HARRIS TOWNSHIP
RULES AND REGULATIONS FOR ARBOR WORK

I. Administration

A. Shade Tree Commission

The Shade Tree Commission is responsible for the planting, care and maintenance of all street trees within the Township's right of way. The Commission has the following responsibilities:

(a) Recommendations of tree species for public areas

(b) Recommendations for controlling diseases and pests damaging trees

(c) Recommendations for tree maintenance

(d) Recommendations for public education and information programs concerning the importance of and the care of trees

(e) Recommendations on rules and regulations regarding tree planting, maintenance and removals

(f) Preparing a tree plan that shows existing trees (including locations and species) and future planting locations

B. Township

The Township has the authority to remove any trees located in public rights of way that are deemed to be hazardous. Prior to any tree removal, a notice shall be provided to the property owner immediately adjacent to the tree to be removed.

The Township has the authority to request the removal, partial removal or treatment of any tree on private property that is sufficiently damaged or diseased and has been determined to be a potential hazard to the public or to other trees on public property. All costs for such work shall be the responsibility of the property owner.

The Township has the authority to trim street trees around stop signs and other traffic regulatory signs.

The Township may periodically raise the limbs on street trees eight feet over sidewalks or rights of ways, provided the activity shall not exceed 66 percent of the live crown ratio of the tree, and 14 feet over cartways.

C. Residents

Residents are not permitted to perform any work on a tree located in a public right of way without first obtaining permission from the Township.

All work must be completed by an ISA-certified arborist (or equivalent) who maintains current liability and workers' compensation insurance, unless permission is granted by the Shade Tree Commission.

Requests will be reviewed by the Shade Tree Commission.

Permission granted for removal and pruning shall be valid for six months after date of approval by the Shade Tree Commission.

D. **Terminology**

Critical Root Zone (CRZ) - A circular area with a radius equal to 18 inches for every inch of the tree's diameter at breast height (DBH), measured in feet from the center of the trunk (e.g., a 10-inch DBH tree has a CRZ radius of 15 feet).

II. Trimming, Pruning, and Removal

No person shall perform any of the following acts without first obtaining permission from the Township. Nothing in this section shall be construed to exempt any person from the requirements of obtaining any permits or license as are required by law:

1. Trim, prune, or remove any tree in the public rights of way or property ownedby the Township.

2. It shall be unlawful to cut, damage, or otherwise interfere with any tree root within the critical root zone that is two (2) inches in diameter or greater, except as expressly authorized by the Township or the Shade Tree Commission..

3. Spray any tree with any pesticide or other chemical which might damage the tree or neighboring trees.

4. Place any rope, guy wire, cable, sign poster or any other fixture on any such tree or guard for any such tree.

5. Excepting solely in case of immediate necessity for the protection of life and property, no person shall damage, misuse or remove any device placed to protect any such tree.

6. Sidewalks - roots less than 2 inches in diameter of Township trees may be cleanly pruned without obtaining permission. Permission is required to prune roots larger than 2 inches in diameter. Sidewalk cutouts are permitted to clear trees or large roots while maintaining a minimum 4 foot wide sidewalk or less if permission

is granted by the Township Engineer.

The following actions are not allowed:

No person shall place or hereafter maintain any stone, cement or other substance which shall impede the passage of water and air to the critical root zone of any street tree in the public rights of way of the Township unless such person shall have an open space of ground surrounding the trunk of such tree, such space to be not less than three feet from the trunk.

No person shall dump or pour any harmful material at any place in such manner that injury might result to any street tree in the public rights of way.

Tree Protection/Relocation Due to Construction:

In the grading for, destruction, erection or repair of any building or structure, the property owner thereof shall place, or require to be placed, a chain link fencing, or such guards as approved by the Shade Tree Commission, around the protected zones of all nearby public trees as shall effectually prevent injury to such trees. Any trenching, excavating, filling or pruning of limbs or roots within the critical root zone of any public tree shall be done with written permission of the Commission. All root and canopy pruning, and other tree work shall be done in accordance to the Township's Rules and Regulations for Arbor Work.

