

Term Tree Work Contract Specifications Example

1.0 Description

The work shall consist of the pruning and removal of trees, stump removals on a routine basis and emergency tree work services.

A list of routine tree pruning, tree removals and stump removals will be provided to the contractor in blocks of a minimum of one workday's work. This work will be paid on a per-tree unit basis based on tree diameter at breast height (4½ feet above grade). The contractor will have **30 calendar days?** to complete this work.

The contractor shall be required to respond within **two (2)?** hours for emergency tree work services. This work will be paid at an hourly rate. The contractor will be paid a minimum of four (4) hours for responding to emergency requests.

2.0 General

A. Damages

The contractor is responsible for all damages that may result directly or indirectly from tree pruning and removal, stump removal or emergency tree work service activities.

B. Maintenance & protection of traffic

Maintenance and protection of traffic shall be in compliance with the **(specifications)**. The contractor shall be responsible for protecting the public from damages to person or property that may result directly or indirectly from work activities.

Street closings must be preapproved by **(designated supervisor/manager)** or authorized representative. Cones, barricades or signage shall delineate the perimeter of the work zone. If a sidewalk or street must be closed, sidewalk and/or street closed signs shall be placed at both of the intersections of the nearest cross street. Two-way vehicular and pedestrian traffic must be maintained at all times. No work is permitted within posted **school zones** during arrival and departure times.

C. Disposal of debris

The contractor shall be responsible for the removal and disposal of all debris created by work activities.

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All wood, limbs and brush shall be removed and the area cleaned up daily. Brush will not be allowed to accumulate such that it creates a hazard.

D. Site restoration

1. Lawn damage caused by tree pruning and removal activities, and stump removals shall be restored with specified materials and as specified or to the satisfaction of the (designated supervisor/manager) or designated representative.

E. Penalties for nonperformance

1. Contract specifications

Contractors may be fined \$100 per infraction if failing to meet a contract specification as determined by the (designated supervisor/manager) or designated representative. Fines will be deducted from the contractor's payment for services.

2. Tree loss

If as a result of the contractor's actions a tree is considered a loss as determined by the (designated supervisor/manager), the contractor may be liable for the value of the tree as determined by the most current version of the Council of Tree and Landscape Appraiser's methodology.

3.0 Tree & stump specifications

Standard

Tree and stump removal work shall be completed by qualified personnel in accordance with all federal, state and local regulations, the most current edition of the American National Standards Institute's ANSI Z133.1; Pruning, Trimming, Repairing, Maintaining, and Removing Trees and Cutting Brush – Safety Requirements and the following specifications.

Specifications

A. Tree removal

1. Trees or limbs being removed that are large enough to cause hardscape or structural damage on impact shall be lowered using roping and rigging techniques. The tree stump shall be flush cut as close as possible with the existing tree lawn grade.

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2. Site restoration

The area shall be raked clean of all debris. All lawn damage created as a result of the tree removal operation shall be restored with topsoil and grass seed.

B. Stump removal

1. Underground Utility Locate

The contractor is required to have an underground utility locate prior to removing the stump by calling the required underground facilities protection organization.

2. Maintenance & protection of traffic

Skirts on the stump grinder are required, and barricades may be necessary to prevent debris from being thrown from the work area.

3. Stump removal

Stumps shall be ground to a minimum depth of 12 inches below normal grade level (See Figure 1) or to a six (6) inch depth within two (2) feet of an identified underground utility. All adjoining surface roots shall be ground to a depth of (12) inches or chopped out with an axe. All grindings shall be placed back in the stump hole if the site restoration is not completed at the same time as the grinding. Adjacent to a sidewalk, roots shall be removed to the edge of the sidewalk without damaging the sidewalk.

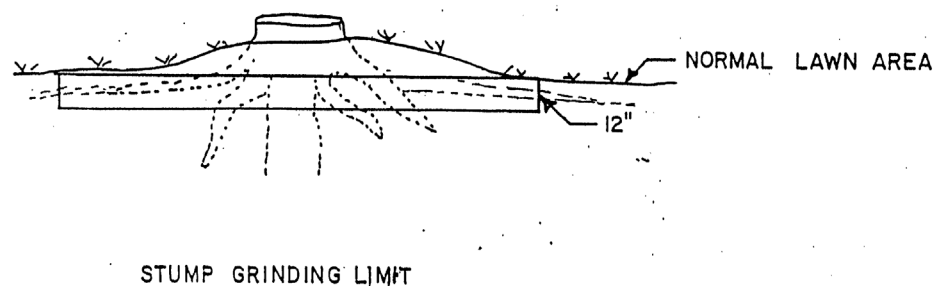


Figure 1

4. Site restoration

All stump grindings shall be removed from the stump hole and the site raked of all debris. The area shall be graded such that the entire area is level with the normal tree lawn area (See Figure 1). Irregularities that

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form low places that will hold water or high places such as created by root crowns shall be eliminated and graded level. Areas requiring topsoil shall be completely tamped using mechanical or hand tamper.

