

A When does construction damage a tree?

Trees are damaged by construction activities through the physical wounding of the roots, trunk and limbs, or through changes in the site and the tree's environment. Once trees are damaged it is difficult, and often not possible, to correct the damage. Wilting, browning or shedding of leaves may be a tree's immediate reaction, but more often symptoms of damage will show up months and even years later in the form of reduced shoot growth, twig and crown dieback and insect and disease infestations.

COMMON EXAMPLES OF DAMAGING PRACTICES:

Roots

- Soil excavation or trenching for utility line installation.
- Crushing of roots by driving or parking equipment on the roots.
- Soil backfill over tree roots.
- Tearing or ripping of roots.

Trunk

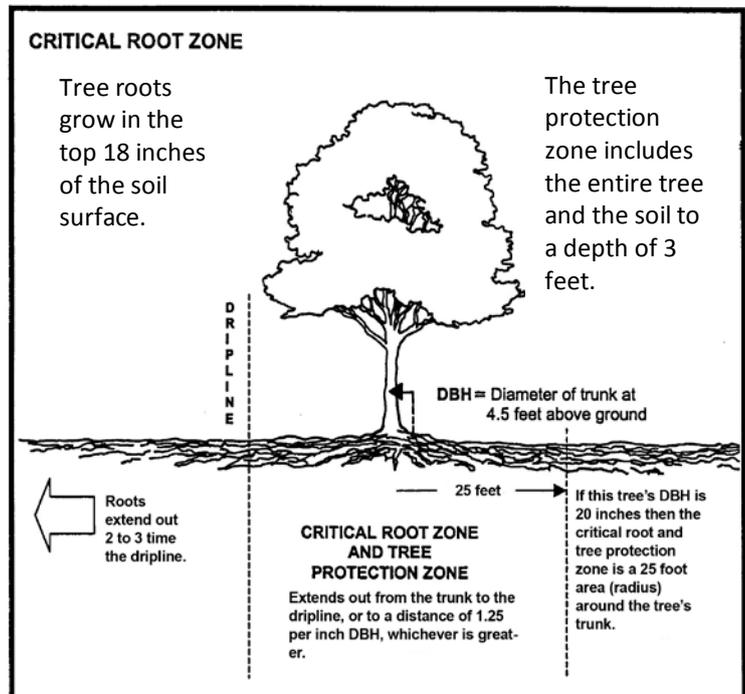
- Wounds (crushing wounds without bark removal and those that remove the bark and expose wood).
- Excessive heat from fires, equipment exhaust pipes, etc.

Crown

- Wounding or breaking limbs.
- Improper pruning.
- Excessive heat from fires, equipment exhaust pipes, etc.

Trees, when wounded, cannot heal themselves. They can seal off the damage and continue to grow around it, but damage almost always leads to infection by fungi, bacteria or insects, decline in tree health and finally loss of strength and a greater risk of failure. To keep a tree healthy and safe, the roots and soil within the critical root zone and within 3 feet of the surface must be protected in addition to the entire aboveground portion of the tree.

Some species of trees are more tolerant than others to physical damage or changes in their environment. Oaks, hickories, and conifers are particularly sensitive. Healthy trees can take more damage than trees already under stress. Older trees are more sensitive to damage and changes in their environment than young, vigorously growing trees.



The Impact of Development on Trees



B Development Stats for Decatur:

- Within the City, 85% of properties are residential, and 15% are commercial.
- There were 44 demolition permits issued in the 6 months between July 1, 2013 and December 4, 2013. In fiscal year 2013 (July 1, 2012-June 30, 2013) there were 55 demolition permits issued.
 - **Prior to 2012, demolitions were combined with SFD building permit and demolitions were counted during fiscal year.*
- Since 1993, single family developments have averaged 40 units per year, and townhomes have averaged 18 units per year. The number of total building permits, single-family building permits, and townhouse building permits are shown in the following chart.
- Generally, Building Permits are 12% new construction, 25% large renovations, 30% small renovations and 33% accessory buildings, fences and hardscape projects.

Calendar Year	Building Permits	Single-Family	Townhouses
*2013	735	75	10
2012	730	73	10
2011	787	44	41
2010	760	29	12
2009	700	16	0
2008	652	19	0
2007	822	50	45
2006	753	41	52
2005	728	83	83
2004	637	25	18
2003	706	17	28
2002	632	22	5
2001	658	39	19
2000	688	42	23
1999	624	50	20
1998	530	74	0
1997	456	63	7
1996	265	16	0
1995	349	16	0
1994	295	6	0
1993	333	40	0
Average	605	40	18

** From January 1, 2013 – December 4, 2013*