



DRIVEWAY PERMIT

Urban trees need to be protected from damage to safeguard their health, safety, environmental benefits, and functionality. All trees and palms – newly planted, young, and mature – require protection from construction activities. Tree protection is designed to preserve tree health and stability by avoiding damage to tree parts such as the root system, trunk, and crown. Disturbing the ground by digging or excavating can negatively impact critical root systems, while temporary dumping and storage of construction waste, materials, and equipment around the bases of trees can compact soil as well as cause physical damage to tree trunks.

Pursuant to Section 13-45(b) of the City Code of Ordinances, all trees retained on site shall be protectively barricaded before and during construction activities. This informational sheet describes necessary actions for driveway construction activities where existing trees and palms are to be retained on the property and likely to be impacted. Please also read the Division’s informational sheet, *Tree Protection During Construction Activities*, which will help to clarify some of the requirements outlined below.

Guidelines for Preparing the Tree Protection Plan

- **Obtain a copy of the Boundary Survey or similar site plan drawing of the property.** The drawing must show adjacent right-of-ways, sidewalks, structures (house, garage, pool, etc.), property lines, and if applicable, utility and drainage easements. The survey or site plan drawing must include dimensions.
- **Mark the location(s) of the proposed driveway work (and walkways, if any) on the drawing.** Draw and label the exact locations of the construction work clearly on the driveway plan.
- **Provide a scope of work and construction specifications for the driveway.** Depth of excavation, proposed construction materials (fill, sand, pavers, crushed rock, concrete, asphalt, etc.), compaction requirements, and thickness and density of materials are examples of the information to be provided.
- **Draw and label the trees and palms growing in the vicinity of the new construction.** For existing trees and palms that are within 25 feet of driveway work, including the trees in the city swale and on neighboring properties, mark and label the tree locations on the drawing and write the species (if not known, write the common name such as “palm”, “oak”, “Black Olive”), height, caliper, condition (good, fair, poor, dead), and disposition (remain, relocate, remove) for each. If the Division is concerned with particular trees growing further than 25 feet away, it may ask for additional tree information.
- **Measure the distance between the tree trunk and the closest edge of the new construction.** Write this linear distance on the drawing for all affected trees and palms. If a tree is adjacent to both driveway and walkway construction work, write the two measurements.
- **Draw and label the tree protection fences and attach the construction details sheet.** Mark and label the locations of the fences as circles or squares around each tree and palm following the guidelines and specifications provided in the Division’s informational sheet, *Tree Protection During Construction Activities (Drawing A)*. The construction details sheet showing the type of fence to be erected, wood rail or orange mesh, must be attached to each set of plans.
- **Draw and label the root barriers along driveway edges, excluding driveway aprons in the City swale.** Root barriers are recommended but not required. Mark and label their on the drawing and provide the specifications as provided in the Division’s informational sheet, *Tree Protection During Construction Activities (Drawing B)*. Specifications may either be written on the plan drawing, or a copy of *Drawing B* referenced above may be attached to each set of plans. Contact the Division if an equivalent root barrier option is proposed.
- **Write the following note on the plan:** “Any root pruning that may be required due to the driveway work will be performed by an ISA Certified Arborist.”
- **Attach a copy of the approved Tree Removal/Relocation Permit, if one is required.**
- **Attach a copy of the ISA Certified Arborist Tree Assessment, if requested by the Division.**



TREE PROTECTION DURING CONSTRUCTION ACTIVITIES

Urban trees need to be protected from damage to safeguard their health, safety, environmental benefits, and functionality. All trees and palms – newly planted, young, and mature – require protection from construction activities. Tree protection is designed to preserve tree health and stability by avoiding damage to tree parts such as the root system, trunk, and crown. Disturbing the ground by digging or excavating can negatively impact critical root systems, while temporary dumping and storage of construction waste, materials, and equipment around the bases of trees can compact soil as well as cause physical damage to tree trunks.