The Commission is authorized to grant permission for the removal of public trees to accommodate construction on private property. Any request for the removal of a public tree will include a report assessing the condition of the tree or trees and the reason why the removal of the tree or trees is required. The following conditions may be placed when granting permission to remove a healthy public tree to accommodate construction:

a. That the value of the tree or trees removed shall be determined by a certified arborist (International Society of Arboriculture or equivalent) using the formula for appraising trees and landscaping contained the latest edition of the *Guide for Plant* Appraisal, published by the International Society of Arboriculture. The value shall be paid to the Township before tree removal permission is granted;

b. That, using proper arboricultural techniques, the tree or trees be transplanted to a location approved by the Commission. The tree or trees shall be properly maintained and watered for a period of three (3) years following transplantation to ensure establishment and survival. The value of the tree as determined in a. above shall be bonded with the Township for a period of three years. If the tree fails to establish within the three-year period, the bond for the value of the tree or trees shall be collected by the Township.

III. Pruning Regulations

1. All Township street and park trees will be pruned by qualified arborists using safety and pruning standards found within the ANSI A300: Standards for Tree Care Operations - Tree, Shrub, and Other Woody Plant Maintenance Standard Practices, the ANSI Z133.1: Safety Requirements for Tree Care Operations, and the International Society of Arboriculture Tree Pruning and Maintenance Best Management Standards.

2. No tree shall be cut back in such a manner that its health or present or future safety will be impaired. An exception to this may occur in tree removal or emergency relief of an immediate hazard to person or property. Any such emergency procedures must be reported within one (1) day following the emergency to Township, along with plans for completion or follow-up work submitted for approval.

3. Authority to prune street trees does not include the cutting back of sound, healthy tree branches outside the stated purpose of the tree permission granted.

4. Only thinning and reduction pruning cuts will be used to prune street and park trees. No heading or stub cuts will be used on live trees remaining in the landscape.

5. It shall not be permitted for any person or firm to top any street tree, park tree, or other tree on public property. Topping is the severe reduction of upper branches of a tree without consideration for its normal growth habit or natural form. Utility companies shall trim around their wires where applicable, as opposed to the topping of trees under the wires.

6. All dangerous deadwood and all broken limbs or other defective tree parts which constitute a hazard to the health of the tree, to public safety, or to property shall be removed.

7. Tree branches shall be removed and controlled in such a manner as not to cause damage to other parts of the tree or to other plants, people or property.

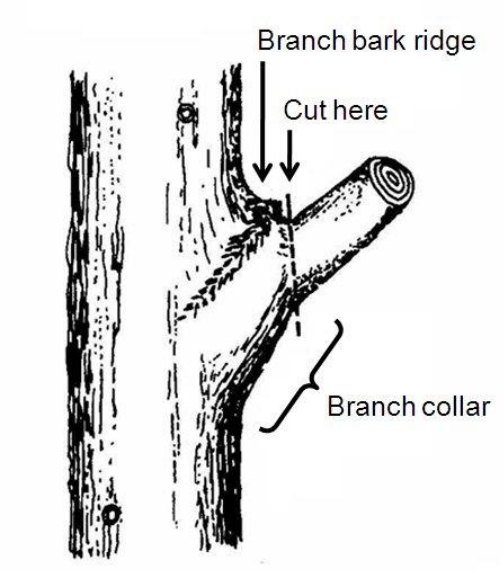
8. All tools used on a tree known to contain an infectious tree disease shall be properly disinfected immediately after completing work in such a tree and prior to being used on any other tree.

9. All cutting tools and saws used in tree pruning shall be kept adequately sharpened to assure clean cuts without jagged edges.

10. When tree pruning all cuts are to be made to a side branch (lateral), at least 1/3 of the diameter of the branch being cut where feasible.

