

## **APPENDIX A**

### **TECHNICAL SPECIFICATIONS FOR SERVICE WORK ITEMS**

#### **SECTION I – DESCRIPTION OF WORK:**

The objectives of this project are to restore an overgrown apple orchard as wildlife habitat.

1. Protect all designated apple trees from damage from operations.
2. Cut all trees and shrubs greater than 2-inches in diameter at stump height
3. Remove all merchantable timber (see Appendix B for timber specifications) from national forest land.
4. Chip all sub-merchantable trees, tree branches and treetops that are equal to or greater than 2-inches in diameter. Spread all chips onsite. Chips shall not be removed from the site.
5. Remove all stumps greater than 2-inches in diameter. Pile stumps in designated stump dumps. Fill in depressions made by stump removal with native material.

#### **SECTION II – WORK ITEMS**

##### **Mandatory Item 1: Cut and remove included timber.**

Cut and remove all trees meeting the timber specifications within the project area except those designated with orange paint as Leave Trees. Refer to Appendix B for timber specifications.

##### **Mandatory Item 2: Chipping**

Chip all residual slash and tops not meeting the timber specifications and spread it on site. No chips from slash or tops shall be removed from the site. Chips shall be spread out evenly on the ground not to exceed 4”.

##### **Mandatory Item 3: Stumping**

Remove all stumps remaining from trees cut and in Item 1. Stumps will be placed in designated stump dumps on-site.

##### **Optional Item 4: Clip and Chip**

Cut all trees and shrubs greater than 1 inch in diameter at breast height, chip and blow chips back on-site. Chips shall be spread out evenly on the ground not to exceed 4”.

##### **Optional Item 5: Sapling Stumping**

Remove all stumps remaining from trees cut and removed in Optional Item 4. Stumps will be placed in designated stump dumps on-site.

##### **Optional Item 6: Filling**

Fill in any holes greater than 6 inches deep created by stump removal in Items 3 and 6.

#### **SECTION III – CONTROL OF WORK**

The Contractor agrees to conduct its operations under this contract and other related business activities in compliance with Federal, State, and local statutes, standards, orders, permits and other regulations.

The Contractor shall meet all State and local environmental quality laws applicable to National Forest system lands.

Work may be done any time during the term of the contract, except under the following conditions:

- (1) When conditions are such that operations shall be restricted or ceased due to increased fire risk.
- (2) All operational restrictions in Appendix B, CT6.312# and CT6.314# apply to service work units.
- (3) When soil moisture conditions create excessive risk of damage to the soil,
- (4) When snow depth creates a situation where requirements cannot be met and/or work cannot be inspected, as determined by the COR.
- (5) If any cultural or archeological sites are discovered during operations of this contract, work will be suspended in the immediate vicinity of the site until a reconnaissance survey is completed by the Forest Archeologist. Areas excluded from treatment shall be deleted from the contract.

#### **SECTION IV – INSPECTION AND ACCEPTANCE**

##### **For All Work Items:**

At any point during the project, the Contractor and/or Project Manager may request (documented through email, text, or hand-written request) an in-the-field consultation with the Forest Service to inspect work progress, review contract specifications, or clarify issues. The Forest Service shall respond to Contractor's request within 5 working days, excluding weekends and federal holidays.

#### **GOVERNMENT QUALITY ASSURANCE SURVEILLANCE PLAN**

*Government Inspection Procedures* - The COR, or a designated inspector (GTM), will make periodic inspections while work is in progress, usually daily at first, as needed to assure work is proceeding satisfactorily. The Contractor shall notify the COR when units are started, when problems are encountered and when contract work needs government oversight.

1. When unit is completed and ready for government inspection, Contractor's designated Project Manager shall request unit inspection in writing, prior to moving out of the general area.
2. The COR, or designated inspector, will determine compliance with contract specifications through informal visual inspections. In the event visual inspection indicates work to be in non-compliance with specifications, prompt corrective action and/or rework shall be required.

##### **Government Inspection Procedures – Formal (Plots)**

1. In the event visual inspection indicates work and / or rework to be in non-compliance with contract specifications, a series of verification plots shall be installed by the Government to determine compliance with specifications and percent of satisfactory work for treatment of each unit not meeting specification as observed with visual inspection.
2. Government verification plots will consist of a series of 0.05-acre fixed area plots (26.33-foot radius) along transects to record whether requirements are being met and to what extent.
3. Plots and grid will be distributed so that a representative sample is obtained.
4. The COR or designated inspector will mark the center of each plot on the ground using flagging, stakes, or pin flags. Additional flagging will be hung near the plot center so that it may be seen from a distance. The inspector will include the plot number, their initials and date on the flagging.
5. Plots will be numbered to correlate with the inspection form and transects on a unit map.
6. The minimum number of verification plots, per treatment unit, shall be as follows:

Unit #	Minimum No. of Plots
1	20 plots

7. Determination of acceptability of the work performed will be based on Government verification inspections and will be considered conclusive.
8. At each plot, the Government will examine the plot area and record findings on the items listed below:
  - a. Damaged apple trees on plot? (Yes = 5 points for each damaged tree)
  - b. Plot contains residual trees that must be cut and removed? (Yes = 1 point for each tree less than 5.0 inches DBH, 3 points for each tree between 5.0 and 11.9 inches DBH, and 5 points for each tree greater or equal to 12.0 inches DBH )
  - c. Plot contains branches and/or tops that must be removed? (Yes = 5 point for plot)
  - d. Plot contains residual stumps that must be removed and placed in designated stump dump? (Yes = 1 point for each stump less than 5.0 inches, 3 points for each stump between 5.0 and 11.9 inches, and 5 points for each stump greater or equal to 12.0 inches DBH )
  - e. Plot contains stump depressions that must be filled? (Yes = 1 point for plot)
9. Work quality will be calculated on the form as follows:

