

File Code: 2430

Date: July 22, 2020

Dear Prospective Bidder:

On **August 20, 2020**, at 02:00 PM, sealed bids will be opened in the Lassen National Forest Supervisor’s Office, 2550 Riverside Drive, Susanville, CA for the **Drought MP Thin sale**. This sale is located in T29N R3E Sections 11, 14, 15, 22 & 23; T29N R4E Sections 6 & 7 Mount Diablo Meridian (MDM). Timber Sale Contract 2400-6 will be used. The termination date for this sale is March 31, 2024.

There are 3.76 miles (6.05 kilometers) of specified road reconstruction and 0.37 miles (0.60 kilometers) of specified road construction. A specified road construction cost of \$37,748.05 has been allowed in the appraisal for this work.

Measurement of the estimated quantities will be made after felling. The total estimated quantity on this sale is 20,083 Ton. The Forest Service encourages potential bidders to make their own inspection and estimate prior to bid submission. The Forest Service makes no representation, warranty, or guarantee of the accuracy of the following quantity estimates:

Estimated Quantities and Minimum Acceptable Rates per Unit of Measure							Required Deposits	
Species	Product	Unit of Measure	Estimated Quantities	Average DBH	Minimum Acceptable Bid Rates	Base Rates	Slash Disposal	Surface Replacement
Combined Softwood	Sawtimber	Ton	16,531.00	16.3	\$12.94	\$2.34	\$0.16	\$1.03
Combined Softwood	Grn Bio Cv	Ton	3,552.00	5.8	\$12.94	\$2.34	\$0.16	\$1.03
Total		Ton	20,083.00				\$3,213.28	\$20,685.49

The minimum acceptable bid for advertised timber is \$259,874.02 for the biddable species.

There is a \$26,000.00 bid guarantee required on this sale.

If you wish for further information on this sale, the prospectus, and bid form, please write or call the Almanor Ranger District Office, 900 East Highway 36, PO Box 767, Chester, CA 96020; Phone (530) 258-2141 or the Lassen National Forest Supervisor's Office, 2550 Riverside Drive, Susanville, CA 96130; Phone (530) 257-2151. Please see the General section of the prospectus for information on submitting bids during Covid-19. Timber Sale Contract and Bid information may also be found at the following web address:
www.fs.usda.gov/goto/lassen/timber-sales.

For specific sale questions, contact Almanor Ranger District, Heidi Van Gieson, at (530) 258-5181.

Sincerely,



Russell Nickerson
District Ranger



TIMBER SALE PROSPECTUS

Sale Name :	DROUGHT MP THIN	Type of Sale :	Scaled
National Forest :	Lassen	Ranger District :	Almanor
Bidding Method :	Sealed Bid	Bid Guarantee :	\$26,000.00

Location of Bid Opening : Lassen National Forest Supervisors Office, 2550 Riverside Drive, Susanville, CA 96130

Date : 08/20/2020

Time : 02:00 PM

1. INTRODUCTION. This prospectus furnishes prospective bidders with information not contained in the published advertisement and is designed to enable bidders to decide whether or not to further investigate the sale. The prospectus is not a legally binding document, but is offered to provide general information about a sale. The contract does not include descriptions, estimates, and other data in this prospectus, unless otherwise stated. In the event that the prospectus contains an error or contradicts the sample contract, the contract governs. Bidders are urged to examine the timber sale and make their own estimates. Timber sale Contract 2400-6 will be used. Inspect the sale area and the sample contract before submitting a bid. Obtain the appraisal, other information on the timber, and conditions of sale and bidding at Forest Service offices listed above and in the named attached advertisement.

2. BIDDING. This is a Sealed Bid sale. Bidders must submit sealed bids on prepared forms they can obtain from Forest Service offices listed above and in the attached advertisement. The forms include instructions for bidding and submission of the required certifications. A bid guarantee must be included with the bid in the form of cash, a bid bond on form FS-6500-13 (4/82) or later, certification of annual bid bond allocation on form FS-6500-13a (4/82) or later, an irrevocable letter of credit, a certified check, bank draft, cashiers check, official bank check, or bank or postal money order payable to the Forest Service, USDA in the amount specified above and in the bid form. The bid guarantee shall be returned to each bidder whose bid is not accepted.

Total Sale Value Bidding:

Prospective purchasers must submit bids in terms of the minimum acceptable total sale value. The bid form states minimum acceptable bid rates and estimated quantities of timber, together with the minimum acceptable total sale value. The advertised minimum acceptable total sale value is only for the biddable species, as listed on the bid form in the upper section of block 14. It does not include any non-biddable, fixed rate species listed in the lower section of block 14 titled "Required Removal at Fixed Rate. Only the Fixed Rate Applies." The bidder should enter the offer on the bid form only in terms of the total sale value. The Forest Service shall establish bid rates by species in the contract by multiplying each species' minimum acceptable bid rate by the bid increase percentage. Such rates will be rounded to the nearest cent. The bid increase percentage is the bidder's total sale value bid rate divided by the minimum acceptable total sale value. The total amount for stumpage is the volume of each biddable species multiplied by its bid rate, plus the volume of each fixed rate species multiplied by its fixed rate.

3. LOCATION AND DESCRIPTION OF TIMBER. Refer to the sample contract and sale area map attached to the sample contract for legal location of sale area, location of subdivisions, location of cutting units, the acreage of sale area, and the cutting unit acreage.

THE FOLLOWING GENERAL LOCATION, ROUTES OF ACCESS, ACREAGES, AND OTHER SPECIAL LOCATION DATA DO NOT SUPERSEDE THE SALE AREA MAP OR SAMPLE CONTRACT.

The Drought MP Thin is located approximately 21 air miles West of Chester, CA. This is a completely marked multi product sale. Approximately 150 acres and 2,486 TON of biomass within this sale is located within the state identified Tier 1 and Tier 2 Hazardous Fuel zones. There are 188.55 acres of Thinning Units and 21.23 acres of Group Selections. This sale is divided into 2 subdivisions. Thinning Unit boundaries are designated with BLUE flagging and are marked with ORANGE paint. Three vertical stripes are painted on boundary trees with one stripe facing into the harvest unit and one on each side of tree following direction to the next boundary line tree

and two stump marks at ground level. Harvest unit numbers are painted at corners, road crossings, and periodically along the line. Boundaries are not painted along existing roads. Group Selections have been designated with BLUE flagging and PINK paint. Two horizontal bands encircle the bole of the boundary tree at or above Diameter Breast Height (DBH). All Thinning Units are Individual Tree Mark (ITM) and are designated for cutting only if marked with BLUE paint. Designation By Spacing C2.351# will be used to determine Green Biomass Cv products designated for removal, All Group Selections are Leave Tree Marked (LTM) and are designated for cutting unless marked with PINK paint. Reference C2.35# Designation of Timber in the Sample Timber Sale Contract for Requirements.

