

## **APPENDIX B - TREE MEASUREMENT**

### **STEWARDSHIP CONTRACT TIMBER REMOVAL SPECIFICATIONS**

#### **BT1.0 CONTRACT AREA**

- BT1.1 Contract Area Map
- BT1.2 Claims

#### **BT2.0 TIMBER SPECIFICATIONS**

- BT2.1 Included Timber
  - BT2.11 Standard Timber
  - BT2.12 Substandard Timber
  - BT2.13 Damaged Timber
    - BT2.131 Damaged by Contractor
    - BT2.13.2 Negligent or Willful Damage
  - BT2.134 Minor Damage by Natural Causes
- BT2.14 Unintentionally Cut Timber
- BT2.15 Construction Timber
- BT2.16 Other Material
- BT2.2 Utilization and Removal of Included Timber
  - BT2.3 Timber Designations
    - BT2.31 Clearcutting Units
    - BT2.32 Construction Clearing
      - BT2.3.21 Road Clearings
      - BT2.322 Other Authorized Clearings
  - BT2.33 Overstory Removal Units
  - BT2.34 Understory Removal Units
  - BT2.35 Individual Trees
  - BT2.37 Designation Changes
- BT2.4 Quantity Estimate

#### **BT3.0 RATES OF PAYMENT**

- BT3.1 Current Contract Rates
- BT3.4 Other Payment Rates
- BT3.41 Material and Quantities Not in Division AT
- BT3.42 Timber Cut Through Mistake
- BT3.43 Undesignated Timber Damaged Without Negligence
- BT3.44 Undesignated Timber Unnecessarily Damaged or Negligently or Willfully Cut
- BT3.45 Liquidated Damages

#### **BT4.0 PAYMENTS**

- BT4.1 Amount Payable for Timber
- BT4.2 Integrated Resource Account
  - BT4.215 Deposits When Payment Guaranteed

#### **BT6.0 OPERATIONS**

- BT6.3 Control of Operations
- BT6.33 Safety
- BT6.4 Conduct of Logging
  - BT6.41 Felling and Bucking
    - BT6.411 Felling in Clearings
    - BT6.412 Stump Heights

- BT6.414 Limbing
- BT6.42 Skidding and Yarding
- BT6.421 Rigging
- BT6.422 Landings and Skid Trails
- BT6.423 Skidding on Roads
- BT6.424 Arches and Dozer Blades
- BT6.63 Temporary Roads
- BT6.64 Landings
- BT6.65 Skid Trails and Fire Lines
- BT6.66 Current Operating Areas
- BT6.67 Erosion Control Structure Maintenance
- BT6.7 Slash Disposal
- BT6.8 Measuring

#### **BT8.0 OTHER CONDITIONS**

- BT8.1 Title and Liability
  - BT8.11 Title Passage
  - BT8.12 Liability for Loss
  - BT8.5 Sale of Other Materials
- 
- CT2.3# Reserve Trees (9/04)
  - CT2.302# Boundary Trees (06/09)
  - CT2.356# Individual Trees, Leave Tree Marking (06/09)
  - CT5.33# Snow Removal (06/09)
  - CT6.24# Site Specific Special Protection Measures – (09/04)
  - CT6.314# Operating Requirements (06/09)
  - CT6.32# Protection Of Reserve Trees (9/04)
  - CT6.331# Safety (09/04)
  - CT6.6# Erosion Prevention Vegetation (06/09)
  - CT7.2# Fire Precautions (06/09)

Division AT

**AT1-Location and Area:**

This Contract Area of 2.9 acres more or less, is located in the town of Benton, Grafton County, New Hampshire.

**AT2-Volume Estimate and Utilization Standards**

Species Group	Product	Estimated Quantity *	Unit of Measure	Minimum Specifications				
				Merchantable Tree		Piece Required to be Removed		
				Diameter Breast High (d.b.h.) (inches)	Number of Minimum Pieces per Tree	Length (feet)	Diameter Inside Bark at Small End (inches)	Net Scale in % Gross Scale <sup>1/</sup>
White pine	Sawtimber	10.10	CCF	9.0	1.0	10.0	8.0	70%
White ash	Sawtimber	1.75	CCF	11.0	1.0	8.0	9.6	70%
Aspen	Sawtimber	0.56	CCF	11.0	1.0	8.0	9.6	70%
Miscellaneous Hardwood	Pulpwood	38.95	CCF	5.0	1.0	8.0	4.0	30%
Pine	Pulpwood	2.91	CCF	5.0	1.0	8.0	4.0	30%
<b>Timber Subject to Agreement</b>								
N/A								
<b>Total Quantity</b>		<b>54.27</b>						

<sup>1/</sup> Enter Merchantability Factor (Merch. Factor) or Net Scale in % of Gross Scale, whichever is appropriate.