11. Whenever removing branches too large to hold securely in one hand during the cutting operation, such branches shall be cut off several inches beyond the intended final cut. Final cuts shall then be made in a manner to prevent any unnecessary tearing of the bark and wood as shown below.

12. All final pruning cuts shall be made sufficiently close to the trunk or parent limb, without cutting into the branch collar or leaving a protruding stub, so that closure can readily start under normal conditions. Clean cuts shall be made in all cases.



13. The use of climbing spurs or spikes shall be permitted only in the process of removing a tree.

14. Public trees or poles in the public right-of-way shall not be used as an anchor for any mechanical device or any process for any reason.

15. Under no circumstances, when in the process of removing a tree or any part of a tree, shall the work site be left unattended unless the tree and its branches are in a safe condition.

16. Unless the tree work area is totally barricaded or otherwise kept safe while pruning or removing trees, at least one responsible worker shall serve to coordinate safe operations on the ground at all times when work operations are in progress.

17. Under no condition shall it be allowed to leave any severed or partially cut branches in the upper portion of any tree being worked on after the tree workers leave the scene of the operation.

18. Whenever large tree sections are being cut which may endanger person or property, such materials shall be secured by ropes or lowered safely in a controlled manner.

19. Cleanup of branches, logs or any other debris resulting from any tree pruning or removal shall be promptly and properly accomplished. The work area shall be kept safe at all times during the cleanup operation. Under no condition shall the accumulation of brush, branches, logs or other debris be allowed upon a public property in such a manner as to result in a public hazard.

20. All removal of public trees shall be done in a manner so that the remaining stumps will be left as close to ground level as possible. If stump removal is required, they shall be ground at least 8 inches below ground level or removed intact.

21. Excavations resulting from tree or shrub removal must be properly filled in to conform to the surrounding ground level with a clean earth fill lightly compacted and free of debris. Surface material shall be restored to match adjacent material.

IV. Planting Regulations

1. Only those trees on the approved street tree list may be planted within the public rights of way unless authorized by the Shade Tree Commission.

2. Plant material shall conform to the latest version of the American Standard for Nursery stock . Plant material shall be of standard quality or better, true to name and type of their species or variety.

3. No plant pit shall be dug or approved until all underground electric or telephone lines, gas lines, water lines or any other improvement locations are checked in accordance with Act 187 of 1996 of the Commonwealth of Pennsylvania.

4. All street trees shall be so situated to form as nearly as possible a straight and uniform line with the other shade trees growing in the same street.

5. Trees shall be planted or set from 30 to 40 feet apart where practical and shall be sound, straight and symmetrical.

6. Trees may not be planted less than 50 feet from a public road intersection or 20 feet from a fire hydrant or 10 feet from a driveway or pole supporting a street light.

7. Every tree shall be planted in a hole not smaller than three feet square filled with good topsoil; to permit the entrance of water and air to the roots.

8. New trees shall be watered weekly during hot, dry weather to keep the trees from dying.

9. Trees shall not be less than 1 3/4 inches in caliper (diameter).

10. Trees planted under utility wires must be selected from the Township's approved species list for small trees.

11. Keep street trees at least 10 feet from utility poles and at least six feet from water, sewer and gas services.

12. All tree plantings shall be staked or guyed and mulched with 2 to 4 inches of wood chips, coarse fibrous bark or other surface treatment as specified by the Township and placed in a circle 2 to 3 feet in diameter but not touching the trunk.

V. Schedule of Fines

Pruning	**Fine**
Pruned according to specifications without a permit	$10 per violation
Severe pruning with a permit or topping	$100 per violation
Topping or severe pruning without a permit	$200 per violation
Removal	
(or things done to a tree to cause the tree to die such as girdling, poisoning, etc., without a permit)	Minimum of $300 per violation
Other Damage to Trees	
There may be instances when trees are damaged intentionally or unintentionally, but do not cause the tree to die	Up to $100 depending on the severity of the damage

Appendix A: Pruning Guidelines

AUTHORIZED TYPES OF TREE PRUNING

Authorized types of tree pruning follow the National Arborist Association's Pruning Standards for Shade Trees and are summarized below:

1. **Crown Cleaning**
   Crown Cleaning shall consist of the removal of dead, dying, diseased, crowded, weakly attached and low-vigor branches from the crown of the tree.