4. TIMBER QUANTITIES AND RATES. The quality, size, cut per acre, and product suitability of the timber are estimates based on detailed cruise information on file and available for inspection at the Forest Service offices listed above and in the advertisement. VOLUME QUANTITIES LISTED HEREIN ARE MADE AVAILABLE WITH THE UNDERSTANDING THAT VALUES SHOWN ARE FOREST SERVICE ESTIMATES AND ARE NOT GUARANTEED. For these reasons, bidders are urged to examine the timber sale area and make their own estimates.

Road Construction Costs. The advertised rate does not include the estimated cost of specified road construction. The estimated road construction cost has been included in the appraisal as a cost that the purchaser will incur. The purchaser will be responsible for the road construction cost and WILL NOT receive credit towards stumpage costs for this expense, i.e., THIS SALE DOES NOT INCLUDE PURCHASER CREDIT and bidders should consider the cost of road construction when developing their bids.

THE MINIMUM ACCEPTABLE BID RATE IS STATED IN THE ATTACHED BID FORM. THESE RATES ARE EFFECTIVE AT THE TIME OF ADVERTISEMENT.

**Estimated Quantities and Minimum Acceptable Rates
per Unit of Measure**

Species	Product	Unit of Measure	Estimated Quantities	Average DBH	Minimum Acceptable Bid Rates	Base Rates	Required Deposits	
							Slash Disposal	Road Maintenance
Combined Softwood	Sawtimber	Ton	16,531.00	N/A	\$12.94	\$2.34	\$0.16	\$0.00
Combined Softwood	Grn Bio Cv	Ton	3,552.00	N/A	\$12.94	\$2.34	\$0.16	\$0.00
	TOTAL	Ton	20,083.00				\$3,213.28	\$0.00

The minimum acceptable total sale value bid for advertised timber is \$259,874.02. It does not include any non-biddable, fixed rate species listed on the bid form in the lower section of block 14 titled "Required Removal at Fixed Rate. Only the Fixed Rate Applies." The total amount for stumpage is the volume of each biddable species multiplied by its bid rate, plus the volume of each fixed rate species multiplied by its fixed rate.

The bid rate for species and unit of measure are assigned under procedures for average bid premium bidding, as noted in this prospectus. This rate has been established by appraisal, with a cost allowance for the roads specified by the contract, if any. Required deposits for slash disposal and road maintenance are in addition to the advertised rates for timber. Purchasers are responsible for the cost of specified road construction. Specified road construction costs ARE NOT available to use as credit for the payment of stumpage, i.e., THIS SALE DOES NOT INCLUDE PURCHASER CREDIT.

Estimated Knutson-Vandenberg deposit for sale area improvement work in a total amount of \$45,483.00 is included in total timber value.

5. PERIOD OF CONTRACT. The normal operating season covers the period between 06/01 and 10/31. Contract termination date is 03/31/2024. Extensions of this contract may be granted only when the purchaser has met specified conditions.

If an appeal or lawsuit is filed challenging the decision to award this contract or upon determination by the Regional Forester that conditions existing on this timber sale are the same as, or nearly the same as, conditions existing on other timber sale(s) in appeal or litigation, Contracting Officer may delay award or reject all bids. If delay in award is for 30 days or more during Normal Operating Season after bid opening, Contracting Officer shall, upon award, adjust the contract term to include additional calendar days in one or more Normal Operating Seasons equal to the time award is delayed during Normal Operating Season.

The purchaser must submit a Plan of Operations to the Contracting Officer for approval before operations begin or within 60 days of sale award, whichever is earlier. The plan must show how the purchaser plans to complete the contract by the termination date. In addition to the Plan of Operations, the purchaser must submit an annual Operating Schedule before commencing operations. This schedule will include the anticipated major activities and needs for harvest. This annual Operating Schedule does not require concurrence of the Forest Service.

6. PAYMENT. Payment for timber and any required deposits for slash disposal or road maintenance are required in advance of cutting. The Purchaser may transfer purchaser credit into the contract, or provide an acceptable payment guarantee prior to cutting. Payment for required deposits must be a cash payment. The purchaser shall make advance deposits in accordance with provision B(T)4.212 - Advance Deposits.

The high bidder whose bid is accepted shall, at the time the contract is signed and returned by the bidder, make a downpayment pursuant to Title 36, Section 223.49, of the Code of Federal Regulations. The Contracting Officer will notify the high bidder of the amount necessary to make this payment. In no case shall the downpayment be less than 10 percent of the total advertised value plus 20 percent of the bid premium. After receipt of the downpayment and a satisfactory performance bond and upon execution of the timber sale contract, the Forest Service will return the bid guarantee. A cash bid guarantee may be applied to the downpayment at the request of the purchaser. The purchaser cannot apply the amount deposited as a downpayment to cover other obligations due on the sale until conditions stated in the contract for release of downpayment have been met. Refer to the sample contract for the specific conditions.

By 01/15/2023 , the purchaser shall have paid for, or in lieu thereof, deposited cash in the amount of: (1) 50 percent of the total estimated bid premium, or (2) 35 percent of the total estimated sale value at bid date, exclusive of required deposits, rounded up to the next \$100.

By 08/16/2023 , the purchaser shall have paid for, or in lieu thereof, deposited cash in the amount of 75 percent of the total estimated sale value at bid date, exclusive of required deposits, rounded up to the next \$100.

7. PERFORMANCE BOND. A performance bond is required. The penal sum of the bond will be 10 percent of the total bid value of the sale, rounded up to the nearest \$100 when the total bid value is \$10,000 or less; and rounded up to the nearest \$1,000 when the total bid value exceeds \$10,000 or \$26,000.00 whichever is greater. If an irrevocable letter of credit is used to secure the performance bond, the termination of the letter of credit must be at least 6 months past the contract termination date.

8. SPECIFIED ROADS. The Forest Service has determined that the following National Forest System roads shall be constructed or paid for, in whole or in part, by the timber sale purchaser. Sufficient information to permit a prospective bidder to calculate the likely cost to be incurred for road construction is available at the Forest Supervisor's Office. See the sample contract for verification of specific details and information concerning construction specifications. CONSTRUCTION ESTIMATES AND INFORMATION CONTAINED HEREIN, TOGETHER WITH RELATED SPECIFICATIONS, ARE NOT GUARANTEED. The following roads are those that Forest Service considers necessary to remove the timber from this sale.

Road Number	Road Name	Traffic Service	Approximate Miles/Kilometers	Estimated Road Construction Cost	Type of Work *
31N17I	E Hampton Butte 1	D	0.37 / 0.6	\$9,047.65	C
31N17W	E Hampton Butte	D	0.19 / 0.31	\$4,685.80	R
31N17H	Hampton Butte	D	0.27 / 0.43	\$2,497.05	R
31N17	Mineral Viola Hwy	B	3.3 / 5.31	\$16,915.55	R

* C = Construction

R = Reconstruction

The required specified road completion date for all roads is 10/31/2021. If provision C(T)5.13# - Road Completion Date has different dates for projects, this is the final road completion date.

