

U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE INTEGRATED RESOURCE CONTRACT (Applicable to Contracts with Measurement after Harvest)		Name of Contractor	
National Forest Stanislaus	Ranger District Summit	Region Pacific S-West	Contract Number
Contract Name Donnell HT FS Stewardship		Award Date	Termination Date 11/30/2019

The parties to this contract are The United States of America, acting through the Forest Service, United States Department of Agriculture, hereinafter called Forest Service, and _____ hereinafter called Contractor.

Unless provided otherwise herein, Forest Service agrees to sell and permit Contractor to cut and remove Included Timber and Contractor agrees to purchase, cut, and remove Included Timber and complete required stewardship projects.

IN WITNESS WHEREOF, the parties hereto have executed this contract as of the award date.

UNITED STATES OF AMERICA

Two Witnesses: 2/

By: _____
 Contracting Officer

 (Name)

 (Title)

 (Address)

 (Contractor) 3/

 (Name)

By: _____

 (Address)

 (Title)

 (Business Address)

I, 4/ _____, certify that I am the _____
 Secretary of the corporation named as Contractor herein; that _____
 who signed this contract on behalf of Contractor, was then _____
 of the corporation; that the contract was duly signed for and in behalf of the corporation by authority of its governing body, and is
 within the scope of its corporate powers.

**CORPORATE
 SEAL 5/**

INSTRUCTIONS:

1/ If Contractor is a corporation, state a "corporation organized and existing under the laws of the State of _____" and specify the State; if Contractor is a partnership, state a "partnership consisting of _____" and specify the names of each partner; and if Contractor is a sole proprietor doing business under an assumed name, state "(n) individual doing business under the name of _____ City of _____, State of _____."

2/ The signatures and addresses of two witnesses are required if Contractor is other than a corporation.

3/ If Contractor is a co-partnership, the signatures should be: XYZ Company, by John Doe, a member of the firm. If Contractor is a corporation, form of signature should be: XYZ Company, by John Doe, President (or other officer or agent) and the seal of the corporation must be impressed or indicated.

4/ The certificate must be completed if Contractor is a corporation.

5/ For companies incorporated in States that require a corporation seal, if the corporation has no corporate seal that fact shall be stated, in which case a scroll or adhesive seal shall follow the corporate name.

EXAMPLE 1/

Subcontractor Certification
Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion

Contract Name: _____
National Forest: _____

The prospective subcontractor (participants in lower tier covered transactions) certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this contract by any Federal department or agency.

Where the prospective subcontractor is unable to certify to any of the statements in this certification, such prospective subcontractor shall attach an explanation to this proposal.

Name of Subcontractor: _____
Business Address: _____

_____ Date _____ Signature

1/ It is the Contractor's responsibility to have subcontractors complete this certification and to maintain a file of completed certifications. This certification does not need to be returned to the Forest Service, except at the written request of the Contracting Officer.

A.0 - SPECIFIC CONDITIONS. The following conditions apply to the indicated portions.

A.1 - Location and Area, applicable to B.1

This Contract Area of 852 acres more or less is located in: T6N R19E Sec 22-25; T6N R20E Sec 27-30 & 34-35; MDBM

A.2 - Volume Estimate and Utilization Standards, applicable to C.1, C.2, C.4, and G.4

Species	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 Merch. Factor 1/
Douglas Fir	Sawtimber	35.00	MBF	12.0	1	10	8.0	25
Incense Cedar	Sawtimber	629.00	MBF	12.0	1	10	8.0	25
Jeffrey / Ponderosa Pine	Sawtimber	954.00	MBF	12.0	1	10	8.0	25
Sugar Pine	Sawtimber	234.00	MBF	12.0	1	10	8.0	25
White / Red Fir	Sawtimber	960.00	MBF	12.0	1	10	8.0	25

Timber Subject to Agreement under K-C.1.1#								
Combined Softwood (biomass)	Non-Saw	unestimated	MBF	3.0	1	6	1.0	N/A
Combined Softwood (cull logs)	Cull Logs	unestimated	MBF	12.0	1	10	8.0	N/A
Combined Hardwood (oak)	Sm Rnd Wd	unestimated	MBF	4.0	1	3	1.0	N/A
Total Quantity		2,812.00	MBF					

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

A.3- Timber Designations, applicable to C.3; acres are approximate:

	<u>Number</u>	<u>Acres</u>
Clearcutting Units (C.3.1)	_____	_____
Specified Road Clearing (C.3.2)	_____	_____
Overstory Removal Units (C.3.3)	_____	_____
Understory Removal Units (C.3.4)	_____	_____
Individual Trees (C.3.5)	_____	547
Incompletely Marked Timber (C.3.6)	_____	_____

A.4 - Timber Payment Rates, applicable to D.1 and E.0

A.4.1 - Escalated Rates, applicable for Species and Products to be Paid for at Rates Escalated under D.2

Species	Product	Unit of Measure	Rates per Unit of Measure				Required Deposits Slash Disposal \$	Base Index
			Base \$	Advertised \$	Bid Premium \$	Bid (Tentative) \$		
Not Applicable								

A.4.2 - Flat Rates, applicable for Species and Products to be Paid for at Flat Rates

Species	Product	Unit of Measure	Rates per Unit of Measure				Required Deposits Slash Disposal \$
			Base \$	Advertised \$	Bid Premium \$	Bid (Flat) \$	
Douglas Fir	Sawtimber	MBF	6.00	51.82			4.01
Incense Cedar	Sawtimber	MBF	10.00	56.15			4.01
Jeffrey / Ponderosa Pine	Sawtimber	MBF	10.00	10.00			4.01
Sugar Pine	Sawtimber	MBF	10.00	10.00			4.01
White / Red Fir	Sawtimber	MBF	6.00	39.66			4.01
Timber Subject to Agreement under K-C.1.1#							
Combined Softwood (biomass)	Non-Saw	MBF	.50	.50			.00
Combined Softwood (cull logs)	Cull Logs	MBF	1.00	1.00			.00
Combined Hardwood (oak)	Sm Rnd Wd	MBF	20.00	20.00			.00

For purposes of convenience in collection and bookkeeping, Bid Rates stated in A.4 include payment of deposits for contract area betterment required pursuant to 16 USC 576b. Such deposits are not included as Required Deposits defined hereunder.

A.4.3 - Stewardship Credits, applicable E.2.2 and K-G.9#

Mandatory Stewardship Projects

Project Number	Project Description	Units of Measure	Quantity	Bid Rate \$	Total Credits
1	Grapple/hand pile dead biomass, non-merch material, breakage, and logging slash	Acres	547.00		

Optional Stewardship Projects

Priority	Project Number	Project Description	Units of Measure	Quantity	Bid Rate \$	Total Credits
		Not Applicable				

The following definitions are established for the terms used in A.4:

Base Rates are the lowest rates of payment for timber that are authorized by this contract. Base Rates remain constant throughout the life of this contract and are not subject to change by rate redetermination, except for reduction under D.3.1, D.3.2, or D.3.3.

Advertised Rates are the minimum acceptable Bid Rates for timber, exclusive of Required Deposits. These rates are those indicated by appraisal, with a cost allowance made for construction of Specified Roads listed in A.7, but are never less than Base Rates.

Bid Premium Rates are the amounts by which Contractor's bid is in excess of Advertised Rates. The Bid Premium Rates are constant during this contract, except as provided in D.3.1, D.3.2, and D.3.3.

Bid Rates are the rates bid by Contractor (exclusive of Required Deposits for slash disposal, road maintenance, and contract scaling) and are the sum of Advertised Rates and Bid Premium Rates. Until a rate redetermination becomes effective, the Bid Rate for species and products in A.4.1 is the Tentative Rate that is subject to quarterly adjustment under D.2; for species and products in A.4.2, the Bid Rate is the Flat Rate.

Required Deposits are deposits that Contractor may be required to pay for slash disposal (16 USC 490), road maintenance (16 USC 537), and contract scaling (1994 Appropriations Act). Required Deposits may be adjusted as part of a rate redetermination or a Contract Term Extension. The table shows only Required Deposits for slash disposal; road maintenance deposits, if any, are given in K-F.3.2#; and contract scaling deposits, if any, are given in K-G.8.1.6#.

Base Index is the specified average of the lumber or other product selling value index used as the basis for computing adjustment in rates for variance in product selling value, as provided in D.2.

A.5 - Indices Used in Quarterly Adjustment, applicable to D.2

Species	Index Name and Date
Not Applicable	

A.6 - High Stumps, applicable to G.4.1.2

Species	Product	Maximum Stump Height * (inches)
All	All	12

* Max stump height is 1/3 stump diameter not to exceed 12 inches. Apply borax to all stumps inside cabin tracts within 4 hours of cutting..

A.7 - Specified Roads, applicable to F.2

Name and Date of Governing Road Specifications:

Project		Design Class	Appro. Length (mi./km.)	Sheet Numbers and Approval Date	Performance Responsibility		
Road No.	Name				Survey	Design	Construction Staking 1/
Not Applicable							

1/ Indicate timing, i.e., before clearing (BC) or after clearing (AC). Applicable to F.2.1.2.

A.8 - Forest Service Engineering Completion Schedule, applicable to F.2.1

Road No.	Road Name	Type of Work	Completion Date
Not Applicable			

A.9 - Scaling Instructions and Specifications, applicable to G.8

Name and Date of Governing Instructions: FSH 2409.11a - National Forest Scaling Handbook, Amendment No. 2409.11a-91-1, May 22, 1991, Cubic Taper 4 as authorized by Regional Forester, February 2001, as amended and supplemented.

Scaling Specifications					
Species	Product	Maximum Scaling Length (feet)	Trim Allowance		
			Diameter Range (inches)	Length Range (feet)	Trim Allowance (inches)
All	Sawtimber	20	06-99	10-20	6

A.10 - Scaling Services, applicable to G.8.1

Species	Product	Unit of Measure	Site and Geographic Location	Method	Standard Estimated Cost per Unit \$
All	Sawtimber	MBF	Sierra Village Log Ramp	Conventional (100%) Log Scale	55.00

A.11 - Minimum Scaling Volumes, applicable to G.8.1

Minimum volume for Continuous Scaling Services in two-week period N/A MBF per scaler

Minimum volume for Intermittent Scaling Services N/A MBF on a N/A basis

A.12 - Fire Precautionary Period, applicable to H.2

May 01 to December 01, inclusive

A.13 - Contractor's Responsibility to Furnish Crews and Equipment for:

Initial Fire Suppression, applicable to H.3

Within 25 road miles

Fire Suppression Reinforcement, applicable to H.3.1.2 and H.3.1.3

Within 100 road miles

A.14 - Contractor's Obligation per Operations Fire, applicable to H.4.1

Maximum Amount: \$ \$33,000.00

A.15 - Termination Date, applicable to 1.2

November 30, 2019

A.16 - Normal Operating Season, applicable to G.3.1, G.6.6, 1.2.1 and J.3

First Period: June 01 to October 31, inclusive

Second Period: _____ to _____, inclusive

A.17 - Performance Bond Amount, applicable to J.1

Performance Bond Amount: \$2,500.00

A.18 - Downpayment, applicable to E.2.1.1

Downpayment Amount: Not Applicable

A.19 - Periodic Payment Amount, applicable to E.2.1.3

	<u>Periodic Payment Determination Date</u>	<u>Amount</u>
Initial Payment:	<u>N/A</u>	<u>N/A</u>
Additional Payment:	<u>N/A</u>	<u>N/A</u>

A.20 - Market-Related Contract Term Addition Producer Price Index, applicable to 1.2.1.2

Index Name: Not Applicable Index Number: N/A

A.21 - Inapplicable Provisions

The following listed provisions - are hereby made inapplicable. (Instructions: List by reference number and title.)