2. **Crown Thinning**
   Crown thinning shall consist of the selective removal of branches to increase light penetration and air movement through the crown. Thinning opens the foliage of a tree, reduces weight on heavy limbs, and helps retain the trees natural shape.

3. **Crown Raising**
   Crown raising removes the lower branches from a tree in order to provide clearance for buildings, vehicles, pedestrians and vistas.

4. **Crown Reduction**
   Crown reduction reduces the size of a tree, often for clearance for utility lines. Reducing the height or spread of a tree is best accomplished by pruning back the leaders and branch terminals to lateral branches that are large enough to assume the terminal roles (at least one-third the diameter of the cut stem).

Appendix B: Planting Guidelines

PLANTING METHODS AND TECHNIQUES

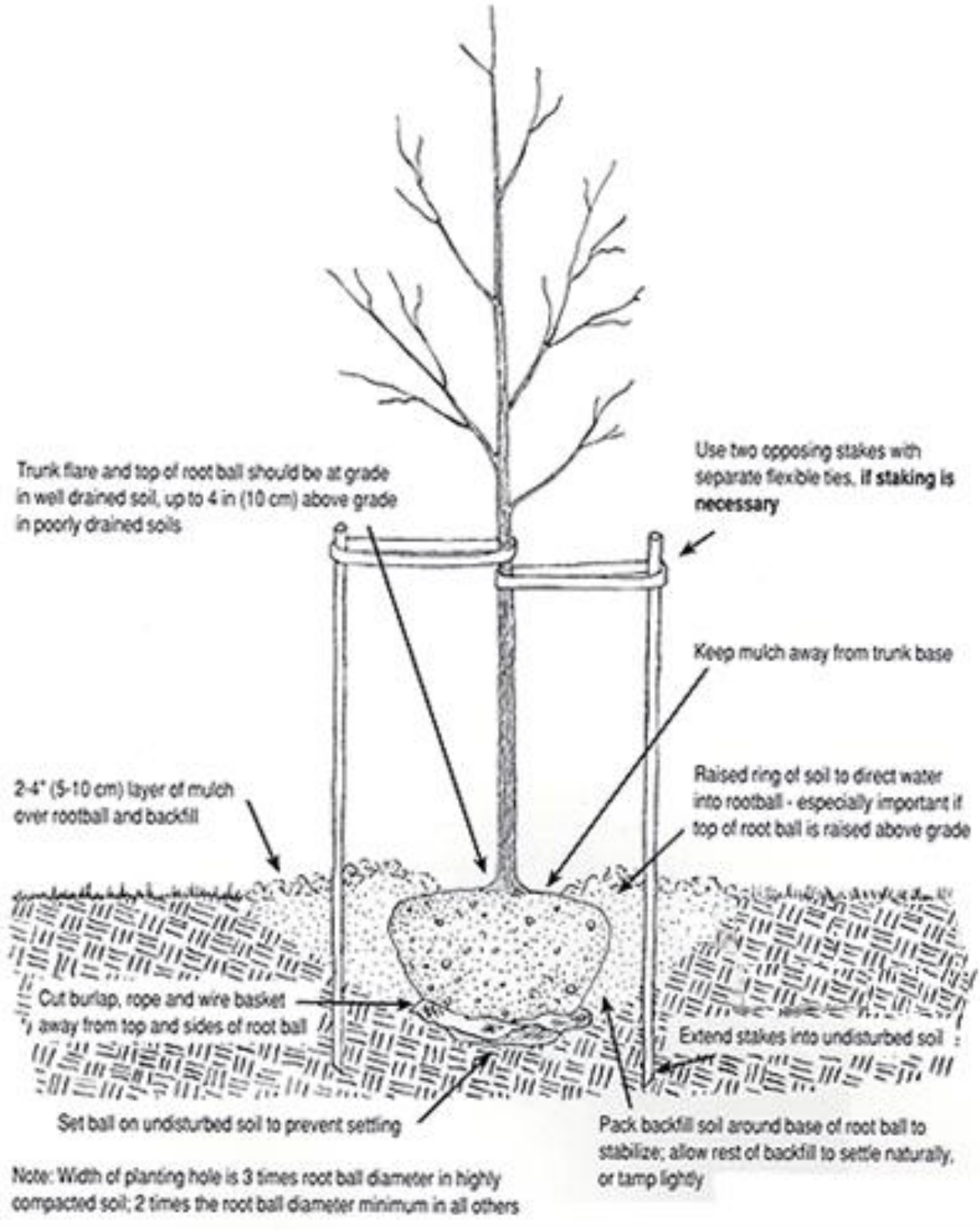
1. Every pit should be two to three times wider and at least the depth of the soil ball or the full extent of the root system of bare root trees. In the process of digging the pit, avoid "glazing" the sides of the hole. If the planting pit is glazed or compacted, the sides of the pit shall be scarified to a minimum depth of two inches to promote root penetration and healthy establishment.

