

PROTECTING TREES DURING CONSTRUCTION

The decision to protect and preserve trees on a construction site is an important one.

Many sites are chosen for residential or business use simply because the site contains a beautiful shade tree or offers a wooded environment. Often the very tree which are highly valued for their contribution to the aesthetic appeal of a site are inadequately protected or cared for during construction.

A few careful and well planned steps may make the difference between a post-construction disappointment and a proud and satisfied new owner.

Develop a Tree Construction Plan

The first step in a tree protection plan is to determine which trees can and should be saved. The following questions should be answered:

- **Is the tree a desirable species? Is the tree healthy? Will it provide shade where I want it?**
- **If the tree is left growing in a small space, will it survive? Will it be the correct size when it reaches maturity? Will it have enough growing space?**
- **Would it be easier and less costly to replace the tree or protect it? What will it cost to protect the tree during construction?**
- **Will the tree fit well into my landscape plan?**

Large trees within 10 feet of buildings and drives may be damaged and later become hazardous. Plan to build a safe distance from large trees, or remove them before construction.

Some trees in poor condition should not be saved. It may be safer and cheaper to remove old slow growing trees and those with extensive rot or diseased woody tissue before construction begins.

Keep trees that are well-located, vigorous, and have desirable characteristics; require the minimum protection to save them. Remove trees that are obviously located in the immediate construction area and will be damaged by soil compaction, cutting of roots, or grade changes.

Follow Tree Protection Guidelines

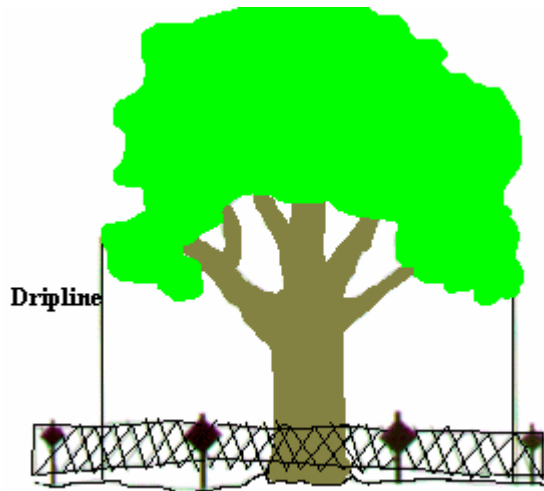
Follow these guidelines to protect trees during construction:

- **Mark trees to be saved with surveyor's flagging or ribbon.**
- **Construct barricades made of wood or wire fencing around trees to establish a tree protection zone. Extend barricades as far out as the branch spread of the trees. If disturbance within this area is unavoidable, the tree barricade should be located a minimum of one foot from the tree for every one inch diameter of tree trunk (for example, ten feet from a tree ten inches in diameter). Place heavy equipment, supplies, ditches, and underground utility lines outside the protection zone. If an underground line must go near a tree, require the contractor to tunnel or auger underneath major roots without cutting them.**
- **Place Tree Protection signs on barricade.**
- **Include a tree protection clause in the construction contract forbidding grading, filling, ditching, equipment parking, or material storage within the tree protection zone. Include penalties for violations of the tree protection clause and damage to trees.**
- **Fertilize protected trees to increase vigor and aid in overcoming stress (only fertilize during the growing season). Prune deadwood and broken branches. Follow the guidelines on tree care that are available from your local DEC office.**
- **Designate one corridor for site access, material storage, fuel tanks, chemical or cement rinsing, vehicle parking and site-office locations to non-tree areas. Keep construction equipment away from the trunk or tree protection zone of trees to be saved. Do not allow trash or debris to be burned beneath trees.**

Tree Wounds

If trees are wounded or stressed during construction, they are more susceptible to insect and disease attack.

Any wounds to the bark should be cleaned to sound wood by removing loose bark and wood, leaving a smooth edge around the wound. No application of a wound dressing is necessary.



Barricades that extend beyond the dripline are a good way to protect trees during construction.

Sources and Symptoms of Tree Damage

When tree roots are removed or damaged, or fill is placed on the soil surface, trees may show decline symptoms within a few months. Trees on construction sites are injured by:

- Lowering of groundwater
- Compaction on soil
- Removal of top soil
- Loss or damage to roots
- Damage to trunk and leaf crown

Symptoms include small or off-color leaves, premature fall color, extensive sprout development on the trunk and main limbs, dead twigs and eventually dead branches.