E.4	PAYMENTS NOT RECEIVED
I.2.1	CONTRACT TERM ADJUSTMENT
I.6.4	DEBARMENT AND SUSPENSION CERTIFICATION

A.22 - List of Special Provisions in Part K

The following listed special provisions are attached to and made a part of this contract. Provisions with reference numbers followed by # contain blanks into which data have been entered for this contract. (Instructions: List by reference number, title, and date.)

K-C.1.1#	TIMBER SUBJECT TO AGREEMENT (09/2004)
K-C.3.5#	DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES, AND SUDIVISION/PAYMENT UNIT BOUNDARIES (06/2012)
K-C.3.5.3#	DESIGNATION BY DAMAGE CLASS (09/2004)
K-E.4	PAYMENTS NOT RECEIVED (08/2012)
K-F.3.1#	ROAD MAINTENANCE REQUIREMENTS (09/2004)
K-F.3.5#	ROAD AND WATER SUPPLY USE (05/2008)
K-G.2.2#	PROTECTION OF IMPROVEMENTS (05/2008)
K-G.2.4#	SITE SPECIFIC SPECIAL PROTECTION MEASURES (09/2004)
K-G.241	TIMBER SALE SPECIFIC WILDLIFE SURVEY MEASURES (08/2018)
K-G.3.1.5#	PROJECT OPERATIONS SCHEDULE (12/2006)
K-G.3.3.1	LOG TRUCKING (02/2005)
K-G.3.6	ACCEPTANCE OF WORK (08/2018)
K-G.3.7	SUBSTITUTE METHODS (02/2005)
K-G.4.1#	FELLING, BUCKING, AND LIMBING (08/2007)
K-G.4.2#	GROUND BASED SKIDDING (12/2006)
K-G.5	STREAMCOURSE PROTECTION (02/2005)
K-G.6#	EROSION PREVENTION AND CONTROL (05/2008)
K-G.7#	SLASH TREATMENT (12/2006)
K-G.8.1.5	THIRD PARTY SCALING SERVICES (09/2004)
K-G.8.4.9	PRODUCT ACCOUNTABILITY (02/2005)
K-G.8.5.2	SCALING LOST SAMPLE WEIGHT LOADS (02/2005)
K-G.9#	STEWARDSHIP PROJECTS (09/2004)
K-H.2#	SPECIFIED FIRE PRECAUTIONS (06/2012)
K-H.2.2#	EMERGENCY PRECAUTIONS (06/2012)
K-I.2.1	CONTRACT TERM ADJUSTMENT (07/2016)
K-I.6.4	DEBARMENT AND SUSPENSION CERTIFICATION (03/2018)
K-I.6.8# (Option 1)	USE OF TIMBER (09/2004)

K-C.1.1# - TIMBER SUBJECT TO AGREEMENT (09/2004)

In addition, there is within Contract Area an unestimated quantity of:

Species	Product
Combined Softwood (cull logs)	Cull Logs
Combined Softwood (biomass)	Non-Saw
Combined Hardwood (oak)	Sm Rnd Wd

that shall be Included Timber upon written agreement.

K-C.3.5# - DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES (06/2012)

Trees are designated for cutting under B.3.5# only if designated as shown in the Timber Designation table below. The boundaries of Subdivisions/Payment Units and Cutting Units are designated as shown in the Boundary Designation table below. Trees used for boundary designation are not to be cut.

SPECIFICATIONS PURSUANT TO K-C.3.5# - DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES

SPECIFICATIONS PURSUANT TO K-C.3.5# - DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES

Timber Designation Table

Cutting Unit/ Subdivision/Area/ Payment Unit	Tree Paint Color	Designation or Specification
All	Blue	Hazard Tree. Notwithstanding B.3.2 all dead and unstable live trees which are leaning towards a road or are otherwise hazardous to a road, and are sufficiently tall to reach Contractor's landings or the roadbed of National Forest System roads within Contract Area, shall be felled by Contractor when Marked in the specified paint color above and below stump height by Forest Service in advance of felling any other timber in the vicinity. Pieces meeting Utilization Standards from such dead and unstable live trees shall be removed unless Contractor is notified in writing that removal would cause unacceptable damage to areas requiring special protection such as residual timber, roads, administrative sites, streamside management zones, and areas identified on Contract Area Map or on the ground.
All	Blue	Individual Tree Mark. Individual trees are designated for cutting only if Marked above and below stump height with the specified paint color.
		Leave Tree Mark. All live < > are designated for cutting unless Marked as leave trees. Leave trees are Marked above and below stump height with the specified paint color. Contract Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.
		Wildlife Trees. Notwithstanding the designation for cutting under B.3.1, B.3.3, B.3.4, or B.3.5, trees which are identified by standard Forest Service metal wildlife tree sign or painted with the specified paint color on the uphill and downhill side, shall be left uncut. In event such trees are destroyed in Contractor's Operations, Forest Service may designate alternate trees to be saved.
Contract Area	Black	Marked Out Trees. When it is necessary to delete previously marked trees, a unique tree marking paint color will be Marked over or adjacent to the original mark, but will not obscure the original marking. Trees Marked with the original marking paint color and the unique tree marking paint color are not Included Timber.
		Designation by Spacing K-C.3.5.1#
		Designation by Species and Diameter, K-C.3.5.2#
All		Designation by Damage Class, K-C.3.5.3#
		Designation by Row Spacing, K-C.3.5.4#

Subdivision/Payment Unit and Cutting Unit Boundary Designation Table

<u>Subdivision/Payment Unit</u>	<u>Boundary Paint Color</u>	<u>Boundary Designation</u>
All	Orange	Cutting unit boundaries around housing tracts (except along major roads) are designated with ORANGE tracer painted 2 circular dots facing into the unit, above DBH, with at least two stump marks at ground level. Painted boundary trees are not designated for cutting. Boundary lines are also flagged with white flagging (except along roads).
<u>Cutting Unit</u>	<u>Boundary Paint Color</u>	<u>Boundary Designation</u>
1-3	Orange	Hazard tree cutting unit boundaries on Highway 108 (where meeting the highway) are designated by ORANGE tracer painted 2 circular dots at eye level facing into the unit. Boundary corners are also painted with the identified cutting unit number and white flagging. Outer edge of cutting unit boundaries are within one and a half tree lengths of the road edge.

K-C.3.5.3# - DESIGNATION BY DAMAGE CLASS (09/2004)

Within Subdivision(s) or cutting unit(s) All, as shown on Sale Area Map, the following criteria are used to designate trees and other products for cutting and removal:

(a) All dead conifers with no visible green needles inside housing tract boundaries painted in orange, AND within 1.5 tree lengths of Highway 108, haul routes, water tanks, and outside the housing tract boundaries. In locations identified as Designation by Distance on the Contract Area Map all conifers with no green needles that are 200 feet (slope distance) from Highway 108, cabin tracts, and water tanks.

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(b) Additional trees to be cut, if any, are designated for cutting if Marked with blue paint.

(c) Cutting unit boundaries and trees that shall be left uncut are Marked with orange, pink, or red paint.

K-E.4 - PAYMENTS NOT RECEIVED (08/2012)

(a) Payments are due and payable on the date of issue indicated on the bill for collection. When a payment for timber cut and other charges is not received at the location designated by Forest Service by the date specified in the bill for collection, Contracting Officer will suspend all or any part of Contractor's Operations until payment or acceptable payment guarantee is received. Other charges include, but are not limited to:

- (i) Slash disposal, road maintenance, and contract scaling deposits;
- (ii) Cooperative work at rates established by specific agreement under E.2.1.8;
- (iii) Damages pursuant to J.4;
- (iv) Road use fees;
- (v) Restoration of downpayment pursuant to E.2.2;
- (vi) Periodic payments pursuant to E.2.1.3;
- (vii) Extension Deposits pursuant to E.2.1.7; and
- (viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date specified in the bill for collection shall be considered a breach under J.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date specified for receipt of payments. If the performance or payment is guaranteed by surety bond, the surety will receive a copy of the written notification of breach. Demand will be made on the surety or other institution providing the guarantee or bond instrument for immediate payment 10 days after issuance of written notification of the breach.

(c) Pursuant to the Debt Collection Improvement Act of 1996, as amended, if payment is not received by Forest Service within 15 days after the date of issue indicated on the bill for collection:

- (i) Simple interest shall be assessed at the Current Value of Funds Rate as established by the Secretary of the Treasury. Interest will begin to accrue as of the date of issue indicated on the initial bill for collection.
- (ii) Debtors will be assessed administrative charges, in addition to the delinquent amount due. Administrative charges are those additional costs incurred by the Government in processing, handling, and collecting delinquent debts.
- (iii) A penalty charge of six (6) percent per annum will be assessed on any portion of a debt delinquent more than 90 days. This penalty charge is in addition to interest and administrative charges under paragraphs (c) (i) and (c) (ii). The penalty charge shall accrue from the date of issue indicated on the bill for collection and shall be assessed on all outstanding amounts, including interest and administrative costs assessed under paragraphs (c) (i) and (c) (ii).

(iv) Payments will be credited on the date received by the Federal Depository or Collection Officer designated on the bill for collection.

(d) Forest Service remedies for Contractor's failure to make payment for timber cut and other charges when due, except for accrual of interest, suspension of all or any part of Contractor's Operations, and administrative offset, shall be stayed for so long as:

- (i) A bona fide dispute exists as to Contractor's obligation to make such payment and
- (ii) Contractor files and prosecutes a timely Claim.

K-F.3.1# - ROAD MAINTENANCE REQUIREMENTS (09/2004)

Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

See Contract Road Maintenance Requirements Summary Table.

K-F.3.1# – ROAD MAINTENANCE REQUIREMENTS. (9/04) Contractor shall maintain roads in accordance with the following Contract Road Maintenance Requirements Summary:

Contract Road Maintenance Requirements Summary

Road	Termini		Miles	Applicable <i>Prehaul</i> Road Maintenance Specifications									
	From	To		T-801	T-802	T-803	T-804	T-805	T-806	T-807	T-808	T-809	T-810
6N18X	7N83	7N83	0.50			C			C	C			
6N18XA	6N18X	EOP	0.12			C			C	C			
6N18XB	6N18X	EOP	0.04			C			C	C			
6N20X	Hwy108	Hwy108	0.10			C			C	C			
61923D2	Hwy108	EOP	0.08			C			C	C			
6N21X	Hwy108	EOP	0.22			C			C	C			
6N41Y	Hwy108	EOP	0.10			C			C	C			
6N22X	Hwy108	EOP	0.04			C			C	C			
6N24X	Hwy108	Hwy108	0.10			C			C	C			
6N23X	Hwy108	Hwy108	0.15			C			C	C			
6N23XA	6N23X	EOP	0.06			C			C	C			
6N36Y	Hwy108	EOP	0.24			C			C	C			
6N25X	6N36Y	EOP	0.13			C			C	C			
6N26X	6N36Y	EOP	0.22			C			C	C			
6N14	Hwy108	6N27X	0.31			C			C	C			
6N27X	6N14	EOP	0.14			C			C	C			
41899Z38	6N14	20E08	0.16			C			C	C			
6N28X	Hwy108	EOP	0.17			C			C	C			
6N91Y	Hwy108	EOP	0.27			C			C	C			
62028D	6N91Y	EOP	0.06			C			C	C			
6N12	Hwy108	EOP	0.13			C			C	C			
6N29X	Hwy108	6N20	0.30			C			C	C			
6N201	Hwy108	6N20	0.07			C			C	C			
6N20	Hwy108	EOP	0.19			C			C	C			
20DC223	Hwy108	EOP	0.06			C			C	C			
62035A	Hwy108	Hwy108	0.17			C			C	C			

C = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable During Haul Road Maintenance Specifications									
	From	To		T-801	T-802	T-803	T-804	T-805	T-806	T-807	T-808	T-809	T-810
6N18X	7N83	7N83	0.50			C			C				
6N18XA	6N18X	EOP	0.12			C			C				
6N18XB	6N18X	EOP	0.04			C			C				
6N20X	Hwy108	Hwy108	0.10			C			C				
61923D2	Hwy108	EOP	0.08			C			C				
6N21X	Hwy108	EOP	0.22			C			C				
6N41Y	Hwy108	EOP	0.10			C			C				
6N22X	Hwy108	EOP	0.04			C			C				
6N24X	Hwy108	Hwy108	0.10			C			C				
6N23X	Hwy108	Hwy108	0.15			C			C				
6N23XA	6N23X	EOP	0.06			C			C				
6N36Y	Hwy108	EOP	0.24			C			C				
6N25X	6N36Y	EOP	0.13			C			C				
6N26X	6N36Y	EOP	0.22			C			C				
6N14	Hwy108	6N27X	0.31			C			C				
6N27X	6N14	EOP	0.14			C			C				
41899Z38	6N14	20E08	0.16			C			C				
6N28X	Hwy108	EOP	0.17			C			C				
6N91Y	Hwy108	EOP	0.27			C			C				
62028D	6N91Y	EOP	0.06			C			C				
6N12	Hwy108	EOP	0.13			C			C				
6N29X	Hwy108	6N20	0.30			C			C				
6N201	Hwy108	6N20	0.07			C			C				
6N20	Hwy108	EOP	0.19			C			C				
20DC223	Hwy108	EOP	0.06			C			C				
62035A	Hwy108	Hwy108	0.17			C			C				

C = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable Post Haul Road Maintenance Specifications									
	From	To		T-801	T-802	T-803	T-804	T-805	T-806	T-807	T-808	T-809	T-810
6N18X	7N83	7N83	0.50		C	C		C	C				
6N18XA	6N18X	EOP	0.12		C	C		C	C				
6N18XB	6N18X	EOP	0.04		C	C		C	C				
6N20X	Hwy108	Hwy108	0.10		C	C		C	C				
61923D2	Hwy108	EOP	0.08		C	C		C	C				
6N21X	Hwy108	EOP	0.22		C	C		C	C				
6N41Y	Hwy108	EOP	0.10		C	C		C	C				
6N22X	Hwy108	EOP	0.04		C	C		C	C				
6N24X	Hwy108	Hwy108	0.10		C	C		C	C				
6N23X	Hwy108	Hwy108	0.15		C	C		C	C				
6N23XA	6N23X	EOP	0.06		C	C		C	C				
6N36Y	Hwy108	EOP	0.24		C	C		C	C				
6N25X	6N36Y	EOP	0.13		C	C		C	C				
6N26X	6N36Y	EOP	0.22		C	C		C	C				
6N14	Hwy108	6N27X	0.31		C	C		C	C				
6N27X	6N14	EOP	0.14		C	C		C	C				
41899Z38	6N14	20E08	0.16		C	C		C	C				
6N28X	Hwy108	EOP	0.17		C	C		C	C				
6N91Y	Hwy108	EOP	0.27		C	C		C	C				
62028D	6N91Y	EOP	0.06		C	C		C	C				
6N12	Hwy108	EOP	0.13		C	C		C	C				
6N29X	Hwy108	6N20	0.30		C	C		C	C				
6N201	Hwy108	6N20	0.07		C	C		C	C				
6N20	Hwy108	EOP	0.19		C	C		C	C				
20DC223	Hwy108	EOP	0.06		C	C		C	C				
62035A	Hwy108	Hwy108	0.17		C	C		C	C				

C = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

T-806 DUST ABATEMENT PLAN (CT5.31)

Road Number	Termini		Material Type ¹	Application Rates ¹	Preparation Method T803
	From	To			
All Native or Aggregate Surface Roads			Water	As Needed to Abate Dust	T-803 As Needed

NOTES:

- The number of water applications per day and the rate of application shall be as required to abate dust.
- Where watering is designated, initial and subsequent applications are estimated at 0.5 GAL/SQ YD. A minimum of one complete watering per day is required for volumes up to 50 MBF. For volumes exceeding 50 MBF per day, additional water will be applied as needed to abate dust. Water draft sites on fish-bearing streams must have a minimum flow of 1.5 CU FT per second to allow water drafting.
- Armor road approaches as necessary from the end of the approach nearest a stream for a minimum of 50 feet, or to the nearest drainage structure (e.g. waterbar or rolling dip) or point where drainage does not drain toward the stream
- Check all water-drafting vehicles daily and repair as necessary to prevent leaks of petroleum products from entering protected stream management zone. Water-drafting vehicles will contain petroleum spill kits. Dispose of absorbent pads according to Hazardous Response Plan.
- Use a screened intake device and pumps with low entry velocity and suction strainers with screen less than 2mm (1/8 in) in size to minimize removal of aquatic species, including juvenile fish, amphibian egg masses and tadpoles, from aquatic habitats. The suction strainer shall be inserted close to the substrate in the deepest water available. Place strainer in a canvas bucket to avoid substrate and aquatic species disturbance when stream flow approaches 1.5 Cu.Ft. per sec. A drafting box measuring 2 feet on all sides covered in a maximum of 0.25 inch screening is required.
- If portable pump is used for stream drafting, place pump in containment pan. Spill pads shall be used for fueling in stream management zone (smz). Fuel shall be stored outside of smz.
- Avoid water sources in developed recreation sites while facilities are open to public use.
- Water drafting by more than one truck at a time at the same site is prohibited.
- Prior to drafting out of Basin Creek, consult with the Forest Aquatic Biologist to identify acceptable drafting methods and location.
- Water Source Drafting Flow Requirements

Fish Bearing Streams:

Do not exceed 350 gallons per minute for streamflow greater than or equal to 4.0 cubic feet per second (cfs); do not exceed 20% of surface flows below 4.0 cfs; and, cease drafting when bypass surface flow drops below 1.5 cfs.

Non-Fish Bearing Streams:

Do not exceed 350 gallons per minute for streamflow greater than or equal to 2.0 cfs; do not exceed 50% of surface flow; and, cease drafting when bypass surface flow drops below 10 gallons per minute. Water sources designed for permanent installation, such as piped diversions to off-site storage, are preferred over temporary, short-term-use developments. Locate water drafting sites to avoid adverse effects to in-stream flows and depletion of pool habitat.

Fish Bearing Streams			
CFS	GPM	Drafting cannot exceed (GPM)	Time to fill 1000 Gal (Min)
>4	>1800	350	3
3.5	1575	315	3
3	1350	270	4
2.5	1125	225	4
2	900	180	6
1.5	675	135	7
<1.5	<675	Cease Drafting	

Non-Fish Bearing Streams			
CFS	GPM	Drafting cannot exceed (GPM)	Time to fill 1000 Gal (Min)
>2	>900	350	3
1.5	675	338	3
1	450	225	4
0.9	405	203	5
0.8	360	180	6
0.7	315	158	6
0.6	270	135	7
0.5	225	113	9
0.4	180	90	11
0.3	135	68	15
0.2	90	45	22
0.1	45	23	44
0.09	41	20	49
0.08	36	18	56
0.07	32	16	63
0.06	27	14	74
0.05	23	11	89
0.04	18	9	111
0.03	14	7	148
0.0222	10	5	200
<0.0222	<10	Cease Drafting	

K-F.3.5# - ROAD AND WATER SUPPLY USE (05/2008)

National Forest water supply locations, access, method of filling trucks, period of water availability and procedures designed to maintain water quality at each location shall be agreed in advance of use. Such use shall at no time reduce water supplies to the level that further use may be detrimental to aquatic resources or other established use. Waterholes and other improvements relating to said water supplies shall be put into condition, prior to expected seasonal periods of precipitation or runoff, to avoid resource damage.

Damage to resources at such locations caused by Contractor's Operations, other than fire suppression activities, shall be repaired by Contractor in a timely and agreed manner to the extent practicable to restore and prevent further resource damage.

Unless otherwise agreed, Contractor's use of roads and other water supply requirements shall conform to the following table.

See Table A.

SPECIFICATIONS PURSUANT TO K-F.3.5#
REQUIREMENTS OF ROAD AND WATER SUPPLY USE

<p>Load Limitations</p>	<p>Contractor shall notify Forest Service in writing of the planned size and load distribution for equipment which exceeds the State of California Vehicle Code legal size and weight, and the National Forest System roads to be used. Such notice may be part of plan of operation under G.3.1.1. Within 15 days after receipt of the written notice Forest Service shall notify Contractor in writing of any regulations or restrictions that may be needed to protect National Forest Transportation Facilities.</p> <p>A written permit shall be required for moving any vehicle which is in excess of the established legal size and weight which is not listed in the above plan, except as may be authorized in prior written agreements.</p>
<p>Existing Non-National Forest System Roads</p>	<p>Roads not shown on Contract Area Map may be used as Temporary Roads if there is agreement before use is started.</p>
<p>Snow Removal</p>	<p>If Contractor removes snow from roads, such work shall be done with Forest Service approval and in a manner that will protect roads and adjacent resources.</p> <p>Snow berms shall be removed or placed to avoid accumulation of melt water on the road and prevent water concentration on erosive slopes or soils.</p> <p>Snow must not be removed to the road surface. A minimum 3 inch snow depth must be left to protect the roadway. If the road surface is damaged, Contractor shall replace lost surface material and repair structures damaged in blading operations prior to hauling, unless climatic conditions prevent necessary work from being accomplished or as otherwise agreed in writing.</p> <p>Single lane roads shall be plowed full width including turnouts. In event double lane roads are not plowed to full width, warning signs shall be required and plowing shall be no less than single lane (12 feet) with intervisible turnouts.</p>
<p>Water Supply Deposits</p>	<p>N/A</p>
<p>Surface Replacement Deposits</p>	<p>N/A</p>

K-G.2.2# - PROTECTION OF IMPROVEMENTS (05/2008)

Contractor shall notify Forest Service at least 10 days prior to any operations in the vicinity of improvements identified on Contract Area Map. Contractor shall protect such improvements from damage and shall be responsible for their timely restoration if damaged by Contractor's Operations. If relocation or removal of said improvements is necessary to avoid foreseeable damage by Contractor's Operations, work and cost shall be borne by the party listed in the table below. If Contractor is required to move or relocate the improvements, they shall move or relocate the improvements listed in the following table to locations and in a manner as specified in drawings or in specifications attached hereto. Improvements shall be returned to their original locations following Contractor's Operations.

See table below for improvements to be protected.

See Table A.

SPECIFICATIONS PURSUANT TO K-G.2.2# - PROTECTION OF IMPROVEMENTS.

<u>Improvement</u>	<u>Owner's or Permittee's Name</u>	<u>Timing</u>	<u>Specifications</u>	<u>Work and Cost of Removal or Relocation Borne by</u>
Distribution Lines	Pacific Gas & Electric	Prior to felling operations adjacent to infrastructure	Contact PG&E if dropping of lines is required	Contractor
Highway 108	California Department of Transportation	Prior to felling operations adjacent to highway	Contractor will secure an Encroachment Permit from Cal Trans. Contractor will be required to adhere to the Encroachment Permit requirements and coordinate traffic control operations with Cal Trans.	Contractor
Underground Utilities	Various	Prior to operations	Avoid underground utilities flagged in BLUE	Contractor
Lot equipment	Various	Prior to operations	Relocate any equipment located in cabin lots to avoid foreseeable damage	Contractor

K-G.2.4# - SITE SPECIFIC SPECIAL PROTECTION MEASURES (09/2004)

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

Cultural Resource Protection Measures: __

Unless otherwise agreed, no Contractor Operation will be permitted w/in areas flagged with orange/white and blue/black candy-striped flagging and/or posted with "Area Controlled" signs. Any Contractor Operation (including the removal of products) within cultural management boundaries will require compliance with Section 106 of the National Historic Preservation Act of 1966.

