Repair sidewalks, curbs, gutters, streets and other infrastructure damaged by street trees in a manner that reduces future tree infrastructure conflicts.
- Ensure that appropriately sited trees are maintained whenever possible while at the same time ensuring mobility.
- Establish the appropriate tree in the right place through diligent species selection, soil volume and location criteria as defined by City code.
- Continue to research and test alternatives to conventional sidewalk surfaces during tree protection efforts.
- Remove trees when other solutions are unavailable to meet ADA standards.
- Maximize street tree canopy by planting in vacant spaces within the public right-of-way.
- Engage property owners to ensure that trees are planted in the correct locations.

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1. MMS Request For Service (RFS) arrives stating sidewalk, hardscape or storm water conveyance damage, tree involved or nearby:

- a. IF assigned to Public Works Maintenance (PWM) contact Urban Forestry Technician responsible for inspecting RFS involving sidewalks.
- b. IF assigned to Urban Forestry, contact PWM Sidewalk Inspector and for storm conveyance issues contact the PWM Surface Maintenance Team Lead.

2. Inspection by Urban Forestry and Public Works Maintenance staff

- a. **Assess condition of sidewalk, hardscape or storm water conveyance features at the site to define the scope of work:** e.g. single location, whole block, Neighborhood Association or Home Owners Association request or Public Works engineering project.
 - i. If request is from HOA, coordinate with City Neighborhood staff, Neighborhood Association and Neighborhood/HOA Leaders.
 - ii. If Public Works Engineering (PWE) project is involved, contact Urban Forestry for coordination with PWE during plan the review process to determine tree preservation or removal recommendations as dictated by City code.
- b. **Determine the cause of the sidewalk, hardscape or storm water conveyance damage**
 - i. If tree is nearby but not contributing to damage, proceed with repair using LS120 tree protection standards as required by City code 7.280.
 - ii. If tree is likely contributing to damage, Urban Forestry shall investigate the site using a variety of methods including but not limited to: pulling sidewalk panels, hand digging, soil probing or using Vactor trucks to locate roots to determine if 30% or more of the critical root zone will be damaged during the repair.
 - iii. Attach public notification (**posting**) on the tree(s) that details potential tree removal, schedule re-inspection after sidewalk panels (or storm conveyance) are removed. Sidewalk panels should only be removed prior to inspection if it is not completely obvious that repairs would force removal of the tree(s) – i.e. that the buttress flare of the tree or roots can be seen to extend beneath surfaces being repaired.
- c. **Assess condition of tree(s)** at the address, on entire block or more to determine scope of repair.
 - i. Determine if the tree is Nuisance Vegetation per EC 6.010.
 1. If the tree is within the Vision Clear Zone, proceed with assessment weighing in favor of removal.
 2. If the tree is an obstruction of drainage facilities in the public right-of-way, proceed with assessment weighing in favor of removal if the drainage obstruction cannot be mitigated.
 3. If the tree roots have entered a sewer and are stopping, restricting or retarding the flow of sewage, proceed with assessment weighing in

favor of removal if the blockage cannot be successfully resolved through root pruning.

4. If the factors that create the nuisance vegetation condition cannot be mitigated, **remove** the tree per EC 6.010 (City removal).
- ii. Determine species of tree. If it is an invasive species, remove (Maintenance Removal Permit or City removal). If it is an unapproved species for the site, (size restriction for planting location per COE approved species list, under wires etc.) proceed with assessment weighing in favor of removal.
- iii. **Determine if tree is a Heritage Tree** per EC Chapter 6.3000, R-6.305-A, Chapter 7, R-7.280-H and as defined in Chapter 9 definitions located on page 9-0-18.
 1. If yes, proceed with preservation planning and safe pedestrian route options, notify Urban Forestry and PWM supervisors.
 2. If no, proceed with assessment.
- iv. Determine condition of tree.
 1. If it is a hazard tree, conduct a Tree Risk Assessment and **remove** per Urban Forestry policy (City removal).
 2. If it is not a hazard tree, proceed with assessment.
- v. Determine vigor of tree based on age, species, twig extension.
 1. If vigor is poor, proceed with assessment weighing in favor of removal.
 2. If vigor is good, proceed with assessment weighing in favor of removal if sidewalk, hardscape or storm conveyance repair cannot be guaranteed for five years without further damage.
 3. If vigor is good, and if five years of sidewalk or storm conveyance life expectancy is anticipated without further damage by tree, proceed with assessment.
 4. If it is an approved species suitable for the site, proceed.
- vi. Determine original soil type per GeoDART Soils Layer and determine local urban soil type, texture and compaction at this individual address as influenced by construction; also determine irrigation and drainage influences on future health, growth and growth rate of tree.
 1. Determine if soil in area is a matrix match for the species.
 - a. If not, proceed with assessment weighing in favor of removal.
 - b. If yes, proceed.