Sum of item scores/plot \* # of plots = % Unsatisfactory work

100% – Unsatisfactory work points = % Work Quality

Example

1 plot contains a 14-inch stump that is required to be removed	(1 * 5 points = 5 points)
<u>2 plots each contain two residual 16-inch trees that must be cut and removed</u>	<u>(2 * 5 points = 10 points)</u>
Total points Unsatisfactory work	15 points

Work quality = 100% -15 points = 85%

**Work quality**

1. If the work quality falls below 90 percent, the COR will immediately notify the Contractor, in writing, and order him to improve the quality of work. If the quality of subsequent work is not raised above the 90 percent minimum acceptable standard within 72 business hours after receipt of such written notice, the Contractor's right to proceed may be terminated and the contract considered in default.
2. When the work quality falls below 90 percent the Government shall order rework to be performed and withhold payment until the results of a post-rework Government inspection show work quality to be at least 90 percent or more. No rework shall be performed unless ordered or authorized by the COR.
3. Repeated failure to produce work quality at or above the 90 percent minimum acceptable standard will be considered reason for contract termination and default action.

**Reinspection Upon Contractor Request**

1. If Government inspection results are unacceptable to the Contractor, a reinspection may be requested, in writing, within 5 business days after receipt of notice of said inspection results. The same inspection procedure will be used; however, the inspection pattern will be shifted so that new inspection plots will not overlap previously inspected plots.
2. If reinspection results indicate a difference of more than 5 points from the first inspection in the contractor's favor, the results of the second inspection will be used to calculate work quality and payment, and the Government will bear the cost of reinspection.
3. If reinspection results are within 5 points of the first inspection, plots from the initial inspection and the reinspection will be combined and used to calculate work quality and payment, and the Contractor shall bear the cost of reinspection.

**Government Inspection Procedures – All Items**

**Table 1 – Minimum Acceptable Work Quality**

ITEM	DESCRIPTION	SCHEDULE	UNIT	Min AQL
1	CUT AND REMOVE INCLUDED TIMBER	MANDATORY	ACRE	90%
2	CHIPPING	MANDATORY	ACRE	90%
3	STUMPING	MANDATORY	ACRE	90%
4	CLIP AND CHIP	OPTIONAL	ACRE	90%
5	SAPLING STUMPING	OPTIONAL	ACRE	90%
6	FILLING	OPTIONAL	ACRE	90%

**SECTION V – PAYMENT METHODS**

**Method of Measurement for Units**

Acreages were determined by using Global Positioning Systems (GPS). The acreage for each work item has been rounded to the nearest 0.1 acre and is final unless:

- a. The contract is modified or,
- b. The Government makes a determination to remeasure.

**Acceptance and Payment**

1. Payment shall be made by whole units. Upon completing an entire unit Contractor shall bill the Forest Service for the entire unit amount.
2. No allowance for variation or portion of a variation will be added which will create a percentage greater than 100 percent.
3. If informal visual inspection indicates acceptable work quality, the Contractor will be paid 100 percent of their bid rate.
4. In the event that formal inspections are used, the rate of payment to the Contractor will be calculated as follows:
  - (a) For work quality of 85 percent or higher, Contractor will be paid 100 percent of their bid rate.
  - (b) For work quality 84 percent and less, there will be no payment made to the Contractor.
5. Only one rework opportunity will be allowed.
6. Percentages as calculated herein shall be rounded to the nearest whole percent.

## **SECTION VI – DEFINITIONS**

**ACCEPTABLE QUALITY LEVEL (AQL):** Acceptance of work will be based on compliance with all specifications corresponding to the appropriate task(s). A minimum AQL is required for all service work – hand or mechanical. The minimum AQL will receive a satisfactory performance rating.

**CIRCULAR PLOT:** A sample plot within a thinning unit that is used to determine the number of desirable trees and other contract specifications.

**CUTTING UNIT:** See Treatment Unit definition

**DAMAGED TREES:** Trees damaged beyond recovery. A tree that is larger than 2 feet in height, and has the top knocked out, is leaning more than 10 degrees, has less than one half of its original limbs, or has approximately 50% of bark removed from the circumference of the bole.

**DBH:** Diameter at breast height, measured at a point of 4.5 feet above the ground level on the uphill side of the tree.

**LEAVE TREE:** Trees that possess desirable characteristics and that serve to create the basis for designated spacing requirements or are otherwise designated to be left.

**PAYMENT UNIT:** See Treatment Unit.

**PROGRESSION OF WORK:** Work conducted in a progressive, workmanlike and orderly manner by the Contractor.

**RESERVE CLUMPS:** Groups of trees within a treatment area that are protected from cutting, may also include Individual Reserve trees.

**SAWTIMBER TREE:** Included timber meeting sawlog size specifications as defined in Appendix B, Division A.2.

**SLASH:** Woody material existing or created that has accumulated on the forest floor. Woody material includes logs, pieces of logs, tops, and branches.

**UNIT:** See Treatment Unit.

**TREATMENT UNIT:** An individual area on the ground in which activities will be performed and which may appear as a separate pay item in the Schedule of Items.

**UNSATISFACTORY WORK:** If work quality falls below the AQL, the COR will issue a work order or notice of noncompliance to the Contractor in writing. Untreated or unsatisfactory treated areas shall be reworked to obtain satisfactory work quality.

**WILDLIFE TREE:** Standing tree marked to be reserved as a wildlife tree. Used by birds and small mammals for shelter, nesting, perching, etc.