2. For all balled and burlapped, bare root and container plantings, the backfill should be of desirable structure, texture and pH to support vigorous plant growth. The backfill shall be added and tamped firmly but not excessively around the ball or root system at 12 inch increments until full.

3. Each plant should be centered and vertically aligned in the pit and set at the depth at which it was growing at the nursery or 1-2” higher in poorly drained soils.

4. For all balled and burlapped stock, once it has been properly positioned in the pit, the burlap and twine shall be removed from around the trunk of the tree and removed. Plastic burlap or other synthetic materials shall be completely removed from the pit. Tree baskets may remain after backfill is placed around the bottom third of the rootball; the rest of the basket and all burlap and twine shall be cut and removed from the hole.

5. A watering berm shall be constructed around every new tree or shrub when possible. The soil in the planting hole shall be thoroughly soaked with water after planting.


Trunk flare and top of root ball should be at grade in well drained soil, up to 4 in (10 cm) above grade in poorly drained soils
Use two opposing stakes with separate flexible ties, if staking is necessary
Keep mulch away from trunk base
2-4" (5-10 cm) layer of mulch over rootball and backfill
Raised ring of soil to direct water into rootball - especially important if top of root ball is raised above grade
Cut burlap, rope and wire basket away from top and sides of root ball
Extend stakes into undisturbed soil
Set ball on undisturbed soil to prevent settling
Pack backfill soil around base of root ball to stabilize; allow rest of backfill to settle naturally, or tamp lightly
Note: Width of planting hole is 3 times root ball diameter in highly compacted soil; 2 times the root ball diameter minimum in all others

6. Every evergreen tree in excess of 6 feet in height and any tree loose in the ball or ground shall be guyed securely.

7. For every plant moved with a tree spade, all space between the ball and surrounding soil shall be filled. Trees shall be staked or guyed and mulched immediately after transplanting.

8. When planting a tree that will be surrounded by an impervious surface, there shall be a minimum of 40 square feet of porous surface around the tree. A lesser area may be pro vided if approved by the Shade Tree Commission.

PLANTING STANDARDS OF WORKMANSHIP

1. Plant material shall be handled in a manner so as to cause the least amount of damage during the planting process. The trunk shall be protected against mechanical impact during handling and transport.

2. Balled and burlapped and container plants shall always be handled by the soil ball. Under no circumstances may they be dragged, lifted or pulled by the trunk or foliage parts in a manner that will loosen the roots in the ball.

3. In transporting plants to the job site, they shall be handled, secured or covered so as to prevent any damage from wind or vibration. Plants shall never be thrown, dropped, or bounced off a truck or loader to the ground.

4. Plant material shall be planted the day it is taken to the planting site or it shall be watered and placed in a shady area to prevent dehydration.