3. Decision by Urban Forestry and Public Works Maintenance.

- a. Single tree. If the factors above weigh in favor of retention, determine whether excavation required to meet ADA standards (as determined by PWM staff) will require root cutting that would create a tree uprooting failure danger.
 - i. Determine if roots need to be cut in an area within 2-5 times the dbh of the tree.
 1. If more than 1/3 of the roots in this area need to be cut, **remove** the tree as a hazard tree due to the moderate to high likelihood of complete tree failure. Accomplish removal by issuing a Maintenance Removal Permit, or creating a work order for contractor or City crew.

2. If less than 1/3 of the roots in this area need to be cut, proceed with decision.
 - i. If root cutting results in an impact greater than 30% of the CRZ, **remove** the tree as a felled tree per R-6.305 (MRP, contract or City removal).
 - ii. If root cutting does not meet uprooting failure thresholds and if it results in less than 30% CRZ impact, but if it decreases the remaining life expectancy of the tree to less than 11 years (or current MPZ rotation period), then **remove** tree. Otherwise, proceed. (MRP or City removal).
 - iii. If the tree caused the damage and sidewalk, hardscape or storm conveyance repairs can be made but the tree is likely to continue to cause damage requiring further repair within five years, **remove** the tree. (MRP or City removal).
 - iv. If the tree is causing the damage, and the cost of sidewalk, hardscape or storm conveyance repair exceeds a rough estimate of the appraised value and long-term benefits of the tree, **remove** the tree (MRP or City removal).
 - v. If the tree is causing damage, and the cost of sidewalk ramping to meet ADA exceeds a rough estimate of the appraised value and long-term benefits of the tree, or the property owner does not support ramping, or the ramping would significantly impact adjacent landscaping, **remove** the tree (MRP or City removal).
 - ii. Otherwise, protect and preserve the tree per EC 7.280 LS120.
- b. More than one tree. If the decision is to remove the tree and there is more than one tree to be removed, assess the impact to the neighborhood and tree canopy. Coordinate with the HOA, NHA, NH Leaders, and City NH staff as appropriate.
 - i. Develop a street tree management plan with the NH Association or HOA that guides removal and replacement strategies. Follow the plan as agreed upon.
 - ii. If no plan is in place and ADA or storm conveyance isn't a factor, stagger removal(s) over a three-year period within the NH Association or HOA to avoid immediate impact to neighborhood character.
 - iii. If a project (PWE or PWM) requires removal of trees on entire block faces, attempt to stagger these projects over time to avoid geographically contiguous tree removal.

1. Operating principles

- a. Replace trees that are removed as appropriate and follow tree location standards of R-7.280.
- b. Work with property owners (who may bear additional cost) and project managers to use techniques and materials such as root trenching, root barriers, TripStop, Silva Cells and root paths to avoid repeated infrastructure damage.
- c. Work with adjacent property owners, HOAs, NH groups, and City NH staff to find funding for alternative and preventative treatments as stated above.
- d. If the sidewalk or curb/gutter is removed prior to grinding of the tree stump, the City contractor will grind all areas to allow for sidewalk or gutter replacement as determined by contract in a timely manner that allows for expedient repairs.