



CITY OF SANTA CLARA

ARBORIST NOTES

I. GENERAL

1. No cutting of any part of city trees, including roots, shall be done without securing approval and direct supervision from the city arborist or arborist employed by city (408-615-3080).
2. No cutting of any part of private trees, including roots, shall be done without direct supervision of an international society of arboriculture (ISA) certified arborist.
3. When construction occurs within the drip line of existing trees, contractor shall pile the soil on the side away from the tree. When this is not possible, place soil on plywood, tarp, or 4"-5" thick bed of mulch. This is to help prevent cutting into the soil surface when the backhoe or tractor blade refills the trench.
4. Refill open trenches quickly within hours of excavation when they occur within the drip line of existing trees. If this is not possible and the weather is hot, dry, or windy, contractor must keep root ends moist by covering them with wet burlap. If the temperature is 80°f or greater, the burlap must be inspected every hour and re-wet as necessary to maintain a constant cool moist condition. If the temperature is below 80°, the burlap must be inspected every four hours and re-wet as necessary to maintain a constant cool moist condition. Small roots can dry out and die in 10-15 minutes. Larger roots can succumb in an hour or less under unfavorable weather conditions.
5. When roots 2" or larger are required to be cut, shovel by hand near the roots and prune the roots with an industry-approved pruning tool. Roots that are accidentally broken should be pruned two inches from the damaged end. Crushed or torn roots are more likely to allow decay to begin. Sharply cut roots produce a flush of new roots helping the tree to recover from its injury.
6. Contractor shall notify the city arborist or arborist employed by city 72 hours in advance of any work requiring digging around or within the drip line of existing trees.
7. A clear system of flagging must be provided around trees within 20' of the proposed grading. Contractor shall secure approval of such system from the city arborist or arborist employed by city.
8. Materials, equipment, temporary buildings, fuels, paints and other construction items shall not be placed within the drip line of existing trees.



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9. Fence all trees to be retained to completely enclose the tree protection zone prior to demolition, grubbing or grading. Fencing shall be placed at the drip line of existing trees or, if possible, 1.5 times the radius of the drip line out from the trunk of the tree. A warning sign shall be prominently displayed on each fence. The sign shall be a minimum of 8.5"x11" and clearly state **"warning – tree protection zone this fence shall not be removed without approval from the city arborist/project arborist"**. Fences shall be 6-foot tall chain link or

equivalent, as approved by the city arborist or arborist employed by city. Fences shall remain until all grading and construction work is completed. In addition, wrap all trees with straw waddle up to the first main branch, and then wrap snow fencing around the waddle on all trees in the construction zone to protect them from bark damage caused by the work.

10. No trenching shall be done within the drip line of existing trees without the approval of the city arborist or arborist employed by city. Open trenching in the root zone of a public tree is prohibited except in cases where the trenching falls outside the drip line of the tree involved. Exceptions may be allowed if, in the opinion of the city arborist or arborist employed by city, the impact of trenching on the tree will be negligible.
11. Any cutting of existing roots of city trees shall be done with approved light equipment under the direct supervision of the city arborist or arborist employed by city. Any cutting of existing roots of private trees shall be done with approved equipment under the direct supervision of an ISA certified arborist.
12. Grading should not create drainage problems for trees by channeling water into them, or creating sunken areas.
13. All grading within the drip line of city trees shall be done with approved light equipment under the direct supervision of the city arborist or arborist employed by city. All grading within the drip line of private trees shall be done with approved equipment under the direct supervision of an ISA certified arborist. The original grade at the base of existing trees shall not be modified. If a grade increase is necessary, dry wells should be used.
14. When trenching is allowed, the contractor must first cut roots with a vermeer root cutter prior to any trenching to avoid tugging or pulling of roots.
15. Trees that are determined to be removed by the city arborist or arborist employed by city due to an unforeseen circumstance during construction shall be replaced by the



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contractor. The city arborist or arborist employed by city shall determine the replacement specie, size, quantity, and spacing.

16. Place 4"-5" thick mulch around all existing trees (out to their drip line) that are to be retained prior to any construction. This will help maintain moisture under the tree within the fencing area.

17. Bore pits are not allowed within the drip line of any tree.

II. BORING

Where there is insufficient space to bypass the drip line by trenching adjacent to all existing trees in excess of 5" DBH, the installation must be made by boring. The beginning and ending distance of the bore from the face of the tree in any direction is determined by the diameter of the tree as specified by the accompanying table:

When the tree diameter at 4½ feet is:	Trenching will be replaced by boring at this minimum distance from the face of the tree in any direction:
0-2 inches	1 foot
3-4 inches	2 feet
6-9 inches	5 feet
10-14 inches	10 feet
15-19 inches	12 feet
over 19 inches	15 feet

Tree diameter	(minimum) depth of bore
9 inches or less	2.5 feet
10-14 inches	3.0 feet
15-19 inches	3.5 feet
20 inches or more	4.0 feet

III. TREE PROTECTION

1. Contractor shall tag and identify existing trees which are to remain within the project limits and on the public right-of-way prior to start of work. Protect all tagged trees at all times from damage by the work. Treatment of all minor damage to tagged trees shall be performed by an ISA certified arborist or other personnel approved by the city arborist or arborist employed by city. If a tagged tree is permanently



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disfigured or killed as a result of the work, contractor shall remove the tree, including its roots, from the site and replace each removed tree with an equal-sized tree. If such replacement is not possible, the contractor shall reimburse to the tree owner the amount listed in the table below. The city arborist or arborist employed by city shall be the sole judge of the condition of any tree. Contractor shall provide regular watering of existing landscaping within the construction area through the construction period.

2. Contractor shall pay the tree owner the value of existing trees to remain that died or were damaged because of the contractor’s failure to provide adequate protection and maintenance. The payment amount shall be in accordance with the following schedule of values, using “tree caliper” method established in the most recent issue of the “guide for establishing values of trees and other plants”, prepared by the council of tree and landscape architects.

7 inches	\$ 2,400
8 inches	\$ 3,400
9 inches	\$ 4,400
10 inches	\$ 5,200
11 inches	\$ 6,200
12 inches	\$ 7,200
13 inches	\$ 8,200
14 inches	\$ 9,200
15 inches	\$ 10,000
16 inches	\$ 11,000
17 inches	\$ 12,000
18 inches and over: Add for each caliper inch	\$ 1,200