**AT3-Timber Designations**, acres are approximate:

	Number	Acres
Clearcutting Units (B2.31)		
Overstory Removal Units (B2.33)		
Understory Removal Units (B2.34)		
Individual Trees (B2.35)		
Designation by Description or Prescription (C2.351-C2.355)		<b>2.9</b>

**AT4c-Schedule of Payment Units**

Payment Unit Number	Approx. Acres	To be Paid for at Flat Rates				Total Flat Rate Payment \$	Total Required Deposits For Slash Disposal \$
		Species	Products	Quantity	Unit of Measure		
1	2.9	White pine	Sawtimber	10.10	CCF		0.00
		White ash	Sawtimber	1.75	CCF		0.00
		Aspen	Sawtimber	0.56	CCF		0.00
		Misc. Hardwood	Pulpwood	38.95	CCF		0.00
		Pine	Pulpwood	2.91	CCF		0.00

**AT6-High Stumps**

Species	Product	Maximum Stump Height (inches)
All	All	Remove all stumps.

**AT7-Roads**

Name and Date of Governing Road Specifications: N/A

Project		Design Class	Approx. Length (mi./km.)	Sheet Numbers and Approval Date	Performance Responsibility		
					Survey	Design	Const. Staking <sup>1/</sup>
Road No.	Name						

<sup>1/</sup> Indicate timing, i.e., before clearing (BC) or after clearing (AC).

Specification sheets with itemized construction codes also attached

UNITED STATES DEPARTMENT OF AGRICULTURE  
Forest Service  
**TIMBER REMOVAL SPECIFICATIONS**

This Division is organized into Parts, Sections, Subsections, and Items. These are numbered in accordance with the following scheme: Part BT1.0, Section BT1.1, Subsection BT1.11, and Item BT1.111. References to a Part include all Sections, Subsections, and Items within that Part; references to a Section include all Subsections and Items within that Section; and references to a Subsection include all Items within that Subsection. Cross references within this contract cite the reference number of the applicable Division, Part, Section, Subsection, and Item. Descriptive headings used are not to be considered in determining the rights and obligations of the parties hereunder. The Standard Clauses in this Division are subject to Specific Conditions of the contract stated in Division AT. Wherever appropriate, Specific Conditions established in Division AT are herein cited by reference number. References to Standard Clauses also apply to Special CT Clauses with the same numbers. These clauses are applicable only to the timber removal portion of the Oliverian Orchard Stewardship Contract except where otherwise specifically referenced. “Timber” when used in this appendix includes timber and other products.

**BT1.0—CONTRACT AREA**

**BT1.1 Contract Area Map.** The boundaries of “Contract Area” and any Payment Unit thereof, are as shown on the attached “Contract Area Map” that is made a part hereof, and were, before contract solicitation, designated on the ground by Forest Service to meet the anticipated needs of the parties. The location of Contract Area and its approximate acreage are stated in Division AT. Payment Units may be revised and additional ones may be established only by written agreement. Upon Contractor’s request, Forest Service shall subdivide Payment Units to reduce them to a size that can be logged within 60 days at Contractor’s normal rate of logging.

Where applicable, the following are also identified on Contract Area Map:

- a) Identified claims limiting Contractor’s rights under BT1.2.
- b) Payment Units where timber is to be Measured or Marked after date of contract solicitation and approximate location of sample Marked timber under BT2.36 and BT2.4.
- c) Boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units under BT2.3.
- d) Diameter limits for Overstory Removal Units and Understory Removal Units under BT2.33 and BT2.34.
- e) Areas where leave trees are Marked to be left un-cut under BT2.35.
- f) Specified Roads
- g) Sources of base course, surface rock, and rock riprap listed in the Schedule of Items.
- h) Roads where log hauling, or use is prohibited or restricted.
- i) Roads and trails to be kept open.
- j) Improvements to be protected.
- k) Locations of known wildlife or plant habitat and cave resources to be protected.
- l) Locations of areas known to be infested with specific invasive species of concern.
- m) Maximum stump heights when more than one height is listed by areas in Division AT under BT6.412.
- n) Skidding or yarding methods specified under BT6.42.
- o) Streamcourses to be protected.
- p) Locations of meadows requiring protection.
- q) Locations of wetlands requiring protection.
- r) Locations of temporary roads to be kept open; and
- s) Other features required by Division BT or CT.