By written agreement, in certain cultural sites within cut units, removal of timber designated within the perimeter of sites will be approved if Contractor's equipment is capable of mechanically cutting and placing the timber outside of the site without disturbance to the site features.

-
Wildlife and Botanical Protection Measures: __

Identified as CA-5 on SAM (Sensitive Plants). Unless otherwise agreed, no Contractor Operations (with the exception of manual hazard tree felling) are permitted within areas flagged in orange & black candy-striped flagging. Any slash or debris resulting from tree felling operations occurring within flagged perimeters is to be removed manually by Contractor. Removal of included products by agreement only.

Identified as NOX on SAM (Noxious Weeds). Unless otherwise agreed, no Contractor Operations (with the exception of manual hazard tree felling) are permitted within areas flagged in orange "Noxious Weeds" flagging.

-
Cave Resource Protection Measures: n/a

K-G.241 - TIMBER SALE SPECIFIC WILDLIFE SURVEY MEASURES (08/2018)

Notwithstanding K(T)-G.315#, when agreed to in writing Purchaser may request a waiver of operating restrictions. If granting such a request requires on the ground surveys prior to approval or denial, the Forest Service will have 10 days to commence such surveys following the acceptance of Purchaser's request by the Contracting Officer. If the Forest Service cannot proceed with these surveys, the Purchaser may request that a qualified wildlife biologist selected by the Purchaser, and approved by the Contracting Officer, be allowed to conduct the survey based on protocol provided by the Contracting Officer. The Biologist may be an employee of the Purchaser. The survey of the biologist will be conducted at no cost to the Forest Service. All surveys shall document survey methodology, locations, time and dates, personnel and results. The Contracting Officer shall have 5 working days to determine whether a waiver is granted after the results are presented. If no decision is made by the Contracting Officer, the waiver is considered denied. The waiver is only granted for the operating season in which the surveys were performed.

K-G.3.1.5# - PROJECT OPERATIONS SCHEDULE (12/2006)

Unless otherwise agreed in writing, Contractor's Operations shall be performed in accordance with the following schedule:

See Table A.

SCHEDULE PURSUANT TO K-G.3.1.5# - PROJECT OPERATIONS SCHEDULE (12/2006)

<u>Subdivision/ Area/Unit</u>	<u>Conditions of Operation</u>	<u>Purpose</u>
Cabin Tracts	No operations prior to June 15	Time for cabin owners to flag out underground utilities
Sale Area	No operations prior to 6:00 am on any day within $\frac{1}{4}$ mile of cabin tracts.	Avoid disturbance to cabin residences

K-G.3.3.1 - LOG TRUCKING (02/2005)

To promote safe operations on National Forest roads and on Specified Roads, loads shall be safely secured before trucks move from the landing or loading location.

K-G.3.7 - SUBSTITUTE METHODS (02/2005)

Notwithstanding other provisions herein, for minor changes such as changes in logging systems for areas smaller than 5 acres, Contractor and Forest Service may agree in writing that use of substitute methods or equipment will achieve Forest Service objectives under this contract and may be used in lieu of those specified for Contractor's Operations.

K-G.4.1# - FELLING, BUCKING, AND LIMBING (08/2007)

Unless otherwise agreed in writing, Contractor's felling, bucking, and limbing operations shall be conducted as specified in the table below.

See Table A.

SPECIFICATIONS AND TREATMENTS PURSUANT TO K-G.4.1# - FELLING, BUCKING AND LIMBING

Treatment Method	Felling, Bucking and Limbing Specifications
Limbing n/a	Outside of construction clearings, Clearcutting Units and regeneration units, unless otherwise provided by G.4.1.4, Contractor shall, prior to skidding/yarding operations, cut exposed limbs from products which are to be skidded/yarded. Such limbing of stems shall be done to a top diameter of approximately < > inches, at which point the top shall be cut from the remainder of the stem.
No Lop "No Lop"	Within units or subdivisions designated NO LOP on Contract Area Map, trees shall be skidded/yarded to agreed landing locations prior to lopping.
Whole Tree Yarding "Whole"	Notwithstanding the requirements above, within units or subdivisions designated "Whole" on Contract Area Map, trees smaller than <u>24</u> inches DBH shall be skidded/yarded to agreed landing locations prior to limbing, bucking, and lopping. Trees larger than or equal to <u>24</u> inches DBH shall be bucked into two or more pieces with the butt portion being no longer than <u>41</u> feet prior to skidding/yarding. The butt log <u>shall</u> be limbed prior to skidding/yarding.
Directional Felling	Within areas designated DF on Contract Area Map, Included Timber shall be directionally felled away from <u>boundary trees, reserve trees, gates, cattleguards, survey monuments, controlled areas, noxious weeds, streamcourses, meadows, structures, utilities, roads, driveways, buildings, water tanks, water lines, propane tanks, retaining walls, powerlines, and other ownership</u> with the use of specialized equipment. Such directional felling shall not be required when in the faller's judgment it is unsafe to do so, and shall be left standing.
Treatment of Stumps	<p>Within areas shown on Contract Area Map, Contractor shall treat stumps of all live <u>conifer</u> trees equal to or greater than <u>6</u> inches stump diameter, (measured inside bark) unless otherwise agreed in writing. Treatment shall be with a borate compound registered by EPA in the State of California for prevention of annosus root disease.</p> <p>Treatment shall consist of removal of sawdust and other loose debris from the cut surface of the stump and application of a thin layer of the borate compound uniformly over the entire cut surface, including exposed wood surfaces on the stump sides, at the rate specified on the product label. Any surface irregularities on the stump preventing application of a uniform layer of borate compound shall be cut level prior to treatment. Unless waived in writing, Contractor shall also apply an approved colorant mixed with the borax to insure complete coverage. Treatment should be done as soon as possible but shall be completed no later than <u>4</u> hours after felling, otherwise stumps shall be re-cut and treated.</p>

	<p>Contractor shall not apply borate compound during heavy rain fall or when such precipitation rate is predicted within 24 hours of application to cause borate compound to be flushed off the stump and become ineffective, in that case treatment shall be reapplied. Application shall be completed within 24 hours of the precipitation having ceased. Borate compound also shall not be applied to stumps located within 10 feet of live streamcourses and meadows/wetlands shown on Contract Area Map and/or 2 feet of sensitive plant location boundaries as flagged on the ground.</p> <p>Contractor shall provide the borate compound and colorant and apply it in compliance with the State of California laws and regulations pertaining to pesticides and pest control operations. Borate compound storage shall be located such that any spillage will not contaminate water. All spills shall be promptly cleaned up and spilled material disposed of according to the product label. All spills occurring in water or over 0.5 pounds shall be reported to Forest Service within 2 hours.</p> <p>Contractor shall submit at the end of each month a "Monthly Summary of Pesticide Use Reports" to the appropriate County Agricultural Commissioner with a copy to the District Ranger.</p>						
<p>Maximum Log Length</p>	<p>Cut trees shall be bucked prior to skidding so that resulting logs shall not exceed the maximum log length including trim allowance shown in following table:</p> <table border="1" data-bbox="354 1108 1222 1205"> <thead> <tr> <th data-bbox="354 1108 735 1157">Unit Number</th> <th data-bbox="735 1108 1222 1157">Maximum Log Length</th> </tr> </thead> <tbody> <tr> <td data-bbox="354 1157 735 1205">All</td> <td data-bbox="735 1157 1222 1205">41 feet</td> </tr> </tbody> </table>	Unit Number	Maximum Log Length	All	41 feet		
Unit Number	Maximum Log Length						
All	41 feet						
<p>Minimum Stump Height</p>	<table border="1" data-bbox="354 1276 1222 1434"> <thead> <tr> <th data-bbox="354 1276 638 1356">Unit/Subdivision</th> <th data-bbox="638 1276 919 1356">Minimum Stump Height (inches)</th> <th data-bbox="919 1276 1222 1356">Purpose or Reason</th> </tr> </thead> <tbody> <tr> <td data-bbox="354 1356 638 1434">All</td> <td data-bbox="638 1356 919 1434">1</td> <td data-bbox="919 1356 1222 1434">Product Accountability</td> </tr> </tbody> </table>	Unit/Subdivision	Minimum Stump Height (inches)	Purpose or Reason	All	1	Product Accountability
Unit/Subdivision	Minimum Stump Height (inches)	Purpose or Reason					
All	1	Product Accountability					

K-G.4.2# - GROUND BASED SKIDDING (12/2006)

Unless otherwise agreed in writing, the method of skidding Included Timber shall be as shown on the Contract Area Map, by areas, with symbols defined in the following table:

See Table A.

Ground-Based Skidding Table - K-G.4.2#

Map Symbol	Requirements
<u>TRAC</u>	<p>Skid road pattern shall be agreed in advance of felling and main skid roads shall be flagged on the ground in advance of felling. Contractor shall stage-log by felling and skidding Included Timber in two or more separate operations when necessary to prevent undue damage to the resources or residual stand. Needed tractor trails shall be constructed in advance of skidding.</p> <p>Products shall be end-lined as needed to protect resources or residual timber from unnecessary damage. The number of chokers shall be limited as necessary to avoid unnecessary damage to resources or residual timber. By agreement, tractors may be used to separate products to prevent stain.</p>
<u>SUSP</u>	Products shall be skidded with leading end clear of ground.
<u>SPACE</u>	Skid roads will average <u>132</u> feet from center to center, except where converging.
<u>ENDL</u>	Endlining shall not be required for distances in excess of <u>75</u> feet uphill, and <u>100</u> feet downhill.
<u>MAX</u>	Tractors used for skidding outside Clearcutting Units, regeneration units or other authorized clearings, shall be of the type (rubber-tired or track-laying) shown on the Contract Area Map and shall not exceed the overall width designated on Contract Area Map.
MH n/a	<p>Contractor shall cut Included Timber and move it to designated skid trails using equipment with a boom having an operating radius of at least __ feet for bunching trees, capable of severing, lowering and placing trees up to __ inches diameter at stump height on the ground prior to skidding. Such equipment must be capable of operating on slopes up to __ %.</p> <p>Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources from unnecessary damage.</p> <p>Trees which exceed capability of specified equipment may be felled, bucked and skidded in a manner consistent with the requirements of G.4.1 - Felling and Bucking, K-G.4.1# - Felling, Bucking, and Limbing Requirements and the above "TRAC", "SUSP", "SPACE", "ENDL", and "MAX" requirements.</p>
CTL n/a	<p>Included Timber shall be felled, limbed and bucked by a self-propelled mechanical harvester capable of producing finished sawlogs or chippable boles. Limbs of Included Timber shall be placed evenly in the machinery skid trail prior to product removal. The harvester shall be an all-wheel drive machine with at least 3 axles and a processing head mounted on a boom having a minimum-operating radius of 20 feet.</p> <p>Notwithstanding above, hand felling using chainsaws may be required in or</p>

	<p>adjacent to sensitive areas to protect resources or residual timber from unnecessary damage.</p> <p>All Products shall be removed by an all-wheel drive forwarder with at least 3 axles capable of self-loading and unloading. The forwarder shall carry all products free of the ground during removal. The loading crane shall have a minimum-operating radius of 15 feet. Log landings and transfer points shall be agreed in advance of harvesting.</p> <p>Included Timber exceeding the harvester's capability may be felled by conventional chainsaw methods, forwarded to nearest skid trail and processed into a finished Product with harvester or chainsaw, consistent with the requirements G.6.1 - Meadow Protection, G.4.1 - Felling and Bucking, K-G.4.1# - Felling, Bucking, and Limbing and the above "TRAC", "SUSP", "SPACE", "ENDL", and "MAX" requirements.</p>
<p>PB n/a</p>	<p>Contractor shall cut Included Timber and move trees to pre-approved skyline corridors to facilitate skyline yarding using equipment with a boom having an operating radius of at least ___ feet for bunching trees, capable of severing, lowering and placing trees up to _____ inches diameter at stump height on the ground prior to yarding. Such equipment must be capable of operating on slopes up to __ %. Bundles shall not exceed yarder capability or cause unnecessary damage to residual stand.</p> <p>Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources from unnecessary damage. Such trees shall be felled away from the corridor in a manner that minimizes residual stand damage during yarding.</p> <p>Included Timber exceeding the feller's capability may be felled by conventional chainsaw methods</p>
<p>HCTL n/a</p>	<p>Included Timber shall be felled, limbed and bucked by a self-propelled mechanical harvester capable of producing finished sawlogs or chippable boles. Such equipment must be capable of operating on slopes up to ___ %. The harvester shall be an all-wheel drive machine with at least 3 axles, or track mounted, and a processing head mounted on a boom having a minimum-operating radius of 20 feet.</p> <p>Notwithstanding above, hand felling using chainsaws may be required in or adjacent to sensitive areas to protect resources or residual timber from unnecessary damage.</p> <p>Included Timber exceeding the harvester's capability may be felled by conventional chainsaw methods-</p>

K-G.5 - STREAMCOURSE PROTECTION (02/2005)

Unless otherwise agreed in writing, wheel or track laying equipment shall not operate within "Buffer Strips" except as necessary for fire suppression activities. "Buffer Strips" are areas marked on the ground or are within the distances identified on the Contract Area Map measured from the apparent high water mark of streamcourses. Boundaries of Buffer Strips may be modified by agreement in writing to meet unforeseen operating conditions.