4.0 TREE PRUNING SPECIFICATION

Standard

Tree pruning shall be completed by qualified tree workers and, at a minimum, supervised by ISA certified arborists or a ISA board master certified arborist and qualified in accordance with current federal, state and local laws. The work shall be completed in accordance with the most current editions of the American National Standards Institute's ANSI A300 "Tree, Shrub and Other Woody Plant Maintenance – Standard Practices"; American National Standards Institute's ANSI Z133.1; Pruning, Trimming, Repairing, Maintaining, and Removing Trees and Cutting Brush – Safety Requirements, the International Society of Arboriculture's Pruning Best Management Practices, and the following specifications.

Specifications

4.1 General

- a. No more than 25% or one-fourth (1/4) of the live crown shall be removed unless limbs present a hazard.
- b. All cuts shall be made with sharp pruning tools as close as possible to the trunk or parent limb, without cutting into the branch collar or leaving a protruding stub.
- c. All branches too large to support by one hand shall be precut to avoid splitting or ripping of the bark. When necessary, ropes or other equipment shall be used to lower large branches or stubs to the ground.
- d. The use of climbing spurs or hooks is prohibited.
- e. Reduction cut pruning should be avoided. Removing the entire limb is preferable. Where reduction cut pruning may be considered, the whole limb or leader shall be removed to the parent leader or limb unless the ratio of the live wood to leaf area of the limb or leader is sufficient to support that limb or leader. If more than one-fourth leaf surface area of the limb or leader needs to be removed, remove the whole limb.

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- f. When removing a parent leader or limb to a lateral (reduction cut), the lateral shall be at least one-third (1/3) the diameter of the parent leader or limb being removed.
- g. **Priorities for pruning.** The following priorities shall be followed to assist in the decision process for limb removal:
 - Risk mitigation
 - Clearance
 - Restoration
 - Structural
- h. Clearance. Clearance is specified in two diameter ranges. These are guidelines. Crown raising shall be completed to provide adequate clearance based on the site conditions and location of the tree. Limb removal decisions should be based on the goal of reaching clearance standards through whole limb removal and the health of the tree. Generally, lateral branches should not be removed below one-third the total height of the tree.
- i. **Private trees**

Trees located on private property that have hazardous limbs that may fail into the right of way, are blocking traffic control devices or do not meet the clearance standards as detailed below shall be pruned to correct these problems. The safety prune specification shall be used in these cases, and work completed shall be restricted to pruning the portions of the tree that present a risk to the village right of way.

4.2 Safety prune

- | | |
|-----------|---|
| Objective | The purpose of this pruning is to remove hazardous branches, prune storm damage, provide adequate clearance from permanent structures and elevate for under canopy clearance. |
|-----------|---|
- a. Risk mitigation -- Hazardous limbs to be removed.
 - Broken limbs lodged in the tree.
 - Broken hanging limbs in the tree.
 - Dead or split branches 1 inch or greater in diameter.
 - Decaying branches with less than 33% sound wood 1 inch or greater in diameter.
 - b. Restoration – storm damaged branches to be removed.
 - Broken lateral branches and leaders living or dead 1 inch or greater in diameter.
 - Waterspouts – where removing an entire lateral or leader with sprouts may not be desirable, leave one to three sprouts. More vigorous sprouts should be

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thinned or headed to control length growth or ensure adequate attachment for the size of the sprout.

- c. Clearance – clearances over the right of way and from buildings, traffic control devices, signs and streetlights.

Trees 6-12 inches in diameter at breast height;

Limbs shall be removed to provide 5 feet clearance over and from the side of permanent structures.

Limbs shall be removed from the lower one-third of the tree to provide under canopy clearance.

Trees 13 inches or greater in diameter at breast height;

Limbs shall be removed to provide 10 feet clearance over and from the side of permanent structures.

Limbs shall be removed to provide an overhead clearance of 15 feet over the street.

Limbs shall be removed to provide an overhead clearance of 10 feet over the sidewalk and under the canopy.

4.3 Crown reduction prune

Objective -- reduce the structural stresses on limbs or leaders with decay present or codominant stems with included bark by reducing the length or height of limbs or leaders.

- a. Where specified or if defects are revealed while pruning the tree, reduce the height or length of limbs or leaders by one-third using proper reduction pruning techniques as specified above in section 1.0, e & f.
- b. Perform a safety prune as specified.