**BT1.2 Claims.** Valid claims are excluded from Contract Area, except those on which timber cutting is authorized in writing by the claimant and except mining claims on which cutting is authorized by the Act of July 23, 1955 (30 USC 614). Claims that limit Contractor’s rights to operate under this contract and that Forest Service has been able to identify are shown on Contract Area Map. Contractor is not obligated to operate contrary to existing claim limitations. Forest Service shall designate boundaries of claims on the ground to the extent necessary to identify Included Timber.

## **BT2.0—TIMBER SPECIFICATIONS**

**BT2.1 Included Timber.** “Included Timber” consists of:

**BT2.11 Standard Timber.** Live and dead trees and portions thereof that meet Utilization Standards under BT2.2 and are designated for cutting under BT2.3.

**BT2.12 Substandard Timber.** Live and dead trees that:

- (a) Do not meet Utilization Standards and
- (b) Are located in Clearcutting Units or construction clearings or are otherwise designated for cutting.

**BT2.13 Damaged Timber.**

**BT2.131 Damaged by Contractor.** Undesignated live trees meeting Utilization Standards:

- (a) Within 200 feet slope distance from centerline of roads constructed hereunder that are damaged by Contractor’s construction to the extent that considerable deterioration or mortality is imminent and are designated by Forest Service for felling before the nearest road segment is Substantially Completed or
- (b) That are damaged by Contractor in logging or stewardship project operations and are subsequently Marked before Contractor has completed work in the immediate area.

By agreement, such trees may be left without charge if their removal would cause undue damage or be grossly uneconomic.

**BT2.132 Negligent or Willful Damage.** Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Contractor, if included by Contracting Officer.

**BT2.134 Minor Damage by Natural Causes.** Undesignated trees within Contract Area and meeting Utilization Standards, in amounts that become insect infested, windthrown, suffer serious damage, or die, as designated by agreement.

**BT2.14 Unintentionally Cut Timber.** Trees within or immediately adjacent to Contract Area or to road construction or other authorized clearing outside Contract Area, not designated for cutting under BT2.3 but that are cut through mistake by Contractor, when included by Contracting Officer.

**BT2.15 Construction Timber.** Trees to be used for construction under this contract.

**BT2.16 Other Material.** Species or products not listed in the contract, upon written approval of Forest Service.

**BT2.2 Utilization and Removal of Included Timber.** “Utilization Standards” for trees and minimum pieces are stated in Division AT. To meet minimum tree specifications, trees must equal or exceed tree diameters listed in Division A and contain at least one minimum piece. Except for timber required or authorized to be left, Contractor shall fell and buck such trees and shall remove from Contract Area all pieces that:

- (a) Meet minimum piece standards in Division AT or
- (b) Do not meet such standards but would have qualified as part of minimum pieces if bucking lengths were varied to include such material.

**BT2.3 Timber Designations.** Timber designated for cutting shall be confined to Contract Area, except as otherwise provided in BT2.131, BT2.14, BT2.15, and BT2.32. Contract Area Map indicates Payment Units, if any, where Marking under BT2.35 is to be done after contract advertisement, except for construction clearing under BT2.23, designation changes under BT2.37, and damaged timber. The boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units were plainly Marked on ground before contract advertisement and are shown on Contract Area Map. Boundary trees shall not be cut. Such units where Measuring is to be completed after date of contract advertisement are also shown. The number of units and approximate acreage of timber designations are stated in Division AT.

**BT2.31 Clearcutting Units.** All trees that meet Utilization Standards within “Clearcutting Units” are designated for cutting.

**BT2.32 Construction Clearing.** All timber is designated for cutting that is within the clearing limits of roads constructed hereunder or is in other authorized clearings. All dead or unstable live trees are designated for cutting that are sufficiently tall to reach Contractor’s landings, work areas, or the roadbed of Specified and Temporary Roads when Marked in advance of work in the immediate area. Pieces meeting Utilization Standards from such dead or unstable live trees shall be removed unless there is agreement that to do so could damage the road.

**BT2.321 Specified Road Clearings.** Timber within the clearing limits of Specified Roads is within separate Payment Units, as shown on Contract Area Map, and the quantities are in Division AT. These Payment Units are subject to revision, as specified in BT2.37. The quantities of dead or unstable trees designated outside the clearing limits are not included in Division AT.

