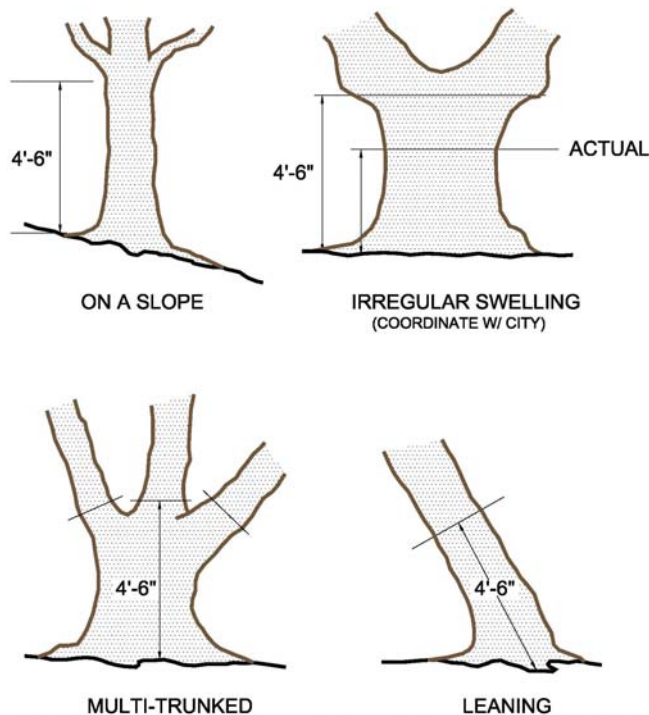


MEASURING TREE DIAMETERS

1. Measure tree diameters at a height of 4-½ feet from ground level.
2. If the tree forks at 4-½ feet, measure below the swell.
3. Diameter measurement should be accurate to one inch and should be rounded up or down to the nearest inch. (Examples: 15.3” = 15”; 15.7” = 16”)
4. Trees which are connected at ground level or above are considered to be multi-trunk trees. Look for bark at the base joining the stems.
 - a. Measure all trunks larger than 6-inches at a height of 4-½ feet and add for total diameter inches.
 - b. If none of the trunks is larger than 6-inches when measured at 4-½ feet, measure the trunk below the swell beneath the lowest fork.
 - c. Example: A Spanish oak with three 8-inch stems and two 4-inch stems would be shown as a “24-inch multi-stem Spanish Oak”.
 - i. Only the three 8-inch stems would count toward the total.
 - ii. Show the total diameter inches in the tree list. Do not show as “8” 8” 8” SO” or “8-inch triple oak”, etc.
5. Clusters of many small stems forking from the ground do not need to be measured or shown on the tree survey.
 - a. The only exception is the Texas Madrone, for which the tree survey should show an approximate height and drip line.



TREE SURVEY SPECIFICATIONS

All plan submittals require an accurate tree survey meeting the following specifications:

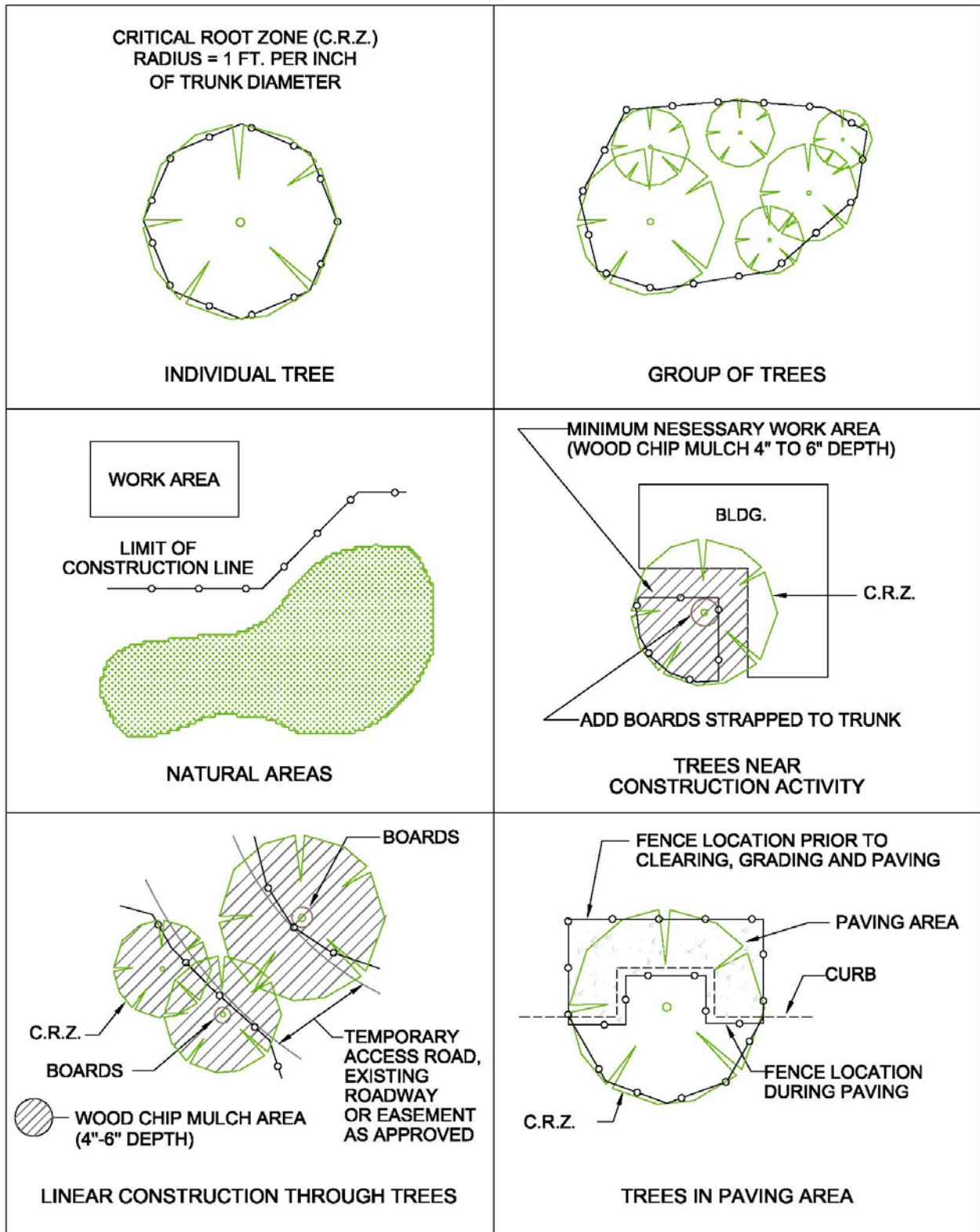
1. The surveyor should locate and measure:
 - a. All hardwood trees 6-inches and larger in diameter.
 - b. All Texas Madrones (*Arbutus xalapensis* var. *texana*) of any size.
2. Trees should be tagged and numbered on site.
3. The tree survey plan should include a tree list showing tag number, size and species.
4. The tree list should show the total diameter inches of multi-trunk trees, with the exception of Texas Madrones.
5. Texas Madrones should be shown in the tree list and on the survey with an approximate height and an actual (not calculated) drip line.
6. The tree survey should show the location of each tree and a calculated drip line drawn for each tree at one foot radius per inch of diameter.
 - a. Ex: a 10-inch diameter oak would show a calculated drip line with a 10-foot radius.
7. The tree survey plan must contain a surveyor's certification.
8. Field work for the tree survey shall be performed within one year of submittal to the City.

Texas Madrone: Small multi-stem evergreen tree, usually less than 20-feet tall, rarely 30-feet. Distinguishing feature is smooth bark, rose to deep red in color. Leaves are oval, up to 3-½ inches long, leathery and light green. Usually found on slopes sheltered beside Ashe Juniper (cedar) trees.