5. Bare root plants shall have their roots covered either with a moist tarp or mulch while they are being transported to and being held at the planting site.

6. Trees and shrubs shall not be dug, balled and burlapped or moved with a tree spade during the active growth period unless the ball is large enough to ensure survival and the foliage is treated with an anti-desiccant.

7. All twine or rope and plant labels secured around the trunk and branches shall be removed after planting is completed.

8. Cleanup of soil, branches or other debris resulting from any tree or shrub planting shall be promptly accomplished. The work area shall be kept safe at all times until the cleanup operation is completed. Under no condition shall the accumulation of soil, branches or other debris be allowed upon public property in such a manner as to result in a public hazard or be unsightly.

9. Excavated plant pits that will be left open when work is not in progress or pose hazards to pedestrians or vehicles shall be adequately barricaded with qualified warning devices.

Appendix C: Chemical Application Specifications

The following specifications pertain to the spray application, soil application, or injection of fertilizers, pesticides, or growth inhibitors to the above ground portions of trees or roots.

GENERAL SPECIFICATIONS

1. Applicators applying chemical pesticides to public trees shall adhere to all federal and state laws and regulations pertaining to pesticides and their application.

2. All work pertaining to the treatment of trees for insect, disease or other pests shall be done in accordance with the Pesticide Control Act of 1973, Act of 1974, P.L. 90, No. 24, and subsequent Pesticides Rules and Regulations. The pesticide application business conducting the treatment must possess a valid Pesticide Application Business License and the application must be performed by a Certified Commercial or Public Applicator who is certified in the category of Ornamental and Shade Trees. Proof of Business License and Certification shall accompany the Township permit application.

3. The pesticide applicator shall know and understand the capacities and safety precautions of those materials used by either himself or his employees and be aware of those recommendations stipulated by the manufacturer.

4. Ineffectual control; damage, injury or death to plants; or adverse effects on animals or persons; resulting from the use of materials beyond the limitation of the manufacturer's guarantee shall be considered the responsibility of the licensed operator and his employer.

5. Spray equipment shall be kept clean and in good working order.

6. It shall not be permitted to perform chemical application with dirty or contaminated tanks or equipment.

7. Operators shall properly dispose of excess chemicals, including rinse water, in accordance with federal and state laws and regulations. Unsanitary or unsafe methods of washing out or draining tanks and equipment into public sewers and gutters is prohibited.
8. No spray application shall be carried out when there is sufficient wind to make pesticide control ineffectual or create an overspray hazard to persons, animals, plants, property and/or the environment.

9. No spraying of pesticides shall be done when air temperature is less than 40 degrees Fahrenheit.

10. All spray machines other than hand pump sprayers must have agitators capable of maintaining a uniform spray solution at all times when spray application is in progress.

11. Adequate precautions shall be taken in all phases of chemical preparation and application in order to minimize the chances of toxicity or phytotoxicity to non-target species.

12. Pesticide application records, required to be kept by the Commonwealth of Pennsylvania, shall be made available to Township authorities upon request.

SPECIFIC REQUIREMENTS PERTAINING TO TREE INJECTIONS

1. Authorization by the Shade Tree Commission must be given prior to any injection of chemicals into Township-owned trees.

2. Injection hole size, spacing and timing of application will be according to product label and tree species.

3. Injection holes should not be placed near wounds in the tree trunk, such as knots, frost cracks, cankers, decay, etc.

4. Holes shall be drilled as low on the trunk as feasible.

5. Avoid vertical alignment of holes from previous treatments.

6. Remove external fixtures as soon after treatment as the manufacturer and legal requirements allow.

7. If growth regulators are used, each stem of a multi-stemmed tree should be treated as a separate tree and any tree showing visible signs of decline or decay should not be injected unless permitted by the Shade Tree Commission.

8. A record of trees injected shall be kept and turned in to the Township upon the complet ion of work. The record shall include the date, time of day and location that the tree or trees were injected, the operator, chemicals used, size and species of tree, amount of chemical used and any other pertinent information.