**BT2.322 Other Authorized Clearings.** Timber within authorized clearings for Temporary Roads, landings, or other construction clearings is designated for cutting. Quantities of such timber are not included in Division AT.

**BT2.33 Overstory Removal Units.** All trees within “Overstory Removal Units” are designated for cutting when they meet Utilization Standards and equal or exceed the diameter limits shown on Contract Area Map.

**BT2.34 Understory Removal Units.** All trees within “Understory Removal Units” are designated for cutting when they meet Utilization Standards and are smaller than the diameter limits shown on Contract Area Map.

**BT2.35 Individual Trees.** All trees to be cut, other than in the units described in BT2.31, BT2.32, BT2.33, and BT2.34, are Marked or designated by description. Trees are “Marked” when individually designated by Forest Service with paint marks above and below stump height. Contract Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.

**BT2.37 Designation Changes.** Within Contract Area, minor adjustments may be made in boundaries of cutting units or in the timber individually Marked for cutting when acceptable to Contractor and Forest Service.

**BT2.4 Quantity Estimate.** The estimated quantities of timber by species designated for cutting under BT2.3 and expected to be cut under Utilization Standards are listed in Division AT. Estimated quantity in Division AT does not include the following:

- a) Damaged timber under BT2.13.
- b) Unintentionally cut timber under BT2.14.
- c) Construction timber under BT2.15 cut outside of Payment Units and removed from construction use for utilization by Contractor.
- d) Timber within clearing limits of Temporary Roads or other authorized clearings and that is not designated under BT2.31, BT2.33, BT2.34, or BT2.35; or
- e) Dead or unstable live trees that are sufficiently tall to reach Contractor’s landings, work areas, or the roadbed of Specified Roads under BT2.32.

Estimated quantities for such timber not included in Division AT shall be determined as stated herein.

If Contract Area Map shows Payment Units where Marking or Measuring is to be completed after date of contract advertisement, the objective of Forest Service shall be to designate for cutting in such Payment Units sufficient timber so that Contract Area shall yield the approximate estimated quantities by species or species groups stated in Division AT. However, the estimated quantities stated in Division AT are not to be construed as guarantees or limitations of the timber quantities to be designated for cutting under the terms of this contract.

### **BT3.0—RATES OF PAYMENT**

**BT3.1 Current Contract Rates.** Included Timber that is Released for Cutting shall be paid for at Current Contract Rates determined under this Section. “Current Contract Rates” shall be Flat Rates. Flat Rates shall be those listed in Division AT or B2 of the Schedule of Items. In the event contract time is adjusted, Current Contract Rates shall be continued in the same manner as immediately prior to the adjustment period.

### **BT3.4 Other Payment Rates.**

**BT3.41 Material and Quantities Not in Division AT.** Incidental amounts of products or portions of trees of species that do not meet Utilization Standards may be removed without charge. Such material may be purposely removed in more than incidental amounts without charge upon written approval of Contracting Officer, and subject to agreement on deposits if needed for road maintenance and use. Other species or products not listed may be cut and removed upon written approval of Contracting Officer and subject to agreement on rates of payment. Timber for which the quantity is not included in the estimate, shall be paid for at Current Contract Rates and Required Deposits.

**BT3.42 Timber Cut Through Mistake.** Undesignated timber meeting Utilization Standards, cut by Contractor through mistake and included by Contracting Officer under BT2.14, shall be removed and paid for at Current Contract Rates and Required Deposits, unless such material is not listed in Division AT. In such event, Contracting Officer, in accord with standard Forest Service methods, shall establish rates to be paid.

**BT3.44 Undesignated Timber Damaged Without Negligence.** Undesignated timber meeting Utilization Standards, damaged without negligence by Contractor and designated by Forest Service under BT2.131, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits.

**BT3.45 Undesignated Timber Unnecessarily Damaged or Negligently or Willfully Cut.** Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Contractor, if included by Forest Service under BT2.132, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits that are in addition to liquidated damages under BT3.46. If such timber is of a species or size not listed in Division AT or is of a quality different from designated timber, Contracting Officer shall establish payment rates in accord with standard Forest Service methods.