Total estimated construction cost allowed in appraisal is \$37,748.05

The estimated road construction cost includes the cost of road reconstruction engineering services, pursuant to Public Law 88-657, 78 Stat. 1089, 16 U.S.C. 532-537. Refer to provision C(T)5.213# - Deposit for Reconstruction Engineering Services in the sample contract for additional information.

Purchaser shall make a cash deposit in the amount \$4,602.00 for engineering services completed by Forest Service in preparation of this contract. The Forest Service shall complete reconstruction related engineering services on the following schedule:

Road or Facility No.	Termini From -To (MP or Sta.)	Engineering Services Completion Date
31N17	0 - 3.3	07/01/2020
31N17H	0 - .27	07/01/2020
31N17I	0 - .37	07/01/2020
31N17W	0 - .19	07/01/2020

9. ROAD MAINTENANCE. Purchaser shall perform or pay for road maintenance work, commensurate with purchaser's use, on roads controlled by Forest Service, and used by purchaser in connection with this sale. Road maintenance requirements are based on the predicted haul route. Any change in the purchaser's actual haul route may necessitate a change in the roads to be maintained and/or in the amount of required deposit for road maintenance. Required deposits for road maintenance are listed in Section 4 and in the sample contract. Maintenance specifications are in the sample contract.

10. INAPPLICABLE STANDARD PROVISIONS. See sample contract.

11. SPECIAL PROVISIONS. See sample contract.

12. SET-ASIDE SALES. Not Applicable.

13. LOG EXPORT AND SUBSTITUTION RESTRICTIONS. The contract requires domestic processing of included timber except for species declared to be surplus, and prohibits the use of such included timber in substitution for unprocessed private timber exported. The bidder, by signing the bid for advertised timber, certifies compliance with the applicable prohibitions against export and substitution prescribed in the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 U.S.C. 620, et seq.) with each bid.

14. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCE REVIEW. If the total bid value plus required deposits for this contract exceeds \$10 million, before award, the Forest Service shall request an equal employment opportunity compliance review of the high bidder to determine compliance with the provisions of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967 and Executive Order No. 12086 of October 5, 1978.

15. AWARD. The Contracting Officer is required to make a determination of bidder responsibility as stated in Title 36, Section 223.101, of the Code of Federal Regulations.

To determine a purchaser to be responsible, a Contracting Officer must find that:

- a. The purchaser has adequate financial resources to perform the contract or the ability to obtain them;
- b. The purchaser is able to perform the contract within the contract term taking into consideration all existing contracts and Governmental business commitments;
- c. The purchaser has a satisfactory performance record on timber sale contracts. A prospective purchaser that is or recently has been seriously deficient in contract performance shall be presumed not to be responsible, unless the Contracting Officer determines that the circumstances were beyond the purchaser's control and were not created through improper actions by the purchaser or affiliate, or that the purchaser has taken appropriate corrective action. Past failure to apply sufficient tenacity

and perseverance to perform acceptably under a contract is strong evidence that a purchaser is not a responsible contractor. The Contracting Officer shall consider the number of contracts involved and extent of deficiency of each in making this evaluation;

d. The purchaser has a satisfactory record of integrity and business ethics;

e. The purchaser has or is able to obtain equipment and supplies suitable for logging the timber and for meeting the resource protection provisions of the contract;

f. The purchaser is otherwise qualified and eligible to receive an award under applicable laws and regulations.

Bidders, by signing the bid form, certify that, to the best of bidder's knowledge the bidder will meet the requirements in 36 CFR 223.101, determination of purchaser responsibility, and, if awarded this contract, that bidder will complete the timber sale contract and any modifications thereof in accordance with its terms including requirements to purchase, cut, and remove included timber.

16. FALSE STATEMENTS ACT. Bidders, by signing the bid form, certify that they are aware that bidder is subject to the penalties prescribed in 18 U.S.C. 1001, Chapter 47, Fraud and False Statements (P.L. 104-45). The Act states "whoever, in any matter within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be fined under this title or imprisoned not more than 5 years, or both."

17. DAMAGES. This contract shall be terminated for breach pursuant to paragraph 16, 19, and/or 21 of the bid form and the terms of the sample contract if: 1) bidder fails to execute a timber sale contract, furnish a downpayment, or furnish a satisfactory performance bond within 30 days of the award letter's date; or 2) bidder is found to have violated the False Statements Act in making any statement or certification on the bid form including not meeting purchaser responsibility requirements, and bidder has made a false statement. The bid guarantee shall be retained, in whole or in part, by the Forest Service to satisfy any damages that may be assessed.

18. SUSPENSION AND DEBARMENT CERTIFICATION. Non-procurement debarments and suspensions are governed by the Government-wide common rules (7 CFR 3017).

These rules require each timber sale purchaser, to submit a certification for itself, its principals, and its affiliates when bidding on sales. The bidder must designate its status regarding debarment, suspension, and other matters as specified on the bid form. The bidder, by signing the bid form, certifies this status. An explanation for not submitting a certification may be submitted. The Contracting Officer will determine whether the explanation provides sufficient reason for permitting participation in the bidding. Also, as a timber sale purchaser enters into transactions with subcontractors, these subcontractors must certify their eligibility. The certification titled "Subcontractor Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion" must be provided to subcontractors, but completed certifications are not required to be submitted with bid forms. Purchaser must keep these subcontractor certification forms on file for review by the Forest Service, if requested.

The certification forms and instructions for subcontractor transactions are provided as an addendum to the bid form.

19. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LOGGING REGULATIONS. Conduct of operations on this timber sale is subject to inspection for compliance with the logging operations regulations at 29 CFR 1910.266 by OSHA. This standard is applicable to the entire logging industry wherever logging operations occur. Information is available to assist purchasers to ensure compliance with the logging operations regulations during conduct of this timber sale from the U.S. Department of Labor, Occupational Safety and Health Administration, OSHA, California Department of Industrial Relations, 1515 Clay Street, Suite 1901, Oakland, California 94612.

20. GENERAL. Corporations submitting an offer under this solicitation must include form AD-3030, Representations Regarding Felony Conviction and Tax Delinquent Status For Corporate Applicants. Copies of this form may be obtained from the Forest Service office shown on page 1 of this prospectus or electronically at:

<http://www.ocio.usda.gov/policy-directives-records-forms/forms-management/approved-computer-generated-forms>.

Due to COVID-19 there is the possibility that our offices will still be closed at the time bids are to be opened. As a result, we are encouraging all prospective bidders to mail in their bids. For a bid to be considered it must be received at the office and by the time

designated in the advertisement. Late bids received by mail will only be considered if they were sent by registered or certified mail not later than the 5th calendar day before the date specified for the receipt of bids or sent by U.S. Postal Service Express Mail Next Day Service - Post Office to Addressee not later than 5 p.m. at the place of mailing 2 working days prior to the date specified for receipt of bids. A bidder may also contact Theresa Fork, at 530-251-3013 to make arrangements to drop off a bid. To ensure that the bid doesn't get misplaced or misdirected, please note in the lower left corner of the envelope that it is a bid for Drought MP Thin Timber Sale, Bid Date August 20, 2020.