4.4 Structural prune

Objective -- to promote a single leader, strong scaffold branch structure and suitable permanent branch selection for clearance requirements at maturity on young and semi-mature trees.

- a. Remove broken, dead, diseased or dying branches.
- b. Trunk development – one central leader
 - Tree species that do not form a single central leader, skip this step.

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- Branches forming multiple leaders in a single leader type tree shall be removed. Leave the most dominant leader or select one. If you cannot remove a competing leader, subordinate with a reduction or heading cut to reduce the height of the less dominant leader.
- c. Clearance
 - At least one-half the foliage should originate on branches in the lower two-thirds of the tree. Remove branches that are below the height of the tree that will maintain this proportion.
- d. Permanent branches – branches attached to the trunk that will remain on the tree throughout its lifetime.
 - The lowest branches should be selected on each side of the tree to meet clearance standards.
 - Permanent scaffold branches should be spaced 6-12 inches apart by thinning for the first five years then 18 inches apart thereafter. Branches directly above should be spaced 15-36 inches for small-to medium-sized trees and 60 inches for large trees.
 - A permanent branch should be less than one-half the diameter of the parent limb.
 - Remove branches to meet this desired spacing or if this will require removing too much leaf area, prune them as temporary branches.
- e. Temporary branches – branches that will be left at this pruning but will eventually be pruned in later pruning.
 - Head or reduce these branches to suppress their growth and allow the permanent branches to develop.

5.0 Materials

5.1 Topsoil

Topsoil shall be natural, fertile agricultural soil, capable of sustaining vigorous plant growth. It shall be of uniform composition throughout and without admixtures of subsoil. The topsoil shall be screened free of stones, lumps, plants, roots, sticks or other extraneous matter. The topsoil shall have a ph of 6.5 to 7.2. It shall have an organic content of not less than 2% nor more than 20%, and the texture shall be sand/loam composition. In most situations, native soil may be used when available.

5.2 Grass seed

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a. General

Seed shall be of current crop year with a germination rate of no less than 85%. It must be certified and have a purity of no less than 95%. Certified seed tags shall be available for on-site inspection.

b. Composition

Seed composition

6.0 Basis of payment

The unit price or hourly cost shall include all labor, materials and equipment necessary to complete the work as specified or to the satisfaction of (designated supervisor/manager) or designated representative.

A list of routine tree pruning and removals, and stump removals will be provided to the contractor in blocks of a minimum of one workday's work. This work will be paid on a per-tree unit basis based on tree diameter at breast height (4½ feet above grade). The contractor will have 30? calendar days to complete this work.

The contractor shall be required to respond within two? hours for emergency tree work services. This work will be paid at an hourly rate. The contractor will be paid a minimum of four hours for responding to emergency requests.

A. Tree & stump removal

Diameter (DBH)	Estimated # of Units	Unit Cost \$	Total Cost \$
1-6			
7-12			
13-18			
19-24			
25-30			
31-36			
37-42			
>42			

a. Stump removal only

Diameter (DBH)	Estimated # of Units	Unit Cost \$	Total Cost \$
1-6			
7-12			
13-18			
19-24			
25-30			
31-36			

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37-42			
>42			

b. Tree pruning

Structural prune trees 1-12 inches in diameter. Safety prune trees 13 inches or larger.

Diameter (DBH)	Estimated # of Units	Unit Cost \$	Total Cost \$
1-6			
7-12			
13-18			
19-24			
25-30			
31-36			
37-42			
>42			

Crown reduction and safety prune

Diameter (DBH)	Estimated # of Units	Unit Cost \$	Total Cost \$
19-24			
25-30			
31-36			
37-42			
>42			

c. Emergency tree work

Unit	Hourly Rate per Unit	# of Units Available
One aerial lift truck, one brush chipper, two qualified tree workers and equipment		
One boom loader truck and operator		

7.0 Qualifications

The company must meet all the legal and insurance requirements to work in North Carolina and complete tree work plus the following requirements.

1. Five years of experience completing tree work and,

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2. A tree care industry association accredited company or
3. Ownership and supervisors are International Society of Arboriculture (ISA) certified arborists, board certified master arborists and
 - a. Tree workers performing the tree work are ISA certified arborists, tree climber or aerial lift specialist.

Professional certifications

Supervisor Name	Certification(s)	Certification #
Employee Name		

8.0 References

1) Company name: _____
Contact name: _____
Contact phone #: _____
Projects: _____

2) Company name: _____
Contact name: _____
Contact phone #: _____
Projects: _____

3) Company name: _____
Contact name: _____
Contact phone #: _____
Projects: _____

