



**TREE PROTECTION
REGULATIONS
ADMINISTERED BY DPD**

Overview

- ▣ The Tree Protection Ordinance is SMC 25.11
- ▣ It's purpose and intent is the “protection of the urban forest”.
- ▣ The urban forest is all the City's trees-street, park, public or private...



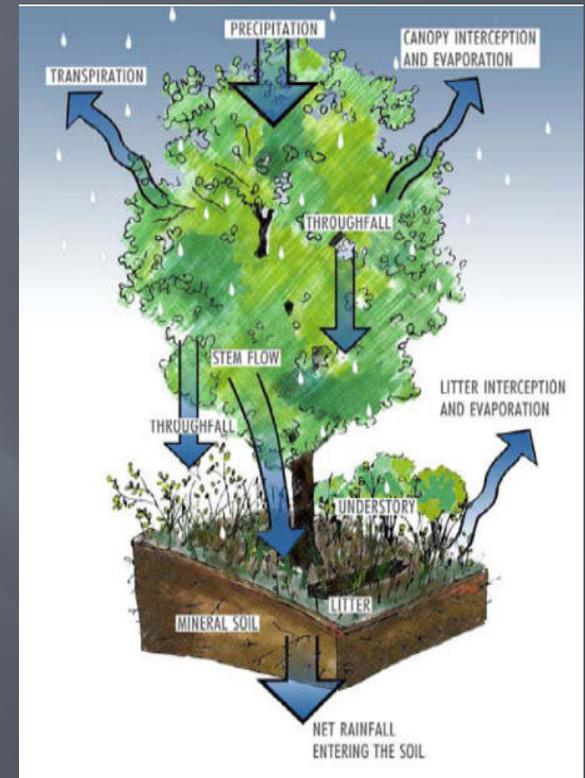
Why do we care about the Urban Forest?

- ▣ Aesthetic – a treeless city is not attractive.
- ▣ Wildlife Habitat.
- ▣ Shading – Reduces the urban heat island effect and the need for artificial cooling.
- ▣ Soil stabilization.



What are the benefits of the Urban Forest?

- ▣ Stormwater reduction
 - Canopy and structure hold rainwater for evaporation and slow release to the ground,
 - Less dirty stormwater reaches streams, lakes and the Sound.
- ▣ Clean Air and Climate Change
 - Trees absorb the “greenhouse gas” carbon dioxide, and turn it into their food, wood and then release oxygen. What a deal!



Tree Planting / Protection Regulations

- ▣ Protection requirements are found primarily in 25.11, Tree Protection, but also TIP's, Director's Rules.
- ▣ Planting requirements in various zone chapters of Title 23.
- ▣ Replacement requirements for exceptional and >2-foot dbh trees in 25.11.090.

SMC 25.11.040

Tree Removal is Restricted in 3 Situations

- ▣ Undeveloped Land
 - Vacant lots without structures
 - Vacant lots proposed for development .

- ▣ Developed Land
 - The site contains a building and no new development is proposed (Except for SF lots < 5,000 sf), and

- ▣ Environmentally Critical Areas
 - Provisions of 25.09.320 restrict tree and other vegetation removal in: landslide-prone critical areas, (including steep slopes), steep slope buffers, riparian corridors, shoreline habitat, shoreline habitat buffers, wetlands, and wetland buffers.

Tree Removal is Restricted in 3 Situations

Removal is prohibited:

- ▣ Undeveloped lots in all zones:
 - Trees 6-inch or greater unless hazardous;
 - Exceptional trees unless hazardous;

- ▣ Undeveloped lots proposed for development in all zones – including SF lots < 5,000 sf

- ▣ Developed lots in SF*, RSL*, LR, MR and C zones (* >=5,000 sf)
 - No more than 3 trees 6-inches DBH or greater in any one-year period unless hazardous (except as a part of an issued building or grading permit);
 - Exceptional trees unless hazardous;
 - Optional preservation for trees > 2' diameter.

SMC 25.11.050

Tree Protection Requirements

- ▣ Exceptional trees, trees receiving Green Stormwater Infrastructure, Green Factor credit or meeting Single Family planting/preservation requirements need to be protected.
 - What type of protection depends on proximity to construction activity (more later).