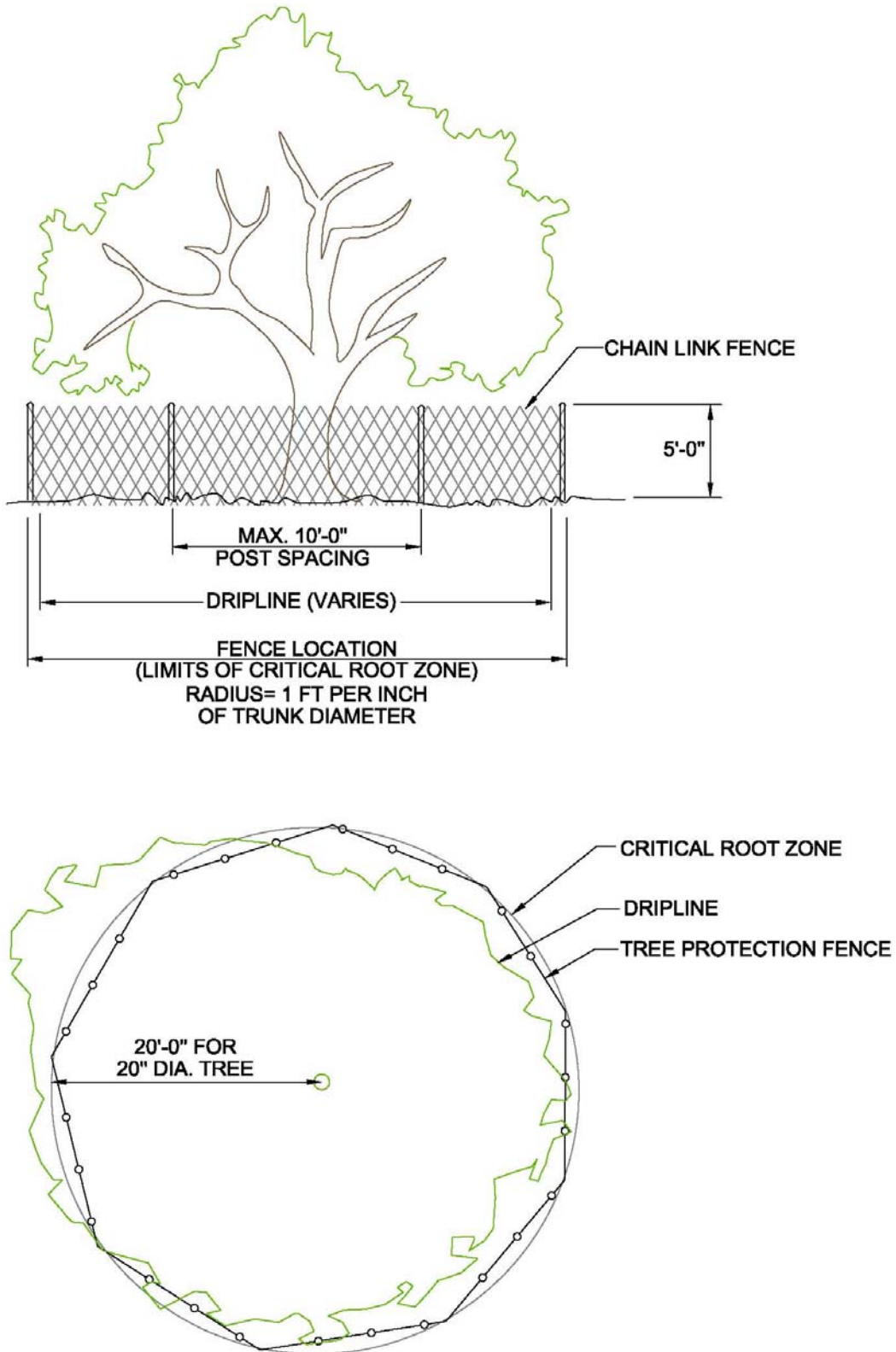
Photo by Benny J. Simpson, Texas Agricultural Extension Service