**BT3.46 Liquidated Damages.** Unnecessary damage to or negligent or willful cutting of undesignated timber, as described in BT3.45, on portions of Contract Area cut over under this contract is likely to cause substantial silvicultural or other damage to the National Forest. It will be difficult, if not impossible, to determine the amount of such damage. Therefore, Contractor shall pay as fixed, agreed, and liquidated damages an amount equivalent to the amount payable at Current Contract Rates. If designated by Contracting Officer, Contractor shall remove such damaged or cut timber and pay for it at Current Contract Rates.

### **BT4.0—PAYMENTS**

**BT4.1 Amount Payable for Timber.** Except as provided in BT3.1, Current Contract Rates and Required Deposits in effect when a Payment Unit is Released for Cutting shall be applied to the timber quantities to determine the amount Contractor shall pay. A “Payment Unit” is a portion of Contract Area established for payment purposes.

**BT4.2 Integrated Resource Account.** “Integrated Resource Account” is an account maintained by Forest Service of all Contractor’s deposits, credits, payment guarantees, and the charges for:

- (a) Timber at Current Contract Rates.
- (b) Slash disposal and road maintenance at Required Deposit rates.
- (c) Stewardship Credits established; and
- (e) Other charges provided in this contract.

Cash deposits and Stewardship Credits earned shall be recorded currently in such account. Charges for Payment Units Released for Cutting shall be made when Forest Service prepares and furnishes to Contractor periodic statements of quantity and value of such timber. Charges shall be made according to BT3.4 when trees are subsequently Marked or designated for cutting.

**BT4.215 Deposits When Payment Guaranteed.** To the extent payment guarantee is provided under Clause entitled, “PRODUCT PAYMENT GUARANTEE” requirements for advance cash deposits shall be waived for the value of Product on contract area that is cut, but not removed, and for the value of Products removed from contract area, up to limit of remaining stewardship credits to be earned and exchanged for value of included product except for Required Deposits and Associated Charges. Associated charges shall be waived for not more than one monthly billing period.

## **BT6.0—OPERATIONS**

**BT6.3 Control of Operations.** Under this contract, “Contractor’s Operations” shall include activities of or use of equipment of Contractor, Contractor’s employees, agents, Subcontractors, or their employees or agents, acting in the course of their employment in operations hereunder on National Forest lands or within Forest Service protection boundary (unless acting under the immediate supervision of Forest Service).

Contractor’s Operations shall be conducted in a workmanlike and orderly manner. The timing of required Forest Service designation of work on the ground and the performance of other Forest Service work shall not be such as to cause unnecessary delay to Contractor.

“Release for Cutting” is written authorization to Contractor to begin cutting in a Payment Unit. Upon Contractor’s request for release of a Payment Unit, Forest Service shall either:

- (a) Give tentative approval and bill Contractor as necessary or
- (b) Reject the request, stating reasons for rejection.

When payment or payment guarantee has been confirmed, Forest Service shall issue Release for Cutting within 10 days. Contractor shall not cut timber in any Payment Unit until it is Released for Cutting.

**BT6.33 Safety.** Contractor’s Operations shall facilitate Forest Service’s safe and practical inspection of Contractor’s Operations and conduct of other official duties on Contract Area. Contractor has all responsibility for compliance with safety requirements for Contractor's employees.

In the event that Contracting Officer identifies a conflict between the requirements of this contract or agreed upon methods of proceeding hereunder and State or Federal safety requirements, the contract shall be modified and Contractor may request an adjustment in Current Contract Rates to compensate for the changed conditions.

Unless otherwise agreed in writing, when Contractor’s Operations are in progress adjacent to or on Forest Service controlled roads and trails open to public travel, Contractor shall furnish, install, and maintain all temporary traffic controls that provide the user with adequate warning of hazardous or potentially hazardous conditions associated with Contractor’s Operations. Contractor and Forest Service shall agree to a specific Traffic Control Plan for each individual project prior to commencing operations. Devices shall be appropriate to current conditions and shall be covered or removed when not needed. Except as otherwise agreed, flagmen and devices shall be as specified in the “Manual on Uniform Traffic Control Devices for Streets and Highways” (MUTCD) and as shown on Plans, Contract Area Map, Traffic Control Plan, or in specifications attached hereto.