The date of the bid opening will be August 20, 2020. If offices are still closed the bid opening will be closed to the public or it will be conducted outside. Bid results will be published on the forest website shortly after the bid opening. In the event the offices are open to the public, the current COVID-19 guidelines will be adhered to and bids could be dropped off prior to the bid opening. In these uncertain times, it would be prudent to plan on having any proposed bids delivered by mail or to make arrangements to drop the bid off prior to bid opening.

This language replaces the first paragraph of Section 4. Timber Quantities and Rates of the Timber Sale Prospectus with the following:

4. TIMBER QUANTITIES AND RATES. The quality, size, cut per acre, and product suitability of the timber are estimates based on detailed cruise information and weight calculations on file and available for inspection at the Forest Service offices listed above and in the advertisement. Weight factors used are based on data collected in the region for green logs (or trees in the case of biomass). Weight data was not actually sampled on this specific timbersale. **WEIGHT QUANTITIES LISTED HEREIN ARE MADE AVAILABLE WITH THE UNDERSTANDING THAT VALUES SHOWN ARE FOREST SERVICE ESTIMATES AND ARE NOT GUARANTEED.** For these reasons, bidders are urged to examine the timber sale area and make their own estimates.

SBA SURETY BOND GUARANTEE PROGRAM: The Surety Bond Guarantee (SBG) Program regulations have been amended to allow SBA to guarantee bid and performance bonds for timber sale contracts. This change applies to contracts administered by the U.S. Forest Service.

PRE-OPERATIONS MEETING: The Purchaser or its representative shall have a pre-operations meeting with the Forest Service Representative before operations begin. This meeting is to provide each party an opportunity to discuss the details of the contract, billing procedures, logging plans, roads to be used for hauling, specified road work and other matters pertinent to the sale.

MECHANICAL HARVESTING: This sale is designed for mechanical harvesting with whole tree yarding. This sale was not planned to be logged with conventional logging equipment. Occasionally handfelling may be necessary (C6.41# - FELLING, BUCKING, AND LIMBING (08/2007) & C6.42# - GROUND BASED SKIDDING (08/2006).

SHARED HAUL ROUTES: There are shared haul routes with other active timber sale contracts in the vicinity of Drought MP Thin that may require coordination of road maintenance, traffic control devices, traffic signing and vehicle communications.

APPRAISAL ALLOWANCES: additional appraisal allowances were made for specified road reconstruction, Project Activity Level impacts, handfelling, erosion prevention and control work, move in/move out costs, treatment of stumps, and machine piling of slash.

THE FOLLOWING ARE INCLUDED IN THE CONTRACT, PURCHASERS NEED TO BE AWARE OF SPECIAL REQUIREMENTS THAT MAY AFFECT THE CONDITIONS OF THIS SALE.

This is a WEIGHT SCALE sale.

CLEANING OF EQUIPMENT: Required prior to entering the Sale area. See Sample Timber Sale Contract B6.35 Equipment Cleaning.

IMPERMEABLE LINERS: To control the potential damage to groundwater on the Lassen National Forest, impermeable liners will be required on all fuel storage facilities on timber sales, service contracts and Stewardship contracts. This protection can be accomplished by using a heavy duty plastic liner within a berm. The liner would need to withstand a fuel truck entering and leaving the storage area on a daily basis or other agreed to methods as long as the end result will not allow oil products to be absorbed into the soil. Reference decision letter from Forest Supervisor sent to current Timber Sale Purchasers and Contractors, dated November 15, 2010. Justification for the decision is based on B6.341 - Prevention of Oil Spills, 40 CFR 112 - General requirements for Spill Prevention, and Best Management Practice (BMP) 2-12 - Servicing and Refueling of Equipment.

THE FOLLOWING SPECIAL C PROVISIONS ARE INCLUDED IN THE CONTRACT

C2.351# - DESIGNATION BY SPACING (4/04) Designation by Spacing C2.351 will be used to determine Green Biomass Cv designated for removal within the thinning units. See Sample Timber Sale Contract for Requirements.

C6.241 SITE SPECIFIC SPECIAL WILDLIFE SURVEY MEASURES (06/2018). Notwithstanding C6.315#, 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. See Sample Timber Sale Contract for Requirements.

C6.32# - PROTECTION OF RESERVE TREES (04/2004). See Sample Timber Sale Contract for Requirements.

C6.315# - SALE OPERATIONS SCHEDULE (08/2006) LOP Spotted Owl March 1- August 15, LOP Northern Goshawk February 15- September 15. Forest Service Road 30N16 has Winter Recreation LOP from December 26- April 1. See Sample Timber Sale Contract for time restrictions.

TREATMENT OF STUMPS: Cellutreat or sporax or other approved pesticides for annosus root disease control is required to be applied on all live conifer stumps 14" or greater in diameter, which is required in all the timber sale units and all group selections. (C6.41# - Felling, Bucking, and Limbing (8/2007)

C6.41# - FELLING, BUCKING, AND LIMBING (8/2007). This sale requires directional felling away from Reserve Trees, Spring, Survey Monuments, and Wetlands.

C6.42# - GROUND BASED SKIDDING (8/2006). Requires specific logging equipment capabilities and methods to achieve product removal and protection of resources. See Sample Timber Sale Contract for Requirements.

C6.815 THIRD PARTY SCALING SERVICES (04/2004). This timber sale contract has been designed for weight scaling using Third Party Scaling organizations. Under this provision, the purchaser shall bear and administer the cost of scaling services. Weight scaled sales assume purchaser shall request an alternate weight scaling location. Alternate weight scaling location must have a currently State certified scale (B6.814) and the ability to transmit scale data to TPSO for processing (C6.815). If an Alternate Scaling request is not made purchaser shall bear all costs for arrangements to weigh loads at a Forest Service approved location on or near the sale area using portable scales or as otherwise agreed. Weight scaling shall be performed by an authorized Third Party Scaling Organization.

C7.22# - EMERGENCY PRECAUTIONS (6/12) The "Project Activity Level" (PAL), an industrial operation's fire precaution system, will be used on this sale The Manzanita Remote Area Weather Station will be used to calculate the Project Activity Levels. The "working operation period" is from June 1 to October 31. Average historical days in each of the Project Activity Levels for the operation month are shown at the end of the Prospectus in Table A.

ADDITIONAL REQUIREMENTS ARE INCLUDED IN THE CONTRACT. PURCHASERS NEED TO BE AWARE OF THE SPECIAL REQUIREMENTS THAT MAY AFFECT THE CONDITIONS OF THIS SALE.

SURFACE REPLACEMENT DEPOSITS: A surface replacement deposit of \$1.03 per TON is required (C5.35# - Road and Water Supply Use (5/2008).

MATERIAL SOURCES FOR SPECIFIED ROAD RECONSTRUCTION: The Forest Service has appraised for a local material source. The Forest Service has not obtained any commitment for price, quantity, or when, or if, such material would be available. Bidders must make their own determination of price, availability, quantity, and time material will be available.