Pursuant to Section 13-45(b) of the City Code of Ordinances, all trees retained on site shall be protected during construction activities. This informational sheet describes tree protection measures required for construction work on single family home lots where existing trees and palms are to remain on the property and likely be impacted.

Tree Protection Requirements

- All construction work involving excavation, compacting, filling, grade changes, or other land-disturbing activity requires a tree protection plan. Examples of construction work (for both new projects and modifications to existing installations), where tree protection may be necessary, include but are not limited to:
 - Driveways and hardscapes
 - Pools, spas, patios
 - Underground gas tanks
 - Houses, garages, concrete slabs
- Tree protection plans for construction work are reviewed and approved by the Landscape Division prior to Building Permit issuance and the commencement of work. The tree protection plan shall constitute part of the overall construction plan which accompanies a Building Department Permit Application. Tree protection plans shall include one or more of the following and will depend on the nature of the proposed work.
 - **Tree Protection Fences:** These structures are intended to protect the roots, trunks and canopies of trees from mechanical injury and soil compaction. Temporary fences (barricades) are erected around the tree or palm to form a ‘tree protection zone’ with the purpose of excluding equipment, materials, personnel, and vehicles from the area surrounding the tree. *Refer to Drawing A.*
 - **Root Barriers:** The City may require the installation of root barriers along the edges of hardscapes (patios, driveways, walkways, sidewalks) and certain other installations (drain fields, septic tanks) to prevent damage to the structures caused by the expansion of tree roots by existing and future trees. Generally, trees (both existing and new) growing within 10 feet of hardscape require root barriers. The City also requires them along the edges of driveway aprons constructed in the city swale. *Refer to Drawing B.*
 - **Root Pruning:** Tree roots may have to be pruned if they conflict with construction activities because they are growing on, under, or adjacent to the work site. Root pruning may seriously damage a tree if the wrong tools are used, the cuts are not clean and straight, the cut roots are too close to the tree trunk, the number of cut roots is high, or the diameter(s) of the cut root(s) are large. For these reasons, the Division requires that an ISA Certified Arborist perform all necessary root pruning.
 - **ISA Certified Arborist Tree Assessment:** If the Division determines that a tree’s health and stability is potentially affected by the construction activities, a detailed assessment of the impacts of the proposed work on the tree *may be requested by the Division.* The written assessment must be performed and prepared by an ISA Certified Arborist and shall address the condition of the existing tree, any required root pruning, and recommendations for tree protection. Typically, a medium to large sized tree growing within 10-15 feet of the construction work is a candidate for an assessment.
 - **Tree Removal, Relocation and Trimming Permits:** If construction work requires that a tree or palm on the property be removed, relocated, or trimmed, the property owner must obtain an approved Permit from the Division before any work can begin. Permit application forms are available online at www.plantation.org or in person from the Landscape Division.

Drawing A - Specifications for Tree Protection Fences

How much protection does a tree need?

The distance between the tree protection fence and tree trunk depends on tree size. The fence should be erected along the edge of the tree canopy, or dripline. For palms, fences 3-5 feet from the trunk is a sufficient distance in most cases. The fence must completely encircle the tree or palm.

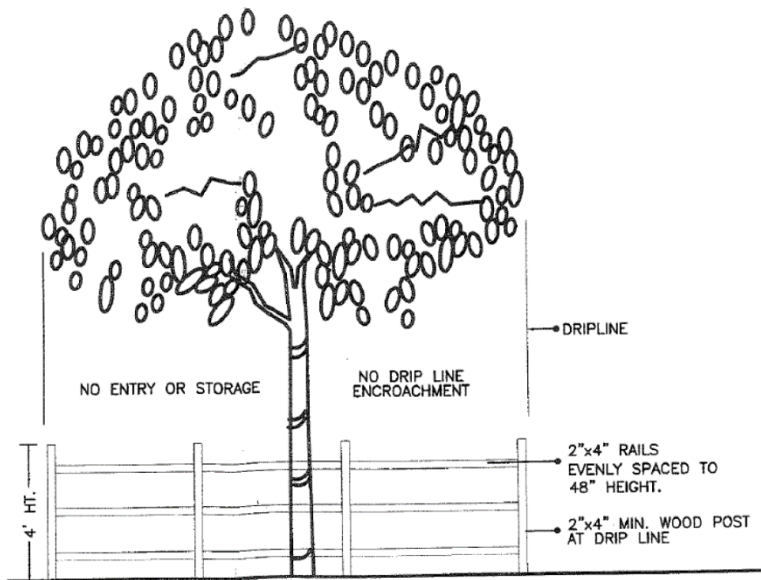
What happens if the fence cannot be installed at the recommended distance from the tree?