**BT6.4 Conduct of Logging.** Unless otherwise specifically provided herein, Contractor shall fell trees designated for cutting and shall remove the portions that meet Utilization Standards, as provided in BT2.2, prior to acceptance of Payment Unit for completion of logging. Forest Service may make exceptions for occasional trees inadvertently not cut or trees or pieces not removed for good reason, including possible damage to forest resources or gross economic impracticability at the time of removal of other timber. Logging shall be conducted in accordance with the following, unless other clauses set forth requirements to meet special or unusual logging conditions:

**BT6.41 Felling and Bucking.** Felling shall be done to minimize breakage of Included Timber and damage to residual timber. Unless agreed otherwise, felling shall be done by saws or shears. Bucking shall be done to permit removal of all minimum pieces set forth in Division AT. Contractor may buck out cull material when necessary to produce pieces meeting Utilization Standards. Such bucked out material shall contain a minimum amount of sound wood, not in excess of the net Measure in percentage of gross Measure, or based on the merchantability factor, whichever is stated in Division AT. If necessary to assess extent of defect, Contractor shall make sample saw cuts or wedges.

**BT6.411 Felling in Clearings.** Insofar as ground conditions, tree lean, and shape of clearings permit, trees shall be felled so that their tops do not extend outside Clearcutting Units, construction clearings, and areas of regeneration cutting.

**BT6.412 Stump Heights.** Stumps shall not exceed, on the side adjacent to the highest ground, the maximum heights set forth in Division AT except that occasional stumps of greater heights are acceptable when Contractor determines that they are necessary for safe and efficient conduct of logging. Unless otherwise agreed, Contractor shall re-cut high stumps so they will not exceed heights specified in Division AT and shall dispose of severed portions in the same manner as other logging debris. The stump heights shown in Division AT were selected with the objective of maximum reasonable utilization of the timber, unless Contract Area Map shows special areas where stump heights are lower for aesthetic, land treatment, or silvicultural reasons.

**BT6.414 Limbing.** When Forest Service determines it is necessary to minimize damage to the residual stand during skidding, Contractor shall cut exposed limbs from products prior to skidding. Contractor may leave un-cut those limbs that cannot be cut with reasonable safety.

**BT6.42 Skidding and Yarding.** Methods of skidding or yarding specified for particular areas, if any, are indicated on Contract Area Map. Outside Clearcutting Units and construction clearings, insofar as ground conditions permit, products shall not be skidded against reserve trees or groups of reproduction and tractors shall be equipped with a winch to facilitate skidding.

**BT6.421 Rigging.** Insofar as practicable, needed rigging shall be slung on stumps or trees designated for cutting.

**BT6.422 Landings and Skid Trails.** Location of all landings, tractor roads, and skid trails shall be agreed upon prior to their construction. The cleared or excavated size of landings shall not exceed that needed for efficient skidding and loading operations.

**BT6.433 Skidding on Roads.** Products may be skidded on permanent roads authorized for hauling only by prior written agreement.

**BT6.424 Arches and Dozer Blades.** Skidding tractors equipped with pull-type arches or dozer blades wider than tractor width or C-frame width, whichever is greater, shall not be used in residual timber outside Clearcutting Units and other authorized clearings, except on constructed tractor roads or landings, unless there is written agreement that residual timber will not be damaged materially by such use.

**BT6.63 Temporary Roads.** As necessary to attain stabilization of roadbed and fill slopes of Temporary Roads, Contractor shall employ such measures as out-sloping, drainage dips, and water-spreading ditches.

After a Temporary Road has served Contractor's purpose, Contractor shall give notice to Forest Service and shall remove bridges and culverts, eliminate ditches, out-slope roadbed, remove ruts and berms, effectively block the road to normal vehicular traffic where feasible under existing terrain conditions, and build cross ditches and water bars, as staked or otherwise marked on the ground by Forest Service. When bridges and culverts are removed, associated fills shall also be removed to the extent necessary to permit normal maximum flow of water.



**BT6.64 Landings.** After landings have served Contractor's purpose, Contractor shall ditch and slope them to permit water to drain or spread. Unless agreed otherwise, cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion.

**BT6.65 Skid Trails and Fire Lines.** Contractor shall construct cross ditches and water-spreading ditches on tractor roads and skid trails, where staked or otherwise marked on the ground by Forest Service. Forest Service shall designate cross ditching on Contractor-built fire lines prior to or during construction. By agreement, Contractor may use other comparable erosion control measures, such as backblading skid trails, in lieu of cross ditching.

**BT6.66 Current Operating Areas.** Where logging, road construction, or other stewardship project work is in progress but not completed, unless agreed otherwise, Contractor shall, before operations cease annually, remove all temporary log culverts and construct temporary cross drains, drainage ditches, dips, berms, culverts, or other facilities needed to control erosion.