ROAD MAINTENANCE T-SPECIFICATIONS: T-807 requires a slash treatment method to be specified, thus SCAT 18" for roadside vegetation has been included. Prospective bidders should refer to Road Maintenance T-Specifications, C5.31# and C6.7# provisions of the contract.

C5.125# - SHARE COST ROAD LIABILITY INSURANCE (08/2006). Purchaser is authorized to use cooperative roads constructed under provisions of W.M. Beaty & Associates, Inc., Cooperator, and Forest Service, and subsequent easements, supplements, and agreements thereto, available for inspection at the Forest Service Supervisor's Office, Susanville, California, and subject to the following liability insurance requirements. See Sample Timber Sale Contract for Requirements.

Drought MP Thin

TABLE A
(Timber Sale Prospectus)

PROJECT ACTIVITY LEVELS
C7.22# - EMERGENCY PRECAUTIONS (06/2012)

Station/SIG/Unit: MANZANITA		Years Analyzed: 1972 - 2005					
PROJECT ACTIVITY LEVELS →	A	B	C	D	Ev	E	Days
	Expected Total Days During "Working Operating Season" at each PAL Level						Analyzed
TOTAL # DAYS DURING "WORKING OPERATING SEASON"	24.2	35.4	71.4	17.4	4.6	0.1	7,081

HISTORICAL DAYS IN WORKING OPERATING SEASON

BID FOR ADVERTISED TIMBER (Reference FSM 2430, FSH 2409.18, Chapter 50)								
USDA - Forest Service								
1. Sale Number: 10172	2. Date and Time of Bid Opening: 08/20/2020 02:00 PM		3. Opened By:			4. In the Presence of:		
5. Sale Name: DROUGHT MP THIN						8. Type of Bid:		
6. National Forest: Lassen			7. Ranger District: Almanor			a. <input checked="" type="checkbox"/> Sealed Bid b. <input type="checkbox"/> Confirmation of Oral Bid		
9. To: (Title and address of Sale Officer receiving bids)				10. Name of Newspaper:		11. Date Published:		
Lassen National Forest Supervisors Office Sale Officer 2550 Riverside Drive Susanville, CA 96130				Intermountain News		07/22/2020		
				12. City: Burney		13. State: California		
INSTRUCTIONS TO SALE OFFICER: Verify that TIM has completed applicable blanks before sending to prospective Bidders. Attach copy of sale advertisement. Entries are required in blocks 1, 2, 5-7, 8a or b, 9-13, 14a, b, c, d, e, f, h, i, & j, 15a, 19, 20, 27; and instruction 13 in all sales. Strike out spaces for entries in one or more columns h, or i, if not applicable to the sale.								
*****In Response to the Notice of Sale published in the newspaper specified above, and subject to the conditions attached hereto, the following bid is submitted and shall constitute a Firm Offer.*****								
14. Bid Information:				Rates Per Unit of Measure				
Species (a)	Product (b)	Unit of Measure (c)	Estimated Quantity (d)	Base Rate (e)	Minimum Acceptable Bid Rate (f)	Total Sale Bid (g)	Additional Deposits for Slash Disposal (h)	Base Indices (i)
Combined Softwood	Sawtimber	Ton	16,531.00	\$2.34	\$12.94	//////////	\$0.16	N/A
Combined Softwood	Grn Bio Cv	Ton	3,552.00	\$2.34	\$12.94	//////////	\$0.16	N/A
Minimum Acceptable Total Sale Value, 14(j)						\$ 259,874.02		
Bidder's Total Sale Value Bid (Must be >=14j), 14(g)						\$		
* Total Value Bidding: Forest Service to determine proportionate rates for Species and Products.								
15. BID GUARANTEE:								
a. The minimum guarantee which must accompany this bid is \$26,000.00.								
b. The form of guarantee accompanying this bid is a(n) _____ in the amount of \$ _____ (See Instruction 6 for acceptable forms of payment.)								

16. BIDDER RESPONSIBILITY CERTIFICATION: Subject to the penalties prescribed in 18 USC 1001, Bidder certifies, by signing this bid form, that to the best of Bidder's knowledge that the following representations are accurate and complete:

- a. That the Bidder has not employed or retained any company or person (other than a full-time bona fide employee working solely for the Bidder) to solicit or secure a contract for this timber or forest product.
- b. That the Bidder has not paid or agreed to pay any company or person (other than a full-time bona fide employee working solely for the Bidder) any fee, commission, percentage or brokerage fee, contingent upon or resulting from the award of contract for this timber or forest product, and agrees to furnish information relating thereto as requested by the Contracting Officer.
- c. That the Bidder meets the requirements in 36 CFR 223.101 regarding determination of purchaser responsibility.
- d. That if awarded this contract that Bidder will complete the timber sale contract to its terms and any modifications thereof including requirements to purchase, cut, and remove the included timber or forest product by the termination date.

16a. BIDDER CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER

RESPONSIBILITY MATTERS: Subject to the penalties prescribed in 18 USC 1001, Bidder certifies, by signing this bid form, that to the best of Bidder's knowledge that the following representations are accurate and complete.

- a. That the Bidder and its principals are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from timber sales (covered transactions) by any Federal department or agency.
- b. That the Bidder and its principals have not within a 3-year period preceding this bid been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- c. That the Bidder and its principals are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph b of this certification.
- d. That the Bidder and its principals have not within a 3-year period preceding this bid had one or more public transactions (Federal, State, or local) terminated for breach or default of a timber or forest product contract.

Bidders that cannot certify this block, in whole or in part, shall submit an explanation with their bid (See Instruction 16.).

16b. BIDDER INFORMATION REQUIREMENTS: Subject to the penalties prescribed in 18 USC 1001, Bidder certifies, by signing this bid form, that to the best of Bidder's knowledge that the following information is accurate.

- a. That the Bidder [] has, [] has not participated in a previous contract subject to the provision of section 202 of Executive Order 11246 (Non-discrimination in Employment) of 9/24/65, as amended; and that the Bidder [] has, [] has not submitted required compliance reports under such previous contracts.
- b. That the Bidder together with its affiliates employs the following number of persons and is classified as:
[] 1-25 [] 26-500 [] Over 500 **and** a: [] Manufacturer [] Nonmanufacturer of sawtimber

17. CERTIFICATE OF INDEPENDENT PRICE DETERMINATION: Subject to the penalties prescribed in 18 USC 1001, Bidder certifies and represents, by signing this bid form, that the following representations are accurate and complete:

- a. By submission of this bid each Bidder also certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this sale:

- (1) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition as to any matter relating to such prices with any other Bidder or with any potential competitor;
- (2) The prices which have been quoted in this bid have not been knowingly disclosed by the Bidder and will not knowingly be disclosed by the Bidder prior to opening of bid, directly or indirectly to any other Bidder or to any potential competitor; and
- (3) No attempt has been made or will be made by the Bidder to induce any other person or firm to submit or not to submit a bid.

b. Each person signing this bid or proposal certifies that:

- (1) The Signer is the person in the Bidder's organization responsible within that organization for the decision as to the prices bid herein and that the Signer has not participated, and will not participate, in any action contrary to a(1) through a(3) above; or
- (2) The Signer is not the person in the Bidder's organization responsible within that organization for the decision as to prices bid herein but that the Signer has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to a(1) through a(3) above, and as their agent does hereby so certify; and that the Signer has not participated, and will not participate, in any action contrary to a(1) through a(3) above.

c. A bid will not be considered for award where any portion of a or b above has been deleted or modified. Where these provisions have been deleted or modified, the bid will not be considered for award unless Bidder furnishes with the bid a sworn statement which sets forth in detail the circumstances of the disclosure and the Chief, Forest Service, or the Chief's designee, determines that such disclosure was not made for the purpose of restricting competition.