- ▣ Basic protection requirements of 25.11 are the same in SF, RSL, LR, MR and C zones. “The tree protection area shall be the area within the drip line of the tree.”
(25.11.050.B)

- ▣ But criteria for removal of protected trees is based on zone (25.11.060, 070 and 080) or if in ECA (25.09.320).

The Drip Line

- ▣ The basic tree protection area – the TPA (aka Tree Protection Zone or TPZ)
 - The **drip line** is formed by the outer end of the canopy.
 - The **feeder root zone** contains the fine roots and is outside of the basic TPA.

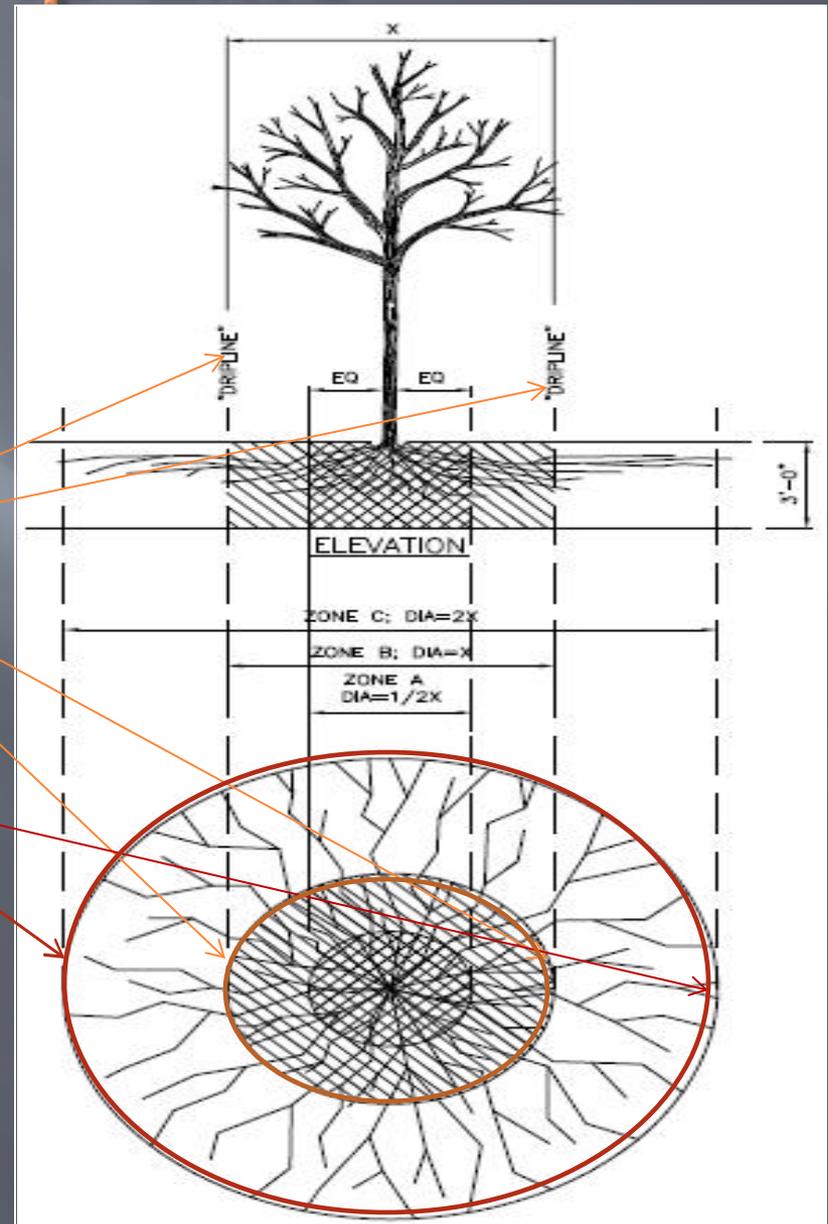


Exhibit 25.11.050.B

How to determine if a tree should be considered “exceptional”.