Such protection shall be provided, prior to end of May 15, for all disturbed, unprotected ground that is not to be disturbed further prior to end of operations each year, including roads and associated fills, tractor roads, skid trails, and fire lines. When weather permits operations during October 10 to May 15 Contractor shall keep such work on any additional disturbed areas as up to date as practicable.

**BT6.67 Erosion Control Structure Maintenance.** During the period of this contract, Contractor shall provide maintenance of soil erosion control structures constructed by Contractor until they become stabilized, but not for more than 1 year after their construction. Contractor shall not be responsible for repair of such structures damaged by other National Forest users whose activities are not a part of Contractor's Operations.

**BT6.7 Slash Disposal.** Contractor's timing of product removal and preparatory work shall not unnecessarily delay slash disposal. Specific slash disposal measures to be employed by Contractor are stated elsewhere herein and are in addition to Required Deposits for slash disposal.

**BT6.8 Measuring.** "Measuring" is the estimation of timber quantities using certain dimensions and applicable volume tables or formulae to determine the contents of trees or stands in a standard manner. Sampling may be on an individual tree or area basis. Examples of standard procedures are tree measurement, sample tree measurement, and area estimate. The quantity of timber designated or to be designated for cutting has been or shall be Measured, as specified in this contract.

## **BT8.0—OTHER CONDITIONS**

### **BT8.1 Title and Liability.**

**BT8.11 Title Passage.** All right, title, and interest in and to any Included Timber shall remain in Forest Service until it has been Measured, removed from Contract Area or other authorized cutting area, and paid for, at which time title shall vest in Contractor. Timber cut under the terms of clause Product Payment Guarantee, shall be considered to have been paid for. Title to any Included Timber that has been Measured and paid for, but not removed from Contract Area or other authorized cutting area by Contractor on or prior to contract termination, shall remain in Forest Service.

**BT8.12 Liability for Loss.** If Included Timber is destroyed or damaged by an unexpected event that significantly changes the nature of Included Timber, such as fire, wind, flood, insects, disease, or similar cause, the party holding title shall bear the timber value loss resulting from such destruction or damage; except that such losses caused by insect or disease after felling of timber shall be borne by Contractor, unless Contractor is prevented from removing such timber for reasons by the Forest Service. Deterioration or loss of value of salvage timber is not an unexpected event.

In the event Included Timber to which Forest Service holds title is destroyed, Contractor will not be obligated to remove and pay for such timber. In the event Included Timber to which Forest Service holds title is damaged, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber

immediately prior to the value loss and the appraised unit value of timber after the loss. Current Contract Rates in effect at the time of the value loss shall be adjusted by differences to become the redetermined rates.

There shall be no obligation for Forest Service to supply, or for Contractor to accept and pay for, other timber in lieu of that destroyed or damaged. This Subsection shall not be construed to relieve either party of liability for negligence.

**BT8.5 Sale of Other Materials.** Forest Service reserves the right to sell from Contract Area during the period of this contract any materials or products not subject to its terms, but shall not permit removal, possession, or use thereof that will materially interfere with Contractor's Operations. Contractor shall not be obligated to do any work made necessary by the action of others.

CT2.3# – RESERVE TREES (09/2004)

Notwithstanding the designations for cutting under BT2.31, BT2.32, BT2.33, or BT2.34, live or dead apple reserve trees or groups of reserve trees within such cutting units or clearings shall be left uncut. Reserve trees are identified by orange paint and shall be protected in accordance with CT6.32# Units with reserve trees are shown on Contract Area Map.

CT2.302# - BOUNDARY TREES (06/2009)

Boundary trees for all harvest units have been designated with orange paint marks above and below stump height. Boundary trees shall not be cut.

CT2.356# - INDIVIDUAL TREES, LEAVE TREE MARKING (06/2009)

Individual trees which are NOT TO BE CUT are Marked with indicated color above and below stump height in all or parts of the following payment unit(s). Areas of leave tree marking are shown on the Contract Area Map. Areas of Leave Tree Marking are shown on the Contract Area Map with the symbol "LTM."