18. ROAD CONSTRUCTION OPTION:

Not applicable.

19. CONTRACT, DOWNPAYMENT, AND BOND: The Bidder whose bid is accepted will, within 30 days of the award letter's date, or any written extension thereof by the Forest Service, execute a timber sale contract which shall be provided by the Forest Service and be based on the sample contract referenced in the prospectus. Simultaneously, Bidder shall submit a downpayment and furnish a satisfactory performance bond, in accordance with the provisions of such timber sale contract, in the penal sum as prescribed in the prospectus for this sale, and otherwise complete the process described on this form and pages attached hereto. Simple interest shall be assessed at then Current Value of Funds Rate for a late downpayment. Bidder agrees that its failure to comply with this paragraph shall result in a termination of this contract for breach under provisions of instruction 9 of the Instructions to Bidders portion of this form.

20. DOWNPAYMENT: Pursuant to 36 CFR 223.49, the Bidder to whom award is made must make a downpayment at the time the contract is signed by the Bidder and returned to the Forest Service in the amount of:

Ten percent of the advertised value, plus 20 percent of the total bid premium.

___ percent of the advertised value, plus ___ percent of the total bid premium, based on the Chief's determination that this amount is necessary to deter speculation.

NOTICE: The indicated downpayment amount shall be increased to 20 percent of the total advertised value and 40 percent of the total bid premium if the Contracting Officer determines that the Bidder meets the criteria for additional downpayment established by 36 CFR 223.49.

21. FIRM OFFER: Subject to the penalties prescribed in 18 USC 1001, the Bidder hereby agrees not to withdraw this bid after the bid opening. Signing this bid form binds the Bidder to accept award under the terms of the sample contract and this bid form if its bid is accepted within 90 days after bid opening. The period for acceptance may be extended by written notice from Bidder. If Bidder qualifies as a small business and elects road construction by the Forest Service, then the Bidder agrees that its offer shall remain open through the period stated in the prospectus although that period may exceed 90 days.

22. TERMS OF BIDDER'S OFFER: Bidder certifies and represents that the Bidder has read and understands each and every provision of this bid form (together with any attachments thereto) and the sample sale contract. The Bidder agrees that it assumes the responsibility to clarify any questions before signing this form. The Bidder agrees that the written provisions of this bid form (together with any attachments) and the sample sale contract constitute the entire agreement of the parties until a written contract is executed and neither the bid form (and any attachments) nor the sample contract can be orally modified. The Bidder expressly adopts the terms of this bid form and the sample contract as material parts of the Bidder's offer for the advertised timber or forest product.

23. DISCLAIMER OF ESTIMATES AND BIDDER'S WARRANTY OF INSPECTION: Before submitting this bid, the Bidder is advised and cautioned to inspect the sale area, review the requirements of the sample contract, and take other steps as may be reasonably necessary to ascertain the location, estimated volumes, construction estimates, and operating costs of the offered timber or forest product. Failure to do so will not relieve the Bidder from responsibility for completing the contract.

The Bidder warrants that this bid is submitted solely on the basis of its examination and inspection of the quality and quantity of the timber or forest product offered for sale and is based solely on its opinion of the value thereof and its costs of recovery, without any reliance on Forest Service estimates of timber or forest product quality, quantity or costs of recovery. Bidder further acknowledges that the Forest Service: (i) expressly disclaims any warranty of fitness of timber or forest product for any purpose; (ii) offers this timber or forest product as is without any warranty of quality (merchantability) or quantity and (iii) expressly disclaims any warranty as to the quantity or quality of timber or forest product sold except as may be expressly warranted in the sample contract.

The Bidder further holds the Forest Service harmless for any error, mistake, or negligence regarding estimates except as expressly warranted against in the sample contract.

24. CERTIFICATION OF COMPLIANCE WITH EXPORT AND SUBSTITUTION RESTRICTIONS: The Bidder certifies, by signing this bid form, that the Bidder is in compliance with applicable prohibitions against export and substitution prescribed in the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, *et seq.*). In Alaska, exports of logs, cordwood or primary products derived from included timber may not be transported from Alaska without Regional Forester approval (See instruction 15).

25. SMALL BUSINESS SET-ASIDE SALE:

Not applicable.

26. SPECIAL SALVAGE SALE TIMBER SALE PROGRAM SET-ASIDE SALE:

Not applicable.

27. CERTIFICATION OF NON-AFFILIATION:

Not applicable.

28. CERTIFICATION OF AFFILIATION: The Bidder certifies that a complete listing of Bidder's affiliates who are primarily engaged in the logging of forest products is included with this bid: (Add additional pages if needed; See Instructions 10 and 14):

Full Name of All Partners & Affiliates (Type or Print)	When requested by Contracting Officer in notice of tentative award, bidder agrees to furnish tax identification number of each partner and affiliate listed herein.

Before signing this bid, review the attached instructions to Bidders and fill in the applicable blanks in boxes 14g, 15b, 16b, 18, 28 and 29.

Name of Bidder: (Type or Print)	By: (Signature in ink)	
Business Name: (Type or Print)	Title: (Type or Print)	Date:

Public reporting burden for this collection is estimated to be between 20 and 50 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Under the Paperwork Reduction Act of 1995, an agency shall not conduct or sponsor, and no persons are required to respond to, a collection of information unless it displays a valid OMB control number. The valid OMB control number for this collection of information is 0596-0066.

Deposits will be returned to unsuccessful Bidders by certified mail unless deposits are returned personally.

Receipt for Returned Deposits:

Check Number _____ in the amount of \$ _____ dated _____ was returned to _____

Signature: _____ Date: _____

29. PERSONAL IDENTIFICATION INFORMATION:

Business Name, Address and Phone Number (Include Zip Code and Area Code) (Type or Print)

Tax Identification Number: _____

Instructions to Forest Officer: Remove and shred this page after entering bidder's PII in the appropriate database.

INSTRUCTIONS TO BIDDERS

1. BIDDER'S QUALIFICATIONS: Before a bid is considered for award, the Bidder may be required to submit a statement regarding the Bidder's previous experience in performing comparable work, business affiliates and technical organizations, financial resources, intended product processing facilities and its timber exporting history.