Culverts, bridges, or other suitable structures shall be required on skid roads and trails only at points where it is necessary to protect Stream courses. The type of crossing structures, method of installation and removal shall be determined by agreement. Contractor in accordance with K-G.6# - Erosion Prevention and Control, shall remove such structures and associated fills.

Damage to Stream course or Buffer Strips caused by unauthorized Contractor's Operations shall be repaired by Contractor in a timely and agreed manner to the extent practical as determined by Forest Service to restore and prevent further damage to Stream courses.

K-G.6# - EROSION PREVENTION AND CONTROL (05/2008)

Erosion prevention and control work, including Streamcourse protection, required by K-G.5 and G.6 shall be completed within 15 calendar days after skidding operations related to each landing are substantially completed or after Forest Service designation on the ground of work where such designation is required hereunder. Said time limit shall be exclusive of full days lost in Contractor's Operations due to causes beyond Contractor's control. Such on the ground designation shall be done as promptly as feasible unless it is agreed that the location of such work can be established without marking on the ground. After September 15 and as long thereafter as operations continue the work shall be done as promptly as practicable. Damage resulting from Contractor's Operations due to failure to perform required work shall be repaired by Contractor.

Notwithstanding other provisions in this contract and unless otherwise agreed in writing, any hay, straw, or mulch used in this contract shall be State of California certified weed free.

Additional erosion control requirements of this contract are listed in the following table.

See Table A.

SPECIFICATIONS PURSUANT TO K-G.6# - EROSION PREVENTION AND CONTROL.

Vegetative Soil Stabilization N/A

Special Erosion Prevention Measures N/A

Soil Scarification In addition to meeting the requirements of G.6.3 and G.6.4, Contractor shall scarify the following areas; unless otherwise agreed:

- (a) Roadbeds of any Temporary Roads used for log hauling by Contractor.
- (b) Landings or portions thereof located outside Roadbed limits of National Forest System roads not designated for scarification.

Scarification shall be to a depth of 6 inches, with intervals between striations not to exceed 12 inches, unless otherwise agreed.

Backblading Within recreation development sites and public use areas designated on Contract Area Map, Contractor shall, at Forest Service request, backblade skid trails in lieu of cross ditching.

Tillage: n/a

K-G.7# - SLASH TREATMENT (12/2006)

Contractor shall pile, scatter, yard, construct firelines or otherwise treat slash defined in specifications below, within designated areas. Work required of Contractor shall be in accordance with the following slash plan and specifications, and the Contract Area Map.

All vegetative debris associated with construction of Specified Roads such as unutilized timber, brush and grubbed stumps is Construction Slash. Measures to be taken by Contractor for treatment of Construction Slash are set forth in the attached road construction specifications and in the attached slash treatment specifications.

Vegetative debris larger than 1 inch in diameter outside bark and 3 feet long resulting from Contractor's Operations, other than Construction Slash, is Logging Slash. Measures to be taken by Contractor for treatment of Logging Slash are set forth below unless otherwise agreed in writing.

Forest Service and Contractor shall jointly develop a schedule for completion of slash treatment on the various portions of Project Area prior to Contractor's Operations.

Removing may be substituted for treatment of any other specified method.

By agreement in writing, certain slash may be left for fuelwood. When the specified treatment is by a combination of methods, Logging Slash not treated by one of the methods shall be treated by the other(s).

See the slash treatment specification table below.

See Table A.

SPECIFICATIONS PURSUANT TO K-G.7# - SLASH TREATMENT (12/2006)

Specified slash treatment methods shall be shown on Contract Area Map or listed in the following tables by the following symbols:

Slash Treatment Methods

<u>Symbol</u>	<u>Method</u>	<u>Definition</u>
Buck-L	"Bucking Large Logging Slash"	Tops and limbs over 4 inches diameter outside bark (d.o.b.), not to be otherwise treated, shall be bucked into lengths not to exceed 6 feet, unless agreed otherwise.
Buck-P	"Bucking and Piling"	Logging Slash smaller than < > inches and larger than 4 inches in large end d.o.b. shall be bucked into lengths not to exceed < > feet and left in place. Logging Slash 4 inches and smaller in large end d.o.b. shall be hand Piled within Required Disposal Strip for Forest Service disposal.
Bury	"Burying"	Logging Slash shall be buried where agreed in borrow areas, pits, trenches, or other locations reasonably near the area of origin. Logging Slash shall be matted down in layers and shall be covered with at least 2 feet of rock and soil so that the final surface is sloped to drain and relatively smooth.
Chip	"Chipping"	Chippable Logging Slash up to 4 inches in d.o.b. shall be processed through a chipping machine. Chips shall be scattered to a loose depth not exceeding 6 inches.
Deck	"Decking" large material	Logging Slash <u>8</u> inches or larger in large end d.o.b. and <u>10</u> feet or more in length shall be Decked for disposal by Forest Service by piling pieces parallel to each other.
Mach	"Machine Piling"	Concentrations of Logging Slash, excluding scattered individual pieces, shall be Machine Piled by tractor equipped with brush rake for disposal by Forest Service.
Pile	"Piling" small material	Logging Slash smaller than <u> </u> inches in large end d.o.b. and <u> </u> feet long shall be hand Piled for disposal by Forest Service.
Remove	"Removing"	Logging Slash shall be moved or hauled to locations shown on Contract Area Map and designated on the ground where it shall be piled for disposal by Forest Service.
Scat 18" Scat 30"	"Scattering"	Logging Slash shall be scattered to reduce slash concentrations with slash being generally left within 18 or 30 inches of the ground as shown on Contract Area Map. Logging Slash shall be scattered into openings away from and without unnecessary damage to residual trees. All scattered logs shall be

limbed, placed away from trees and positioned so they will not roll. When Scattering is specified, another method may be used by agreement.

Stack "Stacking" small material Logging Slash ___ inches or smaller in large end d.o.b. and ___ feet or more in length shall be stacked for disposal by Forest Service by piling pieces parallel to each other.

View "Visible Slash Treatment" Designated on Contract Area Map with boundaries posted on the ground are <> with distance limitations for visible slash treatment. Within such units and the area of visible Logging Slash adjacent thereto, Logging Slash shall be treated by Contractor. Primary treatment shall be by Removing, Burying, Chipping, Piling, Machine Piling, or a combination of these means unless a method is specified or prohibited on Contract Area Map. Logging Slash not readily treated by the selected or specified method shall be removed to designated areas or treated as agreed.

YUMD "Yarding Unutilized Material-Decking" All unutilized material developed by Contractor's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized material shall be Yarded to landings and Decked. Where this is impractical, or other reasons, other locations shall be agreed upon.

Unit	Large End d.o.b. (in)	Length (feet)

YUME "Yarding Unutilized Material-Exterior Boundary" All unutilized material developed by Contractor's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized material shall be yarded to locations a minimum of 50 feet slope distance within the exterior boundaries of such units and positioned so the yarded material will not roll.

Unit	Large End d.o.b. (in)	Length (feet)

YUML "Yarding Unutilized Material-Landing" All unutilized material developed by Contractor's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized shall be yarded to locations within 100 feet slope distance of landing. Where this is impractical, or other reasons, other

locations shall be agreed upon.

Unit	Large End d.o.b. (in)	Length (feet)

YUMR **"Yarding Unutilized Material-Removal"** All unutilized material developed by Contractor's Operations shall be treated by the d.o.b. and length specifications as shown in the unit specification table. All unutilized shall be removed to locations shown on Contract Area Map and designated on the ground, or other agreed locations, and Decked.

Unit	Large End d.o.b. (in)	Length (feet)

Cover **"Covering Piles"** All piles shall be covered with a durable waterproof covering as approved by Forest Service. The material shall be at least six feet in width. Piles shall not be less than fifty percent covered, with the covering extending not less than half way down all sides. Pieces of burnable material shall be placed on top of the durable waterproof covering to keep the covering from blowing off the pile.

Fell **"Damaged Small Tress"** Unless treated under other provisions, all trees smaller than the minimum d.b.h. in A.2, over 5 feet in height, and damaged beyond recovery by Contractor's Operations shall be felled. Such trees shall be limbed to a stem diameter outside bark of approximately 3 inches, at which point the top shall be cut from the remainder of the stem, and shall be bucked into lengths not exceeding 20 feet.

Fire-L **"Firelines"** Shown on Contract Area Map and to be flagged on ground after logging by Forest Service are firelines to be constructed by Contractor unless otherwise agreed in writing. Contractor shall construct not more than <> chains of fireline by hand and not more than <> chains of fireline by tractor.

Firelines constructed by hand shall be cleared of all vegetative debris larger than one inch in d.o.b. and three feet long. The width of firelines shall be at least <> feet, except across the top of cutting units where the width shall be at least <> feet. At least <> feet shall be scraped to mineral soil. In areas where there is potential for burning material to roll, the fireline shall be constructed in a trenched manner on the downhill side.

Tractor lines shall be cleared of all

vegetative debris, larger than one inch in diameter and three feet long, to a width of at least <> feet, with at least <> feet to mineral soil. No slash, brush, or other vegetative debris shall be buried in or under berms created in the construction of firelines. All limbs overhanging into the fireline, shall be removed to a minimum height of 8 feet.

Firelines shall be completed on each unit in accordance with G.3.1.1 unless otherwise agreed in writing.

In subdivisions <> and shown on Contractor Area Map, Logging Slash shall be scattered within <> feet slope distance of the inside edge of firelines.

Fuel-B "Fuelbreaks"

Shown on Contract Area Map, with boundaries designated on the ground, are "Fuelbreaks" of varying width. Within such Fuelbreaks all Logging slash and Construction slash shall be treated by Contractor. Primary treatment shall be by Removing, Burying, Chipping, Piling, Machine Piling, or a combination of these methods unless a method is specified or prohibited on Contract Area Map. Slash larger than treatment size requirements of selected or specified methods shall be scattered outside Fuelbreak, or treated as agreed.

