

TREE PROTECTION DURING CONSTRUCTION

The City of Watertown is committed to providing a safe and healthy urban forest, and recognizes the importance of preventing as much construction damage as possible to preserve the long term health and safety of our urban trees. The intent of this policy is to provide rules for responsible tree protection during all types of construction and excavation.

1. **DEFINITION: ROOT PROTECTION RADIUS (RPR)**

The Root Protection Radius (RPR) is the critical root zone to be identified and clearly marked for the protection of each tree growing within or adjacent to a construction or excavation project. All root protection requirements listed in this policy must be followed while working within the RPR of a tree. The RPR is determined as follows: Take a measurement in inches of the tree's diameter at breast height and multiply by 1.5. This will equal the RPR in feet.

Example: A tree with a 4" diameter at breast height: 4" x 1.5 = RPR of 6 feet.

2. **IDENTIFICATION OF ROOT PROTECTION RADIUS (RPR)**

It is the responsibility of the individual performing the construction or excavation work to identify and clearly mark the RPR for each private and public tree which will have construction or excavation work done within its Root Protection Radius. All street right-of-way construction and excavation projects shall have the RPR for each tree clearly marked prior to and at all times during excavation and construction.

When marking the RPR for a standard street reconstruction project, it is necessary that the contractor mark (paint **PINK** lines) on both sides of the tree, at 6 inches behind the back of the new curb and for the 5 inches allowed at the edge of a sidewalk replacement or installation.

3. **TREE PROTECTION REQUIREMENTS**

A. The Watertown Park and Forestry maintenance staff will assist with all root cutting, unless a contractor has received approval from the City Forester to perform their own root cutting. Contractors are to plan in advance for their root cutting needs and notify the department as soon as possible, so that department crews can be managed in an efficient, yet timely manner. Request for root cutting assistance can be made Monday thru Friday at the Park and Forestry Department office at 515 South First Street or by phone at 262-8080, during the hours of 8:00 a.m. to 5:00 p.m.

NOTICE TO ALL CONTRACTORS: Park and forestry maintenance personnel are available to provide assistance Monday thru Friday, between the hours of 7:00 a.m. to 3:00 p.m. Please understand that it may take the department from 1 to 2 hours to respond to a call for assistance

B. All root cutting is to be done in a manner which provides a smooth, clean cut. It is the contractor's responsibility to excavate the cut root. **Root removal/cutting with excavation equipment is prohibited.** When root cutting prior to excavation is not possible, roots shall be carefully exposed and cut smooth. Crushing of the root system with excavation equipment is not permitted.

- C. No excavation or shaving of the surface top soil for the purpose of reseeded or grading shall be performed under the tree canopy or the Root Protection Radius.
 - D. Extreme caution shall be used during construction to prevent unnecessary damage to the tree or its root system. No unnecessary excavation within the Root Protection Radius shall be permitted.
 - E. Prior to beginning construction, overhead limb obstacles shall be reported to the Forestry Department at 262-8080 for proper removal. There shall be no unauthorized cutting of branches from any tree.
 - F. No dirt, fill materials, construction debris, equipment or heavy construction supplies shall be placed or stored on the turf within the Root Protection Radius of any tree.
 - G. Per direction of the City Forester the contractor may be required to provide protective barriers for the trees
4. **SIDEWALK AND DRIVEWAY INSTALLATION/ REPLACEMENT WITHIN THE ROOT PROTECTION RADIUS**
- A. The root systems along the sidewalks shall be cut no deeper than 9" below the finished grade of the new sidewalk, and not more than 5" from the edge of the new walk.
 - B. When replacing walks adjacent to certain trees, a slip or thin form must be used as determined by the City Forester and the City Engineer.
 - C. Certain desirable trees may require a mooned sidewalk to be placed around the tree per the City Forester's and City Engineer's direction.
 - D. Concrete delivery trucks are to remain outside of curb line at all times.
 - E. For sidewalk installation where trees are present, the use of excavation equipment such as a skid steer is prohibited unless the tree roots have been properly cut prior to excavation.
5. **CURB AND GUTTER REPLACEMENT AND INSTALLATION**
- A. The root system on the curb side shall be cut no more than 6" behind the back edge of the new curb.
 - B. Hand placement and use of thin or slip forms will be required as determined necessary by the City Forester and City Engineer.
6. **PRIVATE UTILITIES**
- A. Boring shall be required within the RPR of all trees located in the street right-of-way, unless otherwise approved by the City Engineer and City Forester.
 - B. All line pruning for overhead clearance shall be approved by the City Forester.