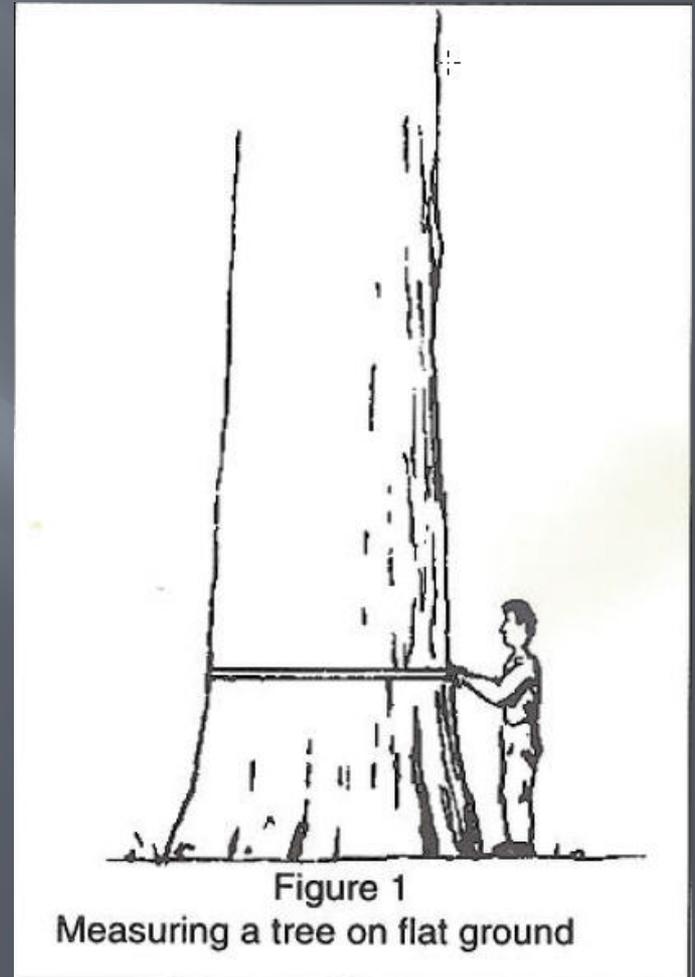
- ▣ Any species of tree can be exceptional.
- ▣ Depends on its size, species and if a heritage tree or in a grove.
 - Species and Size: Table 1 in DR 16-2008 (3 are grove only: red alder, bitter cherry, and black cottonwood)
 - If not in Table 1, then by size 30” or either 75% / 65% of the largest documented size of the species in Seattle / WA State, whichever is less.
 - Heritage Trees: List on SDOT’s website www.seattle.gov/transportation/heritagetree.htm
 - Grove: 8 or more trees 12” dbh or greater that form a continuous canopy.

Determining Tree Size

Diameter measured at 4.5' above ground.

For sloped conditions, multi-stem trees, etc see DR 16-2008.

Helpful illustrations of these methods are in “Champion Trees of Washington”.



Determining Tree Size

- ▣ From “Champion Trees of Washington” pg. ix



Figure 4
Measuring low-branching trees



Figure 2
Measuring a tree on a slope,
averaging between high and low
sides

SMC 25.11.060

When Tree Removal is Allowed

- ▣ **Single Family / RSL Lots *** (Removal of any trees is allowed outright on developed non-ECA lots less than 5,000 sf.)
 - **Exceptional Trees:** If maximum lot coverage can't be achieved or the structure will be less than 15-feet wide after allowing encroachment into the front or rear yards (up to 50%).
 - **Optional:** Non-exceptional trees greater than 2-feet in diameter can be preserved through the same waivers.

SMC 25.11.070 When Tree Removal is Allowed

▣ Lowrise Zones

- Exceptional Trees- Only if the full FAR or allowed height can not be achieved through:
 - ▣ SDR, Streamlined Design Review. Five “adjustments” and the regular Design Review departures of 23.41;
 - ▣ Height adjustment up to 50’ (apartments in LR3 zones only)
 - ▣ Parking Reduction of 23.54.015 and 030.
- Optional: Non-exceptional trees greater than 2-feet in diameter can be preserved through the above methods.

SMC 25.11.80 When Tree Removal is Allowed

- ▣ MR and C Zones
 - Exceptional Trees- Only if not possible to avoid the tree protection area through SDR adjustments and Design Review departures
 - Optional: Non-exceptional trees greater than 2-foot in diameter can be preserved through the above methods.

