

SDCI | Director's Rule 11-2023

Applicant:	Page	Supersedes:
City of Seattle	1 of 4	
Department of Construction and Inspections	Publication:	Effective:
	8/24/2023	
Subject:	Code and Section Reference:	
Interpretation and Administration of the Seattle Department of Construction and Inspections Tree Protection Code: Tree Measurements	SMC Section 25.11.060, 25.11.070, 25.11.130	
	Type of Rule:	
	Code Interpretation	
	Ordinance Authority:	
	SMC 3.06.040	
Index:	Approved	Date
Tree Protection Ordinance Code		
SMC Chapter 25.11		
	Nathan Torgelson, Director, SI	CI

BACKGROUND:

In May 2023, the Council passed Ordinance 12682, which updated Seattle Municipal Code (SMC) Chapter 25.11. A primary purpose of SMC Chapter 25.11 is to implement the goals and policies of Seattle's Comprehensive Plan, especially those in the Environment Element dealing with protection of the urban forest, while balancing other citywide priorities including housing production. Additional stated purposes are to protect Tier 2 trees because their unique historical, ecological, or aesthetic value constitute an important community resource and to protect trees on undeveloped sites to prevent premature loss of trees so their retention may be considered during the review and approval process of development proposals. To support its stated purpose and intent, SMC Chapter 25.11 includes provisions for when the Director may approve removal of Tier 2 trees as part of a development permit application in certain zoning districts.

SMC Section 25.11.070 addresses tree protection on sites undergoing development in Neighborhood Residential, Lowrise, Midrise, commercial, and Seattle Mixed zones using a basic tree protection area to assist the Director in determining when they may approve removal of Tier 2 trees to accommodate either maximum lot coverage or an allowable development area ("development capacity").

In order to implement SMC Chapter 25.11 with predictability during the development review process, it is important to understand how the "tree protection area, basic" used to evaluate tree removal is related to the "tree protection area" required to be shown on site plans for trees that are to remain (SMC Section 25.11.060). To balance development with tree protection, the Director may allow excavation and other construction-related activities within both the "tree protection, basic" or the "tree protection area," as allowed by their definitions.

There are many methods for determining the size of a tree protection area. The drip line method uses the tree canopy's drip line to define the boundary of the tree protection area while the trunk diameter method is based on diameter measured at standard height, multiplied by a factor of 6 to 18 to determine the radius of the tree protection area. Both methods are industry standards per ANSI A300¹.

PURPOSE

This Director's Rule sets forth how SDCI will apply the provisions of SMC Chapter 25.11 related to tree diameter measurement, and how SDCI will delineate both the "basic tree protection area" and the "tree protection area" on plan sets in order to ensure predictability regarding allowed tree removal necessary to achieve development capacity and tree protection requirements on sites undergoing development.

RULE

SECTION 1: MEASUREMENT OF TREE DIAMETER

Diameter at standard height (DSH), which means the diameter of a tree trunk measured at 4.5 feet above ground, is used in determining the diameter of existing trees. Where a tree has branch(es) or swelling that interferes with measurement at 4.5 feet above ground or where a tree tapers below this point, the diameter is measured at the most narrow point below 4.5 feet. When measuring trees on slopes, measure the diameter 4.5 feet from the ground on the upper side of the slope. Where a tree splits into several trunks close to ground level, the DSH for the tree is the square root of the sum of the DSH for each individual stem squared (i.e. - a tree with three stems: DSH = square root [(stem1)^+ + (stem2)^+ + (stem3)^+)].

SECTION 2: BASIC TREE PROTECTION AREA

The Basic Tree Protection Area is defined as "the area surrounding a tree in which excavation and other construction-related activities must be avoided unless approved by the Director. This area is delineated using a radius that is equal to one foot for every inch DSH of the tree."

References for industry standards include: Managing Trees During Construction, Second Edition. Companion publication to the ANSI A300 Part 5: Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development, and Construction). 2016 and the 2019 update of ANSI A300 (Part 5)

- A) The basic tree protection area does not include areas in which excavation and other construction related activities are approved by the Director. For the purposes of determining whether Tier 2 trees may be removed pursuant to SMC subsections 25.11.070.A and 25.11.070.B, excavation and construction related activities are allowed in the following areas:
 - 1. The area located between the outer edge of the tree's the drip line and the outer edge of a radius circle determined by the trunk diameter method, wherein the radius is equal to one foot for every inch DSH of the tree. If the drip line is irregular in shape, the drip line is determined using a radius circle determined by the average extent of branch outer limits; and
 - 2. Any area of the radius circle wherein the radius is equal to one foot for every inch DSH of the tree that is currently disturbed by existing development such as an existing foundation or driveway. This does not include any areas of abovegrade development such as a deck.
- B) For the purposes of determining whether Tier 2 trees may be removed pursuant to SMC subsections 25.11.070.A and 25.11.070.B:
 - Basic Tree Protection Area = (radius circle wherein the radius is equal to one foot for every inch DSH of the tree) (any area beyond the dripline) (areas of existing development)
- C) In Neighborhood Residential zones, for the purposes of determining whether Tier 2 trees may be removed pursuant to SMC subsection 25.11.070.A:
 - 1. As part of a development permit application, a basic tree protection area is required for any on-site Tier 2 tree. This basic tree protection area is required to be shown within any plan set submitted for a Master Use Permit or building permit.
 - 2. Allowable development area shall include all area of the lot regardless of width or depth. Tier 2 trees may be removed only if site characteristics and/or land use standards would result in a site design where a resultant portion of a principal dwelling unit, or an accessory dwelling unit, would be less than 15 feet in width because the basic tree protection area would constrain available development area to a footprint of less than 15 feet.
 - 3. Permitted extensions into front or rear yards must be used, where applicable, before tree removal will be authorized.
- D) In Lowrise, Midrise, commercial, and Seattle Mixed zones, for the purposes of determining whether Tier 2 trees may be removed pursuant to SMC subsection 25.11.070.B:
 - 1. As part of a development permit application, a basic tree protection area is required for any on-site Tier 2 tree and any off-site Tier 1, Tier 2, and Tier 3 tree with canopies overhanging and/or roots extending onto the development site. These basic tree protection areas are required to be shown within any plan set submitted for a Master Use Permit or building permit.

SECTION 3: TREE PROTECTION AREA

For the purposes of SMC Section 25.11.060:

- A) A tree protection area is required for all existing on-site Tier 1, Tier 2, and Tier 3 trees that are not removed during development, and off-site Tier 1, Tier 2, and Tier 3 trees with canopies overhanging or roots extending onto the lot.
- B) The starting point of the tree protection area is the basic tree protection area.
- C) The tree protection area shall never be larger than the basic tree protection area determined pursuant to Section 2 of this Director's Rule.
- D) The tree protection area may be less than the entire area within the drip line pursuant to SMC subsection 25.11.060.A. If the drip line is a circle, any area within the drip line not included in the tree protection area must not be closer than the distance of one half of the drip line radius from the tree. If the drip line is irregular in shape, any area within the drip line not included in the tree protection area must be at least a distance of 10 feet from the tree trunk. Exceptions include existing development to be retained or replaced if no appreciable damage to the tree will result and temporary reductions per SMC subsection 25.11.060.A.4.d. To meet these exceptions, no additional excavation is allowed.
- E) The tree protection area for off-site Tier 1, Tier 2, and Tier 3 trees with canopies overhanging or roots extending onto the lot must include the entire area within the drip line with the exception of existing development that is retained or replaced and temporary reductions per SMC subsection 25.11.060.A.4.d. To meet these exceptions, no additional excavation is allowed.