7. **TREE PROTECTION DURING CONSTRUCTION PERMIT**

All individuals, contractors and utilities shall obtain a “Tree Protection During Construction Permit” for all construction and excavation work which will take place in the street right-of-way within the Root Protection Radius of any tree growing in the street right-of-way and for adjacent private trees where the trees Root Protection Radius extends into the excavation area. The Tree Protection during Construction Permit shall state that the individual, contractor, or utility has read, understands and will obey the city’s Tree Care during Construction Policy. This permit will require all contractors and utilities to provide a detailed written explanation outlining the techniques they will employ to meet the requirements of the city’s Tree Protection during Construction Policy. Failure to follow the Tree Care Protection rules set forth in this policy will result in forfeiture from their contract retainage as per the Tree Damage Consequences noted below.

8. **TREE DAMAGE CONSEQUENCES**

All city construction work shall be done in accordance with the rules set forth in this policy. Failure to follow these rules will greatly increase the potential for long term tree damage. Forfeiture for failure to follow these rules will be as follows:

- A. Cutting of roots with excavation equipment and failure to provide a smooth clean cut of the root system within the root protection radius, \$200.00 per tree.
- B. Non-approved excavation inside of the Tree Protection Zone, \$200.00 per incident.
- C. Placement/storage of dirt, fill, construction debris, equipment or heavy construction supplies within the Root Protection Radius, \$200.00 per incident.
- D. Equipment damage to individual limbs less than 2" in diameter, \$100.00 per incident.
- E. Equipment damage to individual limbs larger than a 2" diameter, \$200.00 per incident.
- F. Equipment damage that split or tear bark from the trunk of the tree, \$200.00 per incident.
- G. Equipment damage that permanently disfigures or destroys the structure of a tree, \$250.00 per tree.
- H. Equipment damage that destroys a tree with a Diameter at Breast Height (DBH) of 3" or less, \$350.00 per incident.
- I. Equipment damage that destroys a tree with a (DBH) greater than 3", \$500.00 per incident.
- J. Failure to properly mark the Root Protection Radius (RPR) for each tree \$50.00 per tree.



TREE PROTECTION DURING CONSTRUCTION PERMIT

All individuals, contractors and utilities shall obtain a Tree Protection during Construction Permit for each construction or excavation project in the city of Watertown. The Permit Holder shall be considered the responsible party for the performance of all work in accordance with the City of Watertown's Tree Protection during Construction Policy.

NOTE: Each subcontractor must also obtain a Tree Protection during Construction Permit, however the prime contractor remains the responsible party.

PERMIT HOLDERS NAME: _____

ADDRESS: _____

CONTACT PERSON: _____

PHONE NO: _____

LOCATION OF PROJECT: _____

PROPOSED START DATE: _____

ESTIMATED COMPLETION DATE: _____

DESCRIPTION OF PROJECT & METHODS TO PROTECT TREES: _____

IS THIS PROJECT A CITY OF WATERTOWN CONTRACT? YES NO

I have read and fully understand the City of Watertown's Policy for Tree Protection during Construction. As an applicant for an Excavation Permit, I and my representatives agree to abide by the rules set forth in the City of Watertown's Tree Protection during Construction Policy and I further agree that I and my representatives shall perform all construction and excavation work as outlined in this application form. I also understand that failure to follow the Tree Protection during Construction Policy will result in damage assessments as outlined in this policy and may result in denial of future excavation permits.

Signature of Applicant _____ Date _____

Signature of Onsite Supervisor _____ Date _____



TREE PROTECTION DURING CONSTRUCTION
FINAL INSPECTION

PERMIT APPROVAL *(For Forestry Department Use Only)*

This application from _____ has been reviewed by
(Name of Applicant)
Watertown Forestry Department officials. The applicant has completed an acceptable permit application and has agreed to abide by the City of Watertown's Tree Protection during Construction Policy.

APPROVED BY: _____ DATE: _____

PROJECT COMPLETION DATE: _____

TOTAL DAMAGE ASSESSMENT: \$: _____

- 1) Cutting of roots with excavation equipment and failure to provide a smooth clean cut of the root system within the root protection radius, \$200.00 per tree.
- 2) Non-approved excavation inside of the Tree Protection Zone, \$200.00 per incident.
- 3) Placement/storage of dirt, fill, construction debris, equipment or heavy construction supplies within the Root Protection Radius, \$200.00 per incident.
- 4) Equipment damage to individual limbs less than 2" in diameter, \$100.00 per incident.
- 5) Equipment damage to individual limbs larger than a 2" diameter, \$200.00 per incident.
- 6) Equipment damage that split or tear bark from the trunk of the tree, \$200.00 per incident.
- 7) Equipment damage that permanently disfigures or destroys the structure of a tree, \$250.00 per tree.
- 8) Equipment damage that destroys a tree with a Diameter at Breast Height (DBH) of 3" or less, \$350.00 per incident.
- 9) Equipment damage that destroys a tree with a (DBH) greater than 3", \$500.00 per incident.
- 10) Failure to properly mark the Root Protection Radius (RPR) for each tree \$50.00 per tree.