PILING SPECIFICATIONS. All piles shall be reasonably compact and free of soil to facilitate burning and shall be constructed of such size and at such distance from trees so that burning shall not result in unnecessary damage to residual timber. Such Logging Slash shall be bucked into lengths not exceeding ten feet prior to piling. Maximum width of tractor, with brush rake attached, shall not exceed **144** inches. Machine Piling is not required on areas where use of tractors would cause undue damage to residual timber or where slopes exceed **25** percent. Piles shall be located a distance of at least twice their height in feet from the outer edge of tree crowns or snags. Piles shall be no less than four feet in height or greater than **10** feet in height. Material extending three feet or more outside the edge of a pile shall be trimmed. An eight foot fuelbreak shall be cleared of all but fine material around each Machine Pile and an 18 inch wide fireline shall be cleared to mineral soil around the outer ring of the fuelbreak. For hand piles, Contractor shall construct a fireline cleared to mineral soil and at least 3 feet wide around each pile. In areas where there is a potential for burning material to roll, firelines, including those for Machine Piles, shall be trenched on the downhill side of each pile to adequately prevent material from crossing firelines. Trenches shall be constructed by hand unless otherwise agreed.

UNIT AND SUBDIVISION SLASH TREATMENT SPECIFICATIONS. ___

	SLASH TREATMENT	
Subdivision or Unit No	Specified Method	Prohibited Method
All	Fell	

LANDINGS AND DISPOSAL SITES. Unutilized logs accumulated at landings and disposal sites shall be Decked by Contractor for disposal by Forest Service. The maximum height of decks is shown in the following table. Other slash accumulated at landings and disposal sites shall be kept separate from unutilized logs and treated by the method shown in the following table.

	SLASH TREATMENT		
	Subdivision or Unit No.	Specified Method	Maximum Height of Decks
<u>Landings</u>	All	Deck, Mach, Cover	20
<u>Disposal Sites</u>	All	Deck, Mach, Cover	20

TREATMENT ALONG PERMANENT ROADS Permanent roads that require roadside slash treatment are listed in the attached table and shown on Contract Area Map. All Logging and Construction Slash within Required Disposal Strips shall be treated by Contractor. "Required Disposal Strips" are those areas adjacent to permanent roads where slash treatment is required for resource objectives. The width of Required Disposal Strips is shown in the attached table and is measured in slope distance from Roadbed edges of permanent roads. By agreement, in Clearcutting Units and regeneration units slash from Required Disposal Strips may be treated with other Logging Slash. By agreement the location of Required Disposal Strips may be adjusted from side to side without materially changing the total work required.

Slash treatment in Required Disposal Strips shall be accomplished without affecting the proper functioning of channels leading to and from drainage structures.

Logging Slash larger than treatment size requirements of the specified method shall either be Scattered outside Required Disposal Strip, within Required Disposal Strip or Decked at agreed locations as shown in the attached table.

			SLASH TREATMENT	
Road No.	Subdivision and/ or Unit No. or Road Juncitons (From To)	Width of Required Disposal Strip	Specified Method	Slash Larger Than Treatment Size Requirements of Specified Method

TREATMENT ALONG TEMPORARY ROADS. Outside of Clearcutting Units or regeneration units, all trees felled or pushed over and trees damaged beyond recovery by Temporary Road construction shall be felled, limbed to a stem d.o.b. of approximately 3 inches, at which point the top shall be cut from the remainder of the stem, and stem shall be bucked into lengths not exceeding **41** feet. Such slash shall be Scattered free of soil to reduce concentrations unless treatment is required by another specified method.

ADDITIONAL SLASH TREATMENT REQUIREMENTS. Within areas shown on Contract Area Map, Contractor shall perform work according to the specifications in the attached Table, unless otherwise agreed in writing.

Subdivision, Payment Units, Roads and or Road Segments	Additional Slash Treatment Requirements
n/a	<p>Yard all stem material to a top d.o.b. of 1 inch, from timber designated for cutting, with the following exception: broken portions of logs and tops less than 4 feet in length need not be yarded.</p> <p>Broken ends of merchantable logs shall not be bucked off in the units.</p> <p>Slash and Substandard Material accumulated at the landings shall be Decked or Machined Piled, in accordance with specifications above.</p> <p>Material accumulated at landings shall be considered as Timber Subject to Agreement under K-C.1.1#, described as Substandard Material and may be removed and paid for at Contractor's option.</p>

K-G.8.1.5 - THIRD PARTY SCALING SERVICES (09/2004)

Notwithstanding the requirement for Forest Service or parties under contract to Forest Service to provide Scaling services under G.8.1, Scaling designated in A.10 shall be conducted by a third party Scaling organization approved by Forest Service. Scaling shall be done in accordance with A.9 and Contractor shall bear costs for Scaling service.

In the event third party Scaling service is suspended for causes such as strikes, termination of third party's approval to Scale National Forest logs by Forest Service, or Contractor's failure to pay third party Scaling costs, hauling operations shall be suspended until agreed alternate Scaling services are provided or service by third party is resumed.

When an approved alternate Scaling location pursuant to G.8.1.1 does not have an approved third party scaling organization as a commonly used Scaling services provider, Forest Service or parties under contract to Forest Service shall provide Scaling services at the approved alternate location. In such an event, the cost of waived third party Scaling listed in A.10 shall be charged to Integrated Resource Account.

If Forest Service and Contractor agree in writing that another party under contract to Forest Service will perform Scaling, the contract will be modified to include K-G.8.1.6 and Integrated Resource Account will be charged for such Scaling.

K-G.8.4.9 - PRODUCT ACCOUNTABILITY (02/2005)

Unscaled products from Included Timber shall not be hauled or presented for scaling on Sundays, Holidays, or after normal scaling hours at the designated scaling location without the written approval of the Contracting Officer.

K-G.8.5.2 - SCALING LOST SAMPLE WEIGHT LOADS (02/2005)

If Scaling is being done by sampling loads of logs, Contractor shall present such sample loads for Scaling by Forest Service. If loads of logs selected to be sample Scaled are placed in the decks before they are Scaled, they shall be considered as lost sample loads. It will be difficult, if not impossible to determine the volume, weight, and species contained in such loads for payment purposes. Therefore, lost sample loads shall be assigned a volume and species composition equal to that of the highest value load Scaled during the sampling period as determined by Forest Service. If sample load is weighed but not Scaled, the weight shall be used as recorded. Otherwise the load will be assigned a weight equal to that of the highest weight load Scaled during the sampling period as determined by Forest Service.

If no sample loads were Scaled during the period, the Scale data for the high-value load shall be taken from the most current preceding sampling period with Scale. Sample loads lost as a result of Forest Service actions shall be treated as non-sample loads.

K-G.9# - STEWARDSHIP PROJECTS (09/2004)

Performance of stewardship projects shall be in accordance with the following specifications.

Stewardship Projects

WO-K-G.9#

K-G.9# – STEWARDSHIP PROJECTS. (9/04) Performance of stewardship projects shall be in accordance with the following specifications.

Project Number 1 – Grapple/hand piling. Across entire project area, cut all biomass trees 3.0 to 11.9 inches DBH with no visible green needles and all non-merchantable trees greater than 12 inches DBH with no visible green needles. Grapple pile using a tracked excavator, loader, or mini-excavator, or hand pile all downed material including biomass trees, non-merchantable trees, breakage, and logging slash.

In cabin tracts, identified on Contract Area Map, logging slash is considered to be larger than 1 inch diameter outside bark and 3 foot long resulting from Contractor's Operations. Outside the cabin tracts logging slash is considered to be larger than 3 inch diameter outside bark and 4 foot long resulting from Contractor's Operations.

Do not pile inside Control Areas flagged on the ground. On slopes greater than 35% lop and scatter to a 12 inch depth instead of piling. Logging Slash shall be scattered into openings away from and without unnecessary damage to residual trees. All scattered logs shall be limbed, placed away from trees and positioned so they will not roll.

Piles shall be placed a minimum of 50 feet away from perennial and intermittent streams, 25 feet from ephemeral streams and meadows, and outside of areas that may receive runoff from roads. Piles shall also be placed a minimum of 50 feet away from any improvements (not including roads).

All piles shall be reasonably compact and free of soil to facilitate burning and shall be constructed of such size and at such distance from trees so that burning shall not result in unnecessary damage to residual timber. Material shall be bucked into lengths not exceeding 12 feet prior to piling. Piles shall be located a distance of at least twice their height in feet from the outer edge of any woody vegetation, live or dead, and no greater than 16 feet wide and 12 feet in height. Piles shall be no less than 4 feet in height. Material extending 3 feet or more outside the edge of a pile shall be trimmed. An eight foot fuelbreak shall be cleared of all but fine material around each grapple pile and an 18 inch wide fireline shall be cleared to mineral soil around the outer ring of the fuelbreak. For hand piles, Contractor shall construct a fireline cleared to mineral soil and at least 3 feet wide around each pile. In areas where there is a potential for burning material to roll, all firelines, shall be trenched on the downhill side of each pile to adequately prevent material from rolling crossing firelines. Trenches shall be constructed by hand unless otherwise agreed. All piles must be 50% covered by waterproof paper with some woody material on the corners to keep the paper from blowing off.

K-H.2# - SPECIFIED FIRE PRECAUTIONS (06/2012)

Contractor or a designated Contractor's Representative shall certify compliance with specific Contract and California Public Resources Code (CPRC) fire precautionary measures in H.1 Plans, K-H.2# and K-H.2.2#. Certification shall be provided prior to starting operations during Fire Precautionary Period and shall be updated as needed.

Listing of specific fire precautionary measures in the following subsections is not intended to relieve Contractor in any way from compliance with State fire laws covering fire prevention and suppression equipment applicable to Contractor's Operations.

Upon request of Forest Service, Purchaser shall permit and assist in periodic testing and inspection of required fire equipment.

The following definitions shall apply to H.2# and K-H.2.2#:

Active Landing: A location Contractor is skidding logs into, or performing other operations such as delimiting, log manufacturing, and chipping logs. Except for EV and E days, loading logs or stockpiled chips only on a cleared landing does not constitute an Active Landing.

Hot Saw: A harvesting system that employs a high-speed (>1100 rpm) rotating felling head (i.e., full rotation lateral tilt head).

Mechanical Operations: The process of felling, skidding, chipping, shredding, piling, log processing and/or yarding which requires the use of motorized power which includes, chainsaws, chippers, motorized carriages, masticators, stroke delimiters, skidders etc.

Specific equipment requirements and fire precautionary measures are shown in the following table and in K-H.2.2#:

Table A

K-H.2# - SPECIFIED FIRE PRECAUTIONS. (06/2012)

Contractor or a designated Contractor's Representative shall certify compliance with specific Contract and California Public Resources Code (CPRC) fire precautionary measures in H.1 Plans, K-H.2# and K-H.2.2#. Certification shall be provided prior to starting operations during Fire Precautionary Period and shall be updated as needed.

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Specific equipment requirements and fire precautionary measures are shown in the following table and in K-H.2.2#:

A. Fire Tools and Equipment Contractor shall meet applicable parts of Section 4428 of the CPRC.

Unless agreed otherwise, Fire tools kept at each Active Landing shall be sufficient to equip all employees in the felling, yarding, loading, chipping, and material processing operations associated with each landing. Fire equipment shall include two tractor headlights for each tractor dozer used in Contractor's Operations. Tractor headlights shall be attachable to each tractor and served by an adequate power source. Fire tools shall be kept in a sealed fire tool box adjacent to the Active Landing and readily accessible in event of fire.

Where cable yarding is used, Contractor shall provide a size 0 or larger shovel with an overall length of not less than 46 inches and a serviceable 5 gallon backpack pump filled with water or a fire extinguisher bearing a label showing at least a 4-A rating must be within 25 feet of each tail and corner block.

Trucks, tractors/skidlers, pickups and other similar mobile equipment shall be equipped with and carry at all times a size 0 or larger shovel with an overall length of not less than 46 inches and a 2-1/2 pound axe or larger with an overall length of not less than 28 inches.

All required fire tools shall be maintained in suitable and

serviceable condition for fire fighting purposes.

B. Fire Extinguishers

Contractor shall equip each internal combustion yarder, fuel truck, and loader with a (4-A:60-B:C) fire extinguisher for oil and grease fires.

Skidders and tractors shall be equipped with a minimum 5-BC fire extinguisher.