If the required distance from the tree trunk to the dripline cannot be achieved because existing hardscapes (driveway, patio, sidewalk, street) or structures (building, pool, screened enclosure) prevent the installation of a fence, provide the maximum distance possible which may be up to the edge of the existing hardscape or structure. If the maximum distance still does not provide adequate protection for a tree or palm, the Division may request that the property owner submit an assessment from an ISA Certified Arborist.

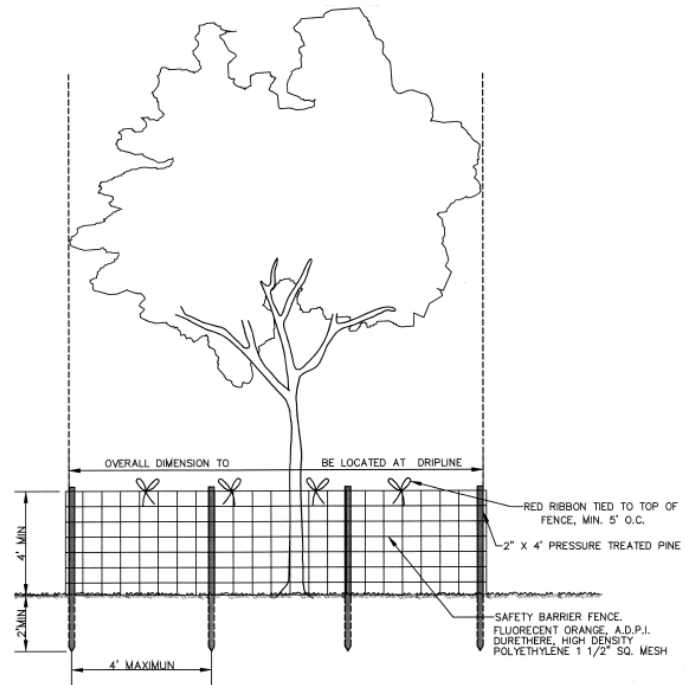
How is the tree protection fence constructed?

Temporary protection fences must be one of two types: wood rail or polyethylene orange mesh. Refer to the fence construction details below or obtain a copy at the Division office. A copy of the appropriate fence detail sheet must be attached to each copy of the construction plan submitted.

Wood Rail



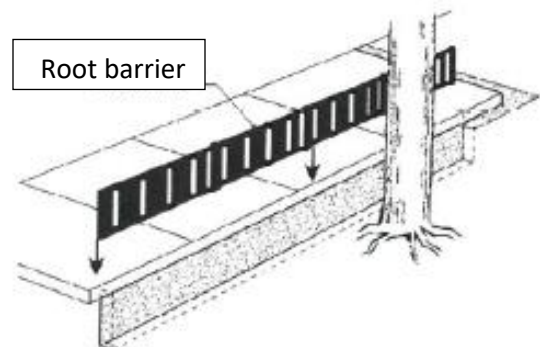
Orange Mesh



Drawing B - Specifications for Root Barriers

Write the following root barrier specifications* on each copy of the plan drawing, or attach a copy of this sheet.

1. Panels of 0.085" thick polypropylene
2. Zipper joining system
3. Rounded edges
4. 24" depth
5. Anti-lift pads



*Contact the Landscape Division if you propose an equivalent root barrier option.