2. PREPARATION OF SEALED BIDS: Bids shall be manually signed, bid prices entered in the "Bidder's Total Sale Value Bid" box (Block 14g) for all material subject to bidding and all fill-in blanks completed. Bidder's total sale value bid entered in block 14g must be equal to or greater than the minimum acceptable total sale value in block 14j. If erasures or other changes appear on the forms, the person signing the bid must initial each erasure or change.

3. SUBMISSION OF SEALED BIDS: Sealed bids, with the accompanying bid guarantee, must be submitted to the Sale Officer, designated by the advertisement as the receiving officer, at or prior to the time established by the advertisement. Such bids must be enclosed in a sealed envelope addressed to the designated receiving officer. The envelope should show on the outside (a) that it is a "Bid for Timber," and (b) the sale name or number, and the date and time of opening bids as shown by the advertisement. Bids received after the time specified in the sale advertisement are late bids, Forest Service Handbook 2409.18, Chapter 60 will govern acceptance of such bids.

4. PUBLIC OPENING OF SEALED BIDS: Sealed bids will be publicly opened and posted at the time and place set for opening in the advertisement.

5. ORAL AUCTION BIDDING: Not applicable.

6. BID GUARANTEE: A bid guarantee in the form of a bid bond on form FS-6500-13 (4/82 or later version), certification of annual bid bond allocation on form FS-6500-13a (4/82 or later version), an irrevocable letter of credit, the format of which has been pre-approved by the Forest Service Regional Forester, a certified check, official bank check, bank draft, cashier's check, bank or postal money order payable to the Forest Service, USDA; or cash, in an amount no less than that specified in item 15(a), must accompany each sealed bid. Failure to submit an acceptable bid guarantee with the sealed bid will require rejection of the bid as non-responsive unless there is no other acceptable bid, or unless the Forest Service, in its sole discretion, decides to briefly delay a sale advertised for sealed bids followed by oral bids in order to allow any Bidder to cure any deficiency in its bid guarantee prior to oral bidding. Bid bonds must be accompanied by a power of attorney indicating that the person signing the bond for the surety has the power to do so. The Bidder acknowledges that bid guarantee shall be retained, in whole or in part, by the Forest Service to satisfy any damages that may be assessed if the bid is accepted and Bidder subsequently fails to furnish a cash downpayment or return the executed contract and performance bond as required. (See instruction 9.) The Bidder also acknowledges that the bid guarantee may be retained, in whole or in part, if the bid is accepted and Bidder has failed to abide by the terms of the bid or sample contract or violates the False Statements Act including not meeting purchaser responsibility requirements in 36 CFR 223.101, or Bidder has made a false statement (block 16). Otherwise, the bid guarantee shall be returned to each Bidder whose bid is not accepted.

7. AWARD OF CONTRACT: Award of the contract will be made to that responsible Bidder whose bid, conforming to the invitation for bids, is most advantageous to the United States on the basis of total value. The Government may, when in its interest, reject any or all bids or waive any informality in bids received. A written award mailed (or otherwise furnished) to the successful Bidder shall be deemed to result in a binding contract without further action by either party. If timber is advertised as set-aside for competitive bidding by small businesses, award will be made to the highest Bidder qualified as a small business and who has not been determined by the SBA to be ineligible for preferential award of set-aside sales. If there are no qualified small business Bidders, Forest Service will advertise this sale without restrictions on bidder size. All small businesses qualified, as a small business by the SBA, shall be required to follow the small business set-aside provisions of the sample contract.

If an appeal or lawsuit is filed challenging the decision to award this contract or upon determination by the Regional Forester that conditions existing on this timber sale are the same as, or nearly the same as, conditions existing on other timber sale(s) in appeal or litigation, Contracting Officer may delay award or reject all bids. If delay in award is for 10 days or more during Normal Operating Season after bid opening, Contracting Officer shall, upon award, adjust the contract term to include additional calendar days in one or more Normal Operating Seasons equal to the actual time lost.

8. DOWNPAYMENT: The Bidder to whom award is made must make a downpayment at the time the Bidder signs the contract and returns the contract to the Forest Service. The amount of the downpayment will be calculated as shown in block 20 of this bid for advertised timber. Only cash may be used to meet this requirement. Deposits shall be made to the Forest Service U.S.D.A., by mail or delivery to the address on the bill furnished by Forest Service. After receipt of downpayment and executed contract with required performance bond, the bid guarantee will be returned to the successful Bidder.

Bidder's failure to make the downpayment in conformance with the terms, conditions, and requirements contained in Contracting Officer's letter of award shall constitute repudiation of bid pursuant to instruction 9. Bidder shall have 3 days from the required date of execution to make the downpayment at the location designated by Forest Service. Bidder shall pay simple interest at the Current Value of Funds Rate on the unpaid downpayment for the period within the 3 days in which the downpayment is late. In the event Bidder fails to make payment within the 3 days, Bidder's bid guarantee shall be retained by Forest Service and applied toward damages. If the amount of the bid guarantee exceeds the amount of damages, the balance will be refunded to Bidder.

9. DAMAGES: Bidder acknowledges that this contract shall be terminated for breach pursuant to blocks 16, 16a, 16b, 19, 21, 24, 25, 26, 27, 28 and/or 29 of this bid form if: (a) the Bidder fails to execute a timber sale contract, furnish a downpayment within 3 days of the required date of execution, or furnish a satisfactory performance bond, within the number of days listed in block 19, or any written extension thereof by Forest Service; or (b) the Bidder is found to have violated the False Statements Act in making any statement or certification on this bid form, including not meeting purchaser responsibility requirements. The Bidder acknowledges that the Bidder shall not be entitled to cure this breach and that it will pay damages pursuant to the following terms:

Damages due the United States shall be determined in the following manner: (a) The costs, as described in this instruction, incurred by Forest Service in contacting the other qualified bidders regarding accepting the award of the contract at the high Bidder's repudiated rate or (b) If another qualified bidder does not accept award of the contract at the high Bidder's repudiated rate:

- (i) If the repudiated contract is reoffered within 6 months of the date of repudiation, damages shall be the difference between the total resale bid value and the total value of Bidder's repudiated bid, plus costs described in this instruction or
- (ii) If there are no responsive bids on the reoffered contract, damages shall be the difference between the reoffered appraised value and the total value of Bidder's repudiated bid, plus costs described in this instruction or
- (iii) If the repudiated contract will not be reoffered or the reoffer is not made within 6 months of Bidder's repudiation, damages shall be the difference between the appraised value of this contract as of the date of Bidder's repudiation and the total value of Bidder's repudiated bid, plus the costs described in this instruction.

The costs to be included in damages are the costs the Government incurs in making the reoffer, including, but not limited to, salary costs, document preparation and duplication costs, mailing costs, and timber sale advertisement costs.

Damages will also include interest measured by interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on the difference between Bidder's retained bid guarantee and the downpayment amount and other deposits required at award. Interest will be calculated from the date of Bidder's repudiation to the date of award of the reoffered contract or to the date a determination is made not to reoffer the repudiated contract or for 6 months, whichever comes first.