<u>Payment Unit</u>	<u>Paint Color</u>
1	Orange

CT5.33# - SNOW REMOVAL (06/2009)

Snow removal shall be done in a manner that will preserve and protect roads, provide for safe and efficient transport of timber, and prevent erosion damage to streams and adjacent lands. In performing snow removal, Contractor shall adhere to the following standards, unless otherwise agreed:

1. Blade will be equipped with skid shoes to prevent loss of surfacing and damage to road bed. On the gravel and native surface roads, a minimum 2-inch depth compacted snow mat will be maintained on the roadbed during blading.
2. Snow shall be removed from the entire road width, including turnouts.
3. Snow berms will be reduced at road intersections where plowed road segments join unplowed road segments. Reduce the piled snow in the roadway to create a smooth transition from plowed road to normal snow depth.
4. Openings will be created in snow berms as needed for proper drainage. Remove snow, ice, and debris from culverts and other drainage structures as needed to ensure efficient flow of water.
5. Tracked or cleated vehicles will not be used for snow removal without prior written approval of Forest Service Representative.

CT6.24# - SITE SPECIFIC SPECIAL PROTECTION MEASURES (09/2004)

Special protection measures needed to protect known areas identified on Contract Area Map or on the ground include:

- Cultural Resource Protection Measures: No skidding, felling or operating within areas identified on the ground.
- Wildlife and Botanical Protection: Protection of Leave Trees (apples) from damage by Contractor's Operations.
- Cave Resource Protection Measures: N/A.

CT6.314# - OPERATING REQUIREMENTS (06/2009)

Within Contract Area, unless changed by written agreement, the following operating requirements apply:

Restricted operations/activities:

- Within Payment Unit 1 cutting, skidding, and hauling is restricted to the period of October 10 to May 15, dry or frozen ground conditions, to protect soil resources.

CT6.32# – PROTECTION OF RESERVE TREES. (9/04)

Contractor's damage or destruction of reserve trees described in CT2.3# will cause serious and substantial silvicultural or other damage to the National Forest. It will be difficult if not impossible to determine the amount of such damage. Therefore, Contractor shall pay as fixed, agreed, and liquidated damages \$150 for each designated reserve tree damaged or destroyed by Contractor's Operations, in addition to amounts payable under BT3.45 and BT3.46.

Damage, as used herein, includes any injury to the living crown, bole, or roots of reserve trees. If areas are marked on the ground around such reserve trees, operation of heavy equipment or skidding of products within the area shall be considered to be damage to the tree.

CT6.331# - SAFETY (09/2004)

In addition to requirements in standard provision BT6.33, when Contractor's Operations are in progress adjacent to or within recreation zones as shown on Contract Area Map, Contractor shall, unless relieved in writing by Forest Service, post warning signs in the zone and maintain a watchman to warn and advise the public of any hazards caused by Contractor's Operations.

CT6.6# - EROSION PREVENTION VEGETATION (06/2009)

Contractor shall establish acceptable erosion prevention vegetation on areas of ground disturbance in the Contract Area. This requirement only applies to the areas identified by the Forest Service that are a result of the Contractor's actions. Revegetation measures shall be applied in such manner and at times as directed by the Forest Service to establish an acceptable grass or legume cover. Failure to achieve an acceptable ground cover may result in the requirement for a second application of seed, fertilizer, etc. Seed, lime, mulch, fertilizer and other efforts will be applied as described in the following required work narrative.

Required work:

Level, drain and waterbar disturbed areas and prepare seedbed. Apply 45 lbs./ acre of winter rye seed. Apply sufficient straw to ensure germination. Seed species and origin must be approved by the Forest Service.

CT7.2# – FIRE PRECAUTIONS (06/2009)

Unless other methods are agreed to in writing between the Contractor and the Contracting Officer, the following specific precautionary measures are applicable during Contractor's Operations in Fire Precautionary Period indicated in AT12.

1. Contractor shall maintain Forest Service-approved spark arresting device on any piece of equipment operated by an internal combustion motor. In addition, each piece of motorized equipment shall be equipped with a serviceable round tipped shovel and an operational fire extinguisher of at least five-pound rating suitable for the equipment being used. All chainsaw operators will have a serviceable round pointed shovel and a one-pound multipurpose fire extinguisher readily available.
2. Contractor shall require that smoking and the building of lunch or warming fires by the Contractor's employees, contractors or employees of contractors be confined to designated safe places where flammable debris has been cleared away and where, at the option of the contractor, smoking or the building of lunch or warming fires may be permitted.
3. Adequate spark arresters shall be maintained on chimneys or stove pipes where wood or coal being burned is an enclosed device.
4. Contractor shall furnish serviceable firefighting tools. Location, numbers, and types of tools shall be specified in the Fire Prevention and Control Plan in accordance with BT7.1