The International Society of Arboriculture's *Arborists' Certification Study Guide* by Sharon Lilly (2010), describes good arboricultural practices in order to aid potential arborists in getting their certification.

Chapter 7 of the study guide includes details on the installation and establishment of trees.

Under **Mulching** subsection:

- Organic mulch, such as that made out of wood chips is recommended
- This mulch and should be placed in a ring around the tree with a depth of <u>2-4 inches (5 to 10</u> cm)
- Mulch should not touch the tree's trunk, as this can lead to diseases/decay

Under the **Tree Stabilization** subsection:

- Staking of newly planted trees is not always necessary. In some cases however, it is needed (e.g. windy areas, or where the tree is not able to support itself yet)
- When staked or secured improperly there can be harm to the tree
- If trees are staked, they should not remain staked for extended lengths of time (duration not explicitly stated in this book, but other resources typically recommend a maximum of either one year or one growing season (e.g. Pacific Northwest Chapter of the ISA, https://pnwisa.org/tree-care/adding-trees/planting/))
- Leaving trees staked too long can have adverse effects. These trees tend not to develop a strong root flare and may not have as extensive of a root system. As a result, they are more prone to wind damage, both tipping over and breaking
- When trees are staked, there should be some room to flex to encourage root flare development (additional details from the Pacific Northwest Chapter of the ISA suggest the trunk should be able to move ~2 inches (5 cm) in any direction when staked)
- Material used to secure trees to stakes should be broad, non-abrasive, without sharp edges, and should have some elasticity or flexibility.
- The use of wires covered in rubber hoses for supporting trees is NOT recommended! It was used in the past but can cause girdling of the trunk and should not be used.