Bidder and Forest Service agree that Bidder's bid guarantee shall be retained by Forest Service and applied toward damages due the United States for Bidder's failure to execute this contract.

10. PRIVACY ACT: All personal information is requested on a voluntary basis; however, if you do not provide this personal information, your bid will not be accepted and the contract will not be awarded to you. Solicitation of this information is necessary for the government to conduct its sale program and thus is authorized under the National Forest Management Act of 1976, (16 USC 472a). The principal purpose for collecting this information is to allow for proper award of a timber sale contract and to provide for administration of that contract after award. Other routine uses of this data include: (a) compilation of Small Business data to determine needs for set-aside sales, (b) determination of volume purchased in any specific time period by a single purchaser, and (c) determination of volume under contract by a purchaser.

11. ROAD COMPLETION DATE: The Bidder hereby acknowledges that the Bidder is aware of the road completion date in the sample contract. The Bidder also acknowledges that if the Bidder elects to have Forest Service construct specified roads, the Bidder is aware: (a) that the Forest Service expects to contract for road construction, (b) that the timber sale contract will not be awarded unless a satisfactory road construction bid is received and a road construction contract is awarded or, if the Forest Service fails to receive such a bid within a maximum period stated in the advertisement, the Bidder agrees to perform road construction, (c) that the Forest Service may extend the maximum award delay time by the amount of time needed to confirm either sale or road Bidder's size status or by any time in excess of 40 days from timber sale bid opening needed to begin solicitation of construction bids, and (d) that if the Forest Service extends the maximum award delay period because solicitation of the road contract is delayed, the Bidder may withdraw its bid without penalty.

12. ELECTION OF ROAD OPTION AND CERTIFICATE OF SMALL BUSINESS STATUS: Not applicable.

13. ELECTION OF ROAD OPTION: Not applicable.

14. DEFINITIONS:

Affiliates: Business concerns or individuals are affiliates of each other if, directly or indirectly, (a) either one controls or has the power to control the other; or (b) a third party controls or has the power to control both.

Bidder: A Bidder is any individual, organization, or other legal entity that submits a bid for, or may be expected to submit a bid for, a National Forest System timber sale.

Covered Transactions: Covered transactions include both non-procurement and procurement transactions. A primary tier transaction is between a Federal Agency and a person. A lower tier transaction is between a participant in a covered transaction and another person. A procurement contract is a covered transaction if it is awarded to a participant in a non-procurement transaction and the amount of the contract is equal to or greater than \$25,000.

Current Value of Funds Rate: A rate of interest established by the Secretary of the Treasury.

Manufacturer: A concern with an existing sawmill, specialty mill (such as a cedar mill, shingle or shake plant, pole plant, or deadwood stud mill), veneer mill, or other manufacturing facility within an economic or logical haul distance, or with firm commitments and permits for construction of such facility. The purpose of this facility is processing the sawtimber component of timber sales.

Nonmanufacturer:

- a. Any concern which manufactures, with its own or leased facilities, or contracts for manufacture less than 50 percent of its total annual sawlog production within an economic or logical haul distance to such facilities, including pulp and fiberboard mills without a contiguous integrated manufacturing facility for lumber, timbers, or veneer from a sawtimber component.
- b. A specialty concern that does not have the capacity to manufacture 50 percent or more of its average annual sawlog production because of factors such as timber species or size.
- c. Any concern purchasing National Forest timber outside an economic and logical haul distance to its manufacturing facility.
- d. Any pulp mill, fiberboard mill, or chip plant that purchases sales with a sawtimber component when it has no manufacturing facility for lumber, timbers, or veneer.

Participant: Any person who submits a proposal for, enters into, or reasonably may be expected to enter into a covered transaction. This term also indicates any person who acts on behalf of or is authorized to commit a participant in a covered transaction as an agent or representative of another participant.

Sale Officer: An individual delegated responsibility for any specific aspect or task in the bidding or awarding process for timber sales.

Small Business: In sales of National Forest timber a Small Business is a concern that: (a) is primarily engaged in the logging and forest products industry; (b) is independently owned and operated; (c) is not dominant in its field of operation; and (d) together with its affiliates does not employ more than 500 persons.

15. CERTIFICATION OF COMPLIANCE WITH EXPORT RESTRICTIONS: Certain restrictions on the purchase and export of unprocessed logs cut from National Forest timber apply in various parts of the country. Pursuant to the Forest Resources Conservation and Shortage Relief Act of 1990, as amended (16 USC 620, *et seq.*), the Bidder acknowledges that the Bidder is aware of the applicable export restrictions. The Bidder is aware that these restrictions affect the disposition of the included timber and is aware that the restrictions may reduce the potential value of the timber.

16. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND

OTHER RESPONSIBILITY MATTERS-TIMBER SALE TRANSACTIONS: The inability of a person to provide the certifications in block 16a will not necessarily result in denial of participation in this timber sale (covered transaction). The Bidder shall submit an explanation of why it cannot provide the certification. The certification or explanation will be considered in connection with the Forest Service's determination whether to enter into this timber sale. However, failure of the Bidder to furnish a certification or an explanation shall disqualify such person from participation in this timber sale.

The certification is a material representation of fact upon which reliance was placed when the Forest Service determined to enter into this timber sale. If it is later determined that the Bidder knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Forest Service may terminate this timber sale for cause or default.

The Bidder shall provide immediate written notice to the Forest Service officer, to whom this bid is submitted, if at any time the Bidder learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

The terms 'covered transaction,' 'debarred,' 'suspended,' 'ineligible,' 'lower tier covered transaction,' 'participant,' 'person,' 'primary covered transaction,' 'principal,' 'proposal,' and 'voluntarily excluded,' as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the Forest Service for assistance in obtaining a copy of those regulations.

The Bidder agrees by submitting this bid that, should the proposed timber sale transaction be entered into, it shall not knowingly enter into any subcontractor transaction (lower tier covered transaction) with a person who is proposed for debarment under 48 CFR 9.4, or who is debarred, suspended, declared ineligible, or voluntarily excluded under 48 CFR 9.4, from participation in this timber sale, unless authorized by the Forest Service's non-procurement Debarment and Suspending Official.

The Bidder further agrees by submitting this bid that Form AD-1047 Certification Regarding Debarment, Suspension and Other Responsibility Matters shall be completed by the Purchaser and provided to the Contracting Officer upon request.

17. SUBCONTRACTOR CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION: Pursuant to 2 CFR 180.355 each timber sale purchaser shall require subcontractors to include a certification for it and its principals in any proposal submitted in connection with this timber sale. Purchasers shall keep the certifications on file until the termination date of the contract. Form AD-1048 Certification Regarding Debarment, Suspension, Ineligibility and voluntary Exclusion Lower Tier Covered Transactions shall be completed by the Purchaser and provided to the Contracting Officer upon request.

A participant in a timber sale may rely upon a certification of a prospective subcontractor that it is not proposed for debarment under 48 CFR 9.4, or is not debarred, suspended, ineligible, or voluntarily excluded from the timber sale, unless it knows that the certification is erroneous. A timber sale purchaser may decide