Fire extinguishers shall be mounted, readily accessible, properly maintained and fully charged.

Contractor shall equip all mechanized harvesting machines and log processors with hydraulic systems, powered by an internal combustion engine (e.g. masticator, chipper, feller/buncher, harvester, forwarder, Hot Saw, stroke delimeter, etc), with at least two 4-A:60-B:C fire extinguishers or an acceptable CAFS substitute identified in Section K.

C. Spark Arresters and Mufflers

Except for tractors and other equipment with exhaust-operated turbochargers, Contractor shall equip each operating tractor and any other internal combustion engine with an approved spark arrester. There shall be no exhaust bypass on any system.

Spark Arresters shall be a model tested and approved under Forest Service Standard 5100-1a as shown in the National Wildfire Coordinating Group Spark Arrester Guide, Volumes 1 and 2, and shall be properly mounted and maintained according to manufacturer's specifications.

Every motor vehicle subject to registration shall at all times be equipped with an adequate exhaust system meeting the requirements of the California Vehicle Code.

D. Power Saws

Each power saw shall be equipped with a spark arrester approved and maintained in effective working order as identified in the Spark Arrester Guide in Section C. above and according to applicable parts of CPRC Section 4442 or 4443. An Underwriters Laboratories (UL) approved fire extinguisher containing a minimum 14 ounces of fire retardant shall be kept with each operating saw.

A size 0 or larger shovel with an overall length of not less than 38 inches shall be kept with each gas can, but not more than 300 feet from each power saw when used off cleared landing areas.

E. Fire Supervisor & Fire Patrolperson

Contractor shall designate in the fire plan required by H.1 and furnish on Contract Area during operating hours a fire supervisor, named in writing and authorized to act on behalf of Contractor in fire prevention and suppression matters.

Unless agreed otherwise, Contractor shall furnish and designate in writing, a Fire Patrolperson each operating day when Project Activity Level C or higher is in effect. When on duty, the Fire Patrolperson is required to patrol the operation for the prevention and detection of fires, to take suppression action where necessary and to notify Forest Service as required under Sections I. Reporting Fires and L.

Communications. This Fire Patrol is required on foot, unless otherwise agreed.

By written agreement, one Fire Patrolperson may provide patrol on this and adjacent projects or sales. No Fire Patrolperson shall be required on Specified Road construction jobs except during clearing operations unless otherwise specified.

F. Seasonal Permits

Contractor shall obtain written permits from Forest Service before allowing welding, warming fires or burning, subject to K-H.2.2# - Emergency Precautions.

G. Clearing of Fuels

Contractor shall clear away, and keep clear, fuels and logging debris as follows:

Welding equipment and stationary log loaders, yarders and other equipment listed in California State Law:	10 feet slope radius
Tail or corner haulback blocks:	All running blocks on a cable yarding operation shall be located in the center of an area that is cleared to mineral soil at least 15 feet in diameter.
Lines near, between or above blocks:	Sufficient clearing to prevent line from rubbing on snags, down logs and other dead woody material.

H. Smoking

All smoking shall be confined within a car, truck, crew rig or other enclosed cab after 1:00 PM on Ev days and all hours on E days (K-H.2.2#). At other times, any smoking shall be done while sitting in an area at least 3 feet in diameter, cleared of flammable materials. Burning tobacco and matches shall be extinguished before they are properly disposed.

I. Reporting Fires

As soon as feasible, but no later than **15 minutes** after discovery, Contractor shall notify Forest Service of any fires on Contract Area or along roads used by Contractor.

J. Tank Truck

Contractor shall provide a water tank truck or trailer on or in proximity to Contract Area during Contractor's Operations hereunder during Fire Precautionary Period unless otherwise agreed.

Tank truck or trailer shall contain at least 300 gallons of water and comply with the following requirements:

- (1) Pump, which at sea level, can deliver 23 gallons per minute at 175 pounds per square inch measured at the pump outlet. Pumps shall be tested on Contract Area by Forest Service using a 5/16 inch orifice with a one inch in line test kit and shall meet or exceed the pressure values identified in

the following table for nearest temperature and elevation:

T e m p	Sea Level		1000 Feet		2000 Feet		3000 Feet		4000 Feet		5000 Feet		6000 Feet		7000 Feet		8000 Feet		9000 Feet		10000 Feet	
55	179	23	174	23	169	23	165	22	161	22	157	22	153	22	150	21	146	21	142	21	139	21
70	175	23	171	23	166	22	162	22	158	22	154	22	150	21	147	21	143	21	139	21	136	20
85	171	23	168	23	163	22	159	22	155	22	151	21	147	21	144	21	140	21	136	20	133	20
100	168	23	164	23	159	22	155	22	152	22	148	21	144	21	141	21	137	20	133	20	131	20
	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G
	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P	S	P
	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M	I	M

The pump outlet shall be equipped with 1-1/2 inch National Standard Fire Hose thread. A bypass or pressure relief valve shall be provided for other than centrifugal pumps.

(2) 300 feet of 3/4-inch inside diameter rubber-covered high-pressure hose mounted on live reel attached to pump with no segments longer than 50 feet, when measured to the extreme ends of the couplings. Hose shall have reusable compression wedge type 1-inch brass or lightweight couplings (aluminum or plastic). One end of hose shall be equipped with a coupling female section and the other end with a coupling male section. The hose shall, with the nozzle closed, be capable of withstanding 200 PSI pump pressure without leaking, distortions, slipping of couplings, or other failures.

(3) A shut-off combination nozzle that meets the following minimum performance standards when measured at 100 P.S.I. at the nozzle:

	G.P.M.	Horizontal Range
Straight Stream	10	38 feet
Fog Spray	6 - 20	N/A

(4) Sufficient fuel to run pump at least 2 hours and necessary service accessories to facilitate efficient operation of the pump.

(5) When Contractor is using Hot Saws or Masticators an additional 250 feet of light weight hose, approved by Forest Service, shall be immediately available for use and be capable of connecting to the 300 feet of hose and appurturances in (2) and (3) above.

(6) This equipment and accessories shall be deliverable to a fire in the area of operations and is subject to the requirements for each specific activity level identified in K-H.2.2#.

K. Compressed Air Foam System (CAFS)

A fire suppression system where compressed air is added to water and a foaming agent. By agreement, Contractor may substitute a CAFS or functional equivalent in lieu of the tank

truck, trailer or fire extinguishers, provided it meets or exceeds the following specifications and requirements:

1. Variable foam expansion ratio - 10:1 to 20:1.
2. Units shall be kept fully charged with air; water and foam concentrate as recommended by the manufacturer and have the appropriate tools to service the system.
3. The unit shall contain enough energy to empty tank and clear hose prior to exhausting propellant.
4. The unit shall be capable of being completely recharged within 10 minutes.
5. When used on cable yarding landings, the unit shall be outfitted for immediate attachment to carriage and transported without damage to the unit.

Fire extinguishers required for Hot Saws, Masticators and similar equipment identified in Section B. above may be substituted with a 3 gallon CAFS.

Tank truck, trailer or equivalent may be substituted with a 30 Gallon CAFS with at least 550 feet of one inch hose and an adjustable nozzle with enough water, air and foam concentrate for at least one recharge.

This equipment and accessories shall also be deliverable to a fire in the area of operations and subject to the requirements for each specific activity level identified in K-H.2.2#.

L. Communications Contractor shall furnish a serviceable communications system such as a telephone, radio-telephone, radio system or satellite phone connecting each operating side within the Contract Area with Contractor's headquarters, and capable of notifying Forest Service within **15 minutes** of discovery of any fires on the Contract Area or along Contractor's haul route. When such headquarters is at a location which makes communication to it clearly impractical, Forest Service may agree to a reasonable alternative notification method.

A Citizen's Band (CB) radio is not acceptable communications.

M. Cable Yarding Tank Unit When all or part of Included Timber will be harvested by a long span (over 1,500 feet) cable yarding operation, Contractor shall provide at each active cable yarding landing a tank truck, trailer or acceptable CAFS substitute which can be lifted and transported by the carriage.

The unit shall meet the same requirements as specified for the tank truck, trailer or approved CAFS substitute.

N. Helicopter Yarding Fire Precautions Contractor shall provide and maintain fire equipment as follows:

1. The fire tool box required under this provision shall be equipped for attachment to the helicopter long line so that it may be hauled to needed locations. Such attachment device shall not interfere with access to fire tools. Unless agreed otherwise, the fire tool box shall be located at the Active Landing ready for immediate dispatch.
2. An external helibucket readily attachable to the

helicopter, with a capacity of at least 500 gallons, and having a remote control door mechanism adequate for rapid dropping of water. The helibucket shall be located at the helicopter service landing and shall be filled with water ready for immediate dispatch unless otherwise agreed.

3. All aircraft used in conjunction with Contractor's Operations shall be equipped with an operable radio system capable of meeting Region Five avionics requirements.
4. For protection of fuel servicing operations, fire extinguishers which have the following ratings based on the open hose discharge capacity, i.e., "broken hose," of the aircraft fueling system shall be readily available:
 - a. Where said capacity does not exceed 200 gallons per minute, at least one approved extinguisher having a minimum rating of 20-B;
 - b. Where said capacity is in excess of 200 gallons per minute, but not over 350 gallons per minute, one approved extinguisher having a minimum rating of 80-B;
 - c. Where said capacity is in excess of 350 gallons per minute, two approved extinguishers, each having a minimum rating of 80-B.
5. By agreement, a suitable CAFS may also be used in lieu of the above extinguishers.
6. Extinguishers of over 50 pounds gross weight shall be of wheeled type or be mounted on carts to provide mobility and ease of handling.

K-H.2.2# - EMERGENCY PRECAUTIONS (06/2012)

Contractor's Operations shall conform to the limitations or requirements in the Project Activity Level (PAL) table below. Unless otherwise agreed in writing, Project Activity Levels applicable to this project shall be the predicted levels for the Fire Danger Rating Area(s), or fire weather station(s) stated in the Contract Area Map legend.

Forest Service, in its sole discretion, may change the predicted activity level if the current fire suppression situation, weather and vegetation conditions warrant an adjustment. If practicable, Forest Service will determine the following day's activity level by 6:00 PM. Contractor shall obtain the predicted Project Activity Level from the appropriate Ranger District Office before starting work each day. Forest Service may change the Project Activity Level Table to other values upon revision of the National Fire Danger Rating System. When Contractor is notified, the revised Project Activity Levels will supersede the levels in the Project Activity Level Table below.

PROJECT ACTIVITY LEVEL (PAL) - K-H.2.2# - EMERGENCY PRECAUTIONS

K-H.2.2# - EMERGENCY PRECAUTIONS. (06/2012) Contractor's Operations shall conform to the limitations or requirements in the Project Activity Level (PAL) table below. Unless otherwise agreed in writing, Project Activity Levels applicable to this project shall be the predicted levels for the Fire Danger Rating Area(s), or fire weather station(s) stated in the Contract Area Map legend.

Forest Service, in its sole discretion, may change the predicted activity level if the current fire suppression situation, weather and vegetation conditions warrant an adjustment. If practicable, Forest Service will determine the following day's activity level by 6:00 PM. Contractor shall obtain the predicted Project Activity Level from the appropriate Ranger District Office before starting work each day.

Forest Service may change the Project Activity Level Table to other values upon revision of the National Fire Danger Rating System. When Contractor is notified, the revised Project Activity Levels will supersede the levels in the Project Activity Level Table below.