SMC 25.11.090

When Tree Replacement is Required

- ▣ Each exceptional tree and tree over 2-foot dbh removed associated with development in all ZONES (unless hazardous).
 - Size and species determined by Director
 - Equal canopy cover at maturity
 - On site preference, public property preference for off- site

Environmentally Critical Areas with and without Development Proposals

- ▣ Prohibited except as allowed in limited situations (SMC 25.09.320.A.3.a,b,c & d).
- ▣ See TIP's 331, Tree & Vegetation Overview, and 331B, Hazard Trees.

Short Plats

SMC 23.24.040

- ▣ Does the short plat “maximize the retention of existing trees”?
 - Not a prohibition on platting or the number of lots.
 - Looking for opportunities to retain trees by considering placement of easements, access and future building footprints.

Planting Requirements by Zone

- ▣ Single Family Zones
 - The only outright requirements for tree planting on private property in Title 23. (SMC 23.44.008.I)
 - Preserve or plant 2 caliper inches/1,000 sq.ft for lots over 3,000 sq.ft.
 - Preserve or plant 3 caliper inches for lots under 3,000 sq.ft.
 - Preservation plan required!

Planting Requirements by Zone

- ▣ Multi-Family, Commercial, Seattle Mixed, Downtown and Industrial Zones
 - Only street trees required (varies by zone);
 - If Green Factor required or chosen then credit for planting and preserving;
 - Higher credit for preserving (because bigger trees mean greater environmental benefits).

The Supporting Cast – TIP's and DR's

- ▣ TIP 242 Tree Protection Regulations
 - Clear guide and summary of 25.11,
 - A must read!
- ▣ Director's Rule 10-2008 Designation of Exceptional Trees
 - Defines exceptional trees
 - Tree size measure – dbh
 - Risk assessment – hazardous trees
 - Qualified professionals

Essential Protection Details – Scattered About

- ▣ Director's Rule 10-2011 Landscaping Standards and Green Factor
 - Tree preservation and planting, pgs. 3-5
 - Shows Standard Plan 133 (TPA Illustration) for protection zone.
 - States tree professional qualifications.

- ▣ TIP 534 – Tree Planting and Retention for Flow Control Credit
 - Protection Details pgs. 5 & 6 – some science, pruning, BMP's for construction activity, root zone, protective fencing.

Essential Protection Details – Scattered About

- ▣ TIP 331 ECA Tree & Vegetation Overview
 - ▣ BMP's for canopy reduction (pruning) when preserving is an option if tree were “smaller” pgs.1 & 3.

- ▣ TIP 331B Hazard Trees
 - ▣ Describes process and criteria for determining hazard.

TIP 331B Hazard Trees

- Describes process and criteria for determining hazard.

Submittal Requirements

The following information must be submitted when requesting to remove a hazard tree:

1. Hazard Tree Removal Application (Attached)

2. Tree Assessment Form. A Tree Assessment Form documenting the condition of the tree or trees in question. (Attached)

3. Report by a qualified professional*. A brief letter style report on each tree summarizing data describing why the tree is a hazard. This should include information on the overall health of the tree, targets, and height of the tree. The report should also include analysis of tissue samples where necessary to determine root rot or other issues.

4. Photos. Photos should include pictures of the whole tree, defects and potential targets.

5. Site Plan/Revegetation Plan that is legible, to scale and shows the following:

- site address
- site tax parcel number
- site configuration
- area of ECA and/or buffer
- location of existing structures or other potential targets
- location of hazard tree(s)
- specific trees proposed to be replanted as part of restoration, noting plant size, species, spacing and location

*TRAQ designated arborist consistent with code definition of hazardous tree.

"Hazardous tree" means any tree or tree part that poses a *high risk of damage* to persons or property, and that is designated as such by the Director according to the tree hazard evaluation standards established by the International Society of Arboriculture [25.11.020]

Questions??

- ▣ Seth Amrhein, ISA Certified Arborist (TRAQ)
- ▣ Senior Environmental Analyst
- ▣ Seattle Department of Planning and Development
- ▣ (206) 386-1981
- ▣ Seth.amrhein@seattle .gov