

Avoiding Tree Damage During Home Construction

A house built on wooded property can be worth up to 20 percent more than the same house built on property barren of trees. But with this benefit comes a precaution: When building or remodeling a house on property where there are trees, it is important to guard against tree damage during the construction.

Construction work can be harmful to nearby trees, but unless the damage is extreme, it is often difficult to detect, and it might take years for a tree to deteriorate. This makes it difficult to correlate the damage with the construction. As a homeowner, the most important step you can take is to hire a professional arborist to assess a construction situation early in the process. An arborist can work with you and your builder to determine which trees can be saved and how to protect your trees during each phase of construction.

How Trees Are Damaged During Construction

Trees can be damaged in a variety of ways during the construction process. Construction equipment can injure the above-ground part of a tree by breaking branches or tearing bark and wounding the trunk. Also, the digging and trenching necessary to construct a house can cause root damage. The severing of a major root can cause a loss of 5-20 percent of a tree's root system. When significant digging and trenching occurs, there is an increased chance of a tree falling over.

Arborists point out that 90 percent of the fine roots of a tree that absorb water and minerals are in the upper 6-12 inches of soil. Piling soil over a root system or increasing a soil grade can smother roots. In addition, the heavy equipment used in construction compacts the soil, which can dramatically reduce the oxygen levels essential to growth and function of the roots.

Erecting Barriers

The ability to repair construction damage to trees is limited. The single most important action homeowners can take is to set up construction fences around all trees they want to protect. These fences should be placed as far away from the trees as possible, in order to protect the root systems. As a general guideline, allow one foot of space from the trunk for each inch of trunk diameter. Instruct construction personnel to keep the fenced area clear of building materials, waste and excess soil. No trenching or other soil disturbances should be allowed in the fenced areas.

Post-Construction Tree Maintenance

Most likely your trees will require several years to adjust to the shock and environmental changes induced during construction. Post-construction trees are more prone to health problems such as disease and insect infestation. By talking with an arborist, you can create a plan for continued maintenance during this critical time. By monitoring your trees, and having them periodically evaluated, you can greatly improve the health of your wooded areas. Despite the best intentions and most stringent precautions, trees can still be injured during the construction process. In this instance, an arborist can suggest various treatments to reduce stress and stimulate growth.