PROJECT ACTIVITY LEVEL (PAL) - K-H.2.2# - EMERGENCY PRECAUTIONS

PROJECT ACTIVITY LEVEL TABLE

Level	Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.
A	Minimum required by K-H.2.2#.
B	1. Tank truck, trailer, or approved CAFS substitute shall be on or adjacent to the Active Landing.
C	1. When Hot Saws or Masticators are operating, a tank truck, trailer or approved CAFS substitute shall be within $\frac{1}{4}$ mile of these operations. Effective communications shall exist between the operator and the Active Landing. 2. Immediately after Mechanical Operations cease, Fire Patrol is required for two hours.
D	1. Immediately after Hot Saw or Masticator operations cease, Fire patrol is required for three hours. 2. No Dead Tree felling after 1:00 PM, except recently dead. 3. No Welding or cutting of metal after 1:00 PM, except by special permit.
Ev	1. The following activities may operate all day: <ul style="list-style-type: none"> a) Loading and hauling logs decked at approved landings. b) Loading and hauling chips stockpiled at approved landings. c) Servicing equipment at approved sites. d) Dust abatement, road maintenance (Chainsaw use prohibited), culvert installation within cleared area, chip sealing, paving, earth moving or rock aggregate stock pile loading and installation (does not include pit or quarry development). e) Chainsaw and log processing operations associated with loading logs or other forest products at approved landings. 2. Hot Saws or Masticators may operate until 1:00 PM; provided that: <ul style="list-style-type: none"> a) A tractor or other equipment with a blade capable of constructing fireline is on or adjacent to the active landing or within $\frac{1}{4}$ mile of the operating equipment. This piece of equipment shall have effective communication with the Hot Saw or Masticator. b) Any additional restrictions specified by the Forest.

	<p>3. All other conventional Mechanical Operations are permitted until 1:00 PM.</p> <p>4. Some operations may be permitted after 1:00 PM, on a case-by-case basis, under the terms of a PAL Ev Variance Agreement. Activities for which a Variance may be issued are:</p> <ul style="list-style-type: none"> • Rubber Tire Skidding • Chipping on Landings • Helicopter Yarding • Fire Salvage <p>When approved by a Line Officer, a Variance Agreement can be implemented when the criteria specified in the agreement are met and mitigation measures are in place. This approval is good for ten (10) days unless cancelled sooner or extended by the Contracting Officer for an additional ten (10) days. Variance approval can be withdrawn at the sole discretion of Forest Service. Variance approval is contingent on the 7-day fire weather forecast, fuel conditions, site characteristics, current fire situation, state of Contractor's equipment for prevention and suppression readiness, type of operation and social and community considerations etc. (See attached Project Activity Level Variance Agreement).</p>
E	<p>The following activities may operate all day:</p> <ol style="list-style-type: none"> 1. Loading and hauling logs decked at approved landings. 2. Loading and hauling chips stockpiled at approved landings. 3. Servicing Equipment at approved sites. 4. Dust abatement, road maintenance (chainsaw use prohibited) or loading stock piles and rock aggregate installation (does not include pit or quarry development). 5. Chainsaw operation associated with loading at approved landings. <p>All other activities are prohibited.</p>

SPECIFICATIONS PURSUANT TO K-H.2.2# - EMERGENCY PRECAUTIONS. (10/2010)

Region 5 Project Activity Level (PAL) Ev Variance Application/Agreement

Project Name: _____
 Contract Number: _____
 Purchaser/Contractor Name: _____
 Request #__, for period: _____
 Units/Subdivisions Affected: _____

Location of operation:	
Slope	
Aspect	
Elevation	
Fuels on site	
Fuels in surrounding area	
7 Day PAL Outlook	
Short range predictions (Red Flags)	
<i>Fuel Moistures</i>	
Response time of suppression resources	
Potential for ignition	
RAWS location	
Current Fire Situation:	
Draw down information	
National Readiness Level	
Contractual considerations:	
Normal Operating Season	
Frequency of recent contract fires in area	
Type of operation	
Purchaser/Contractors past/current performance & equipment readiness	
Other site specific mitigation or precaution (i.e. Purchaser/Contractors proposals)	
Social & Community Considerations:	
Proximity of high value resources	
Sensitivity of location	
Remarks:	

Ev Proposed Actions

Rubber Tired Skidding

Chipping on Landings

Helicopter Yarding

Fire Salvage

Description of Mitigation Measures

Fire Management Officer Concurrence

Date

Line Officer Approval

Date

I have considered the above request and determined the specified mitigation measures or actions must be implemented to continue operations in Project Activity Level Ev. Unless extended, the approval remains in effect for ten (10) calendar days unless cancelled sooner or extended by the Forest Service for an additional ten (10) days. At the sole discretion of the Forest Service, this variance can be modified and/or cancelled at no cost to the government.

Contracting Officer

Date

Purchaser/Contractor Rep.

Date

K-I.2.1 - CONTRACT TERM ADJUSTMENT (07/2016)

"Contract Term Adjustment" (CTA) means adjustment only as provided for in the three circumstances described in this subsection. Under these circumstances, the contract term shall be adjusted in writing to include additional calendar days in one or more normal operating seasons equal to the actual time lost, except as limited by paragraph (2) in this subsection.

To qualify for such adjustment, contractor shall give written notice of the lost time not later than 30 days after the end of the normal operating season in which time was lost and at least 10 days before termination date. Contracting officer shall make prompt written acknowledgment of such notice, indicating concurrence with the number of days in the notice or the number of days the Forest Service considers as qualifying for the adjustment. Lost parts of days shall be disregarded in computing time lost. The three circumstances qualifying for a CTA are:

(1) Contractor experiences delay in starting operations scheduled under G.3.1 or interruptions in active operations, either of which stops such operations for 10 or more consecutive days during a normal operating season due to causes beyond the contractor's control, including, but not limited to, acts of God, acts of the public enemy, acts of the Government, labor disputes, fires, insurrections, or floods. Operations subject to these causes include:

(i) Removal of the included timber from contract area through curtailment in felling and bucking, yarding, skidding, loading, hauling, or road construction; or

(ii) Performance of stewardship projects shown in A.4.3.

(2) Causes described in paragraph (1) substantially affect the disposition or processing of included timber during the normal operating season through their effects on primary timber processing facilities, with a resulting delay of 60 days or more in use of such facilities. In such event, the CTA shall not extend for more than 12 consecutive months.

(3) (i) Contracting officer requests the contractor, in writing, to delay or interrupt operations during the normal operating season for any purpose other than suspension under E.4 or J.3; or

(ii) Contractor suffers a delay or interruption of the contractor's operations described in paragraph (1)(i) or (ii) because of a fire emergency closure ordered by Forest Service (or another agency on its behalf), and the total of such lost time is 10 or more days during any normal operating season.

If the termination date is adjusted, as described in this subsection, and later extended under I.2.3, the appraisal for the extension shall be made as of the unadjusted termination date, but the date on which the new rates become effective, if higher than current contract rates immediately prior to the termination date, shall be the adjusted termination date.

K-I.2.1.2 - MARKET-RELATED CONTRACT TERM ADDITION (11/2008)

The term of this contract may be adjusted when a drastic reduction in wood product prices has occurred in accordance with 36 CFR 223.52. The Producer Price Index used to determine when a drastic reduction in price has occurred is stated in A.20. Contractor will be notified whenever the Chief determines that a drastic reduction in wood product prices has occurred. If the drastic reduction criteria specified in 36 CFR 223.52 are met for 2 consecutive calendar quarters, after contract award date, Contracting Officer will add 1 year to the contract term, upon Contractor's written request. For each additional consecutive quarter such a drastic reduction occurs, Contracting Officer will, upon written request, add an additional 3 months to the term during Normal Operating Season, except that no single 3-month addition shall extend the term of the contract by more than one year. Contracting Officer must receive Contractor's written request for a market-related contract term addition before the expiration of this contract.

No more than 3 years shall be added to a contract's term by market-related contract term addition unless the following conditions are met:

(i) The contract was awarded after December 31, 2006; and

(ii) A drastic reduction in wood product prices occurred in at least ten of twelve consecutive quarters during the contract term, but not including the quarter in which the contract was awarded.

For each qualifying quarter meeting the criteria in paragraphs (i) and (ii) of this provision, the Forest Service will, upon the Contractor's written request, add an additional 3 months during the normal operating season to the contract, except no single 3-month addition shall extend the term of a contract by more than 1 year.

In no event shall a revised contract term exceed 10 years as a result of market-related contract term addition.

Additional contract time may not be granted for those portions of the contract that have a required completion date or for those portions of the contract where Contracting Officer determines that the timber is in need of urgent removal or that timber deterioration or resource damage may result from delay.

K-I.6.4 - DEBARMENT AND SUSPENSION CERTIFICATION (03/2018)

Pursuant to 2 CFR 180 and 2 CFR 417, Contractor shall certify and obtain certifications from its Subcontractors regarding debarment, suspension, ineligibility, and voluntary exclusion, including additional Subcontractors obtained after award of this contract. 'Subcontractors' are participants in lower tier covered transactions.

Contractor may rely upon a certification of a prospective Subcontractor that it is not proposed for debarment under 48 CFR 9.4, debarred, suspended, ineligible, or voluntarily excluded from participating in covered transactions or contracts, unless Contractor knows that the certification is erroneous.

Contractor shall keep the certifications of its Subcontractors on file until contract Termination Date and any extensions thereof, and will provide a copy at the written request of Contracting Officer. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this Subsection. The knowledge and information of Contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

If Contractor knowingly enters into a contract transaction with a person who is proposed for debarment under 48 CFR 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in covered transactions or contracts, in addition to other remedies available to the Government, Forest Service may pursue available remedies, including suspension and/or debarment.

Contracting Officer shall provide a copy of Forms AD-1047, Certification Regarding Debarment, Suspension and Other Responsibility Matters-Primary Covered Transactions, and AD-1048, Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions to the Contractor.

Contractor shall complete form AD-1047 and provide to the Contracting Officer upon request.

Contractor shall require each Subcontractor to complete form AD-1048 and provide to the Contracting Officer upon request.

K-I.6.8# (Option 1) - USE OF TIMBER (09/2004)

(a) This contract is subject to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, et seq.).

(b) Except for NONE determined pursuant to public hearing to be surplus, unprocessed Included Timber shall not be exported from the United States nor used in direct or indirect substitution for unprocessed timber exported from private lands by Contractor or any person as defined in the Act (16 USC 620e).

(c) Timber in the following form will be considered unprocessed:

(i) Trees or portions of trees or other roundwood not processed to standards and specifications suitable for end product use;

(ii) Lumber, construction timbers, or cants intended for remanufacturing not meeting standards defined in the Act (16 USC 620e); and

(iii) Aspen or other pulpwood bolts exceeding 100 inches in length.

(d) Unless otherwise agreed in writing, unprocessed Included Timber shall be delivered to a domestic processing facility and shall not be mixed with logs intended for export.

(e) Prior to award, during the life of this contract, and for a period of 3 years from Termination Date, Contractor shall furnish to Forest Service, upon request, records showing the volume and geographic origin of unprocessed timber from private lands exported or sold for export by Contractor or affiliates.

(f) Prior to delivering unprocessed Included Timber to another party, Contractor shall require each buyer, exchangee, or recipient to execute an acceptable agreement that will:

(i) Identify the Federal origin of the timber;

(ii) Specify domestic processing for the timber involved;

(iii) Require the execution of such agreements between the parties to any subsequent transactions involving the timber;

(iv) Require that all hammer brands and/or yellow paint must remain on logs until they are either legally exported or domestically processed, whichever is applicable; and

(v) Otherwise comply with the requirements of the Act (16 USC 620d).

(g) No later than 10 days following the execution of any such agreement between Contractor and another party, Contractor shall furnish to Forest Service a copy of each such agreement. Contractor shall retain, for 3 years from Termination Date, the records of all sales, exchanges, or dispositions of all Included Timber.

(h) Upon request, all records dealing with origin and disposition of Included Timber shall be made available to Contracting Officer.

(i) For breach of this Section, Forest Service may terminate this contract and take such other action as may be provided by statute or regulation, including the imposition of penalties. When terminated by Forest Service under this Section, Forest Service will not be liable for any Claim submitted by Contractor relating to the termination.