STANDARD TREE PROTECTION LOCATIONS

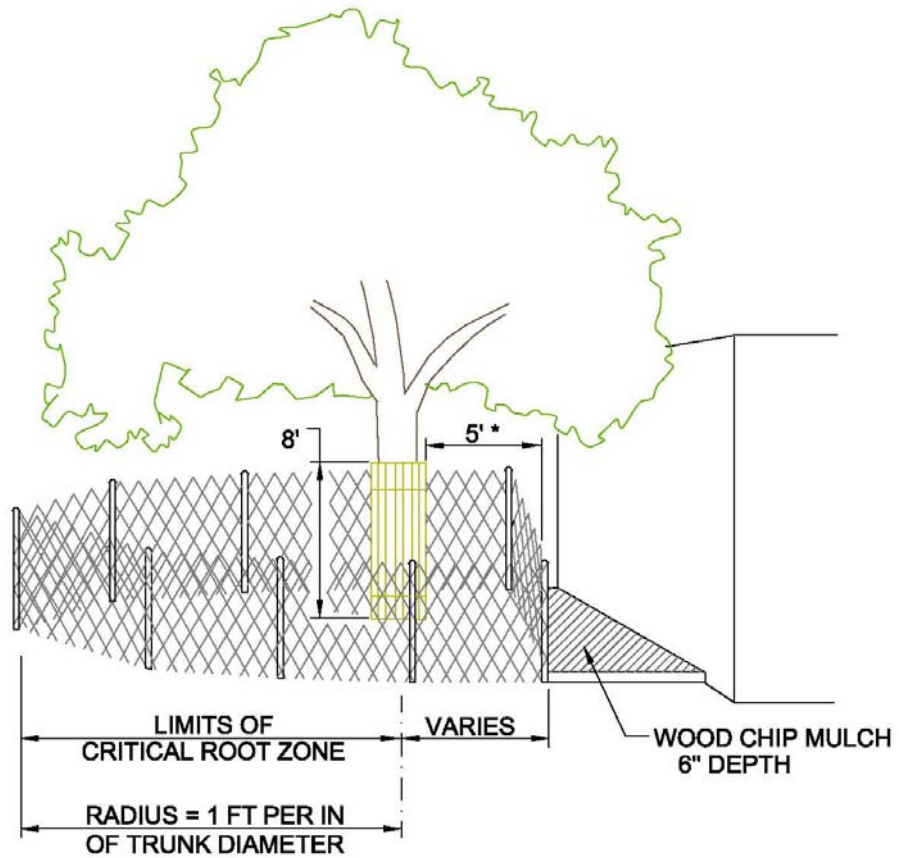


Source: City of Austin Tree Standards (modified for the City of Lakeway)

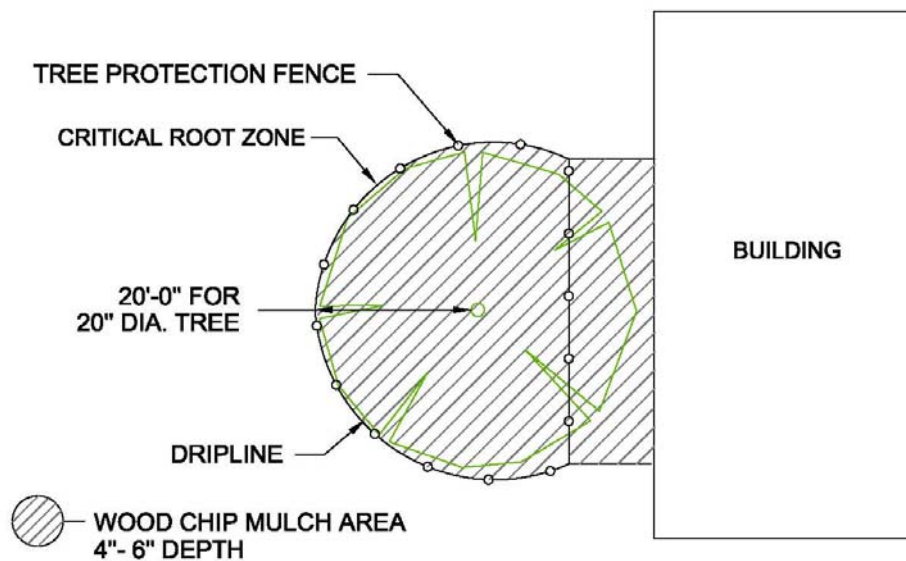
CHAIN LINK FENCE TO DRIP LINE
Required for all trees to be preserved during construction



CHAIN LINK FENCE TO DRIP LINE (MODIFIED)
Required for all trees to be preserved during construction



*AS NEEDED TO PROVIDE MINIMUM NECESSARY WORK SPACE.
 IF LESS THAN 5', THEN ADD BOARDS STRAPPED TO TRUNK.



CHAIN LINK FENCE, PRUNING AND PLANKING

Exceptions to installing fences at tree drip lines may be permitted in the following cases:

1. Where there is to be an approved grade change, impermeable paving surface, tree well, or other such site development, erect the fence approximately 2 to 4 feet behind the area in question.
2. Where paving is to be installed within a tree's drip line, erect the fence at the outer limits of the paving area (prior to site grading so that this area is graded separately prior to paving installation to minimize root damage).
3. Where trees are close to proposed buildings, erect the fence to allow 6 to 10 feet of work space between the fence and the building.
4. Where any of the above exceptions result in a fence being closer than 4 feet to a tree trunk, protect the trunk with strapped-on planking to a height of 8 feet (or to the limits of lower branching) in addition to the reduced fencing provided.
5. All branches that hang over the fence shall be pruned to a height of 13-½ feet or higher if required for equipment clearance.
6. All pruned limbs of oak trees shall be painted with pruning seal immediately after cutting. Any broken limbs of oak trees shall be cut clean and painted with pruning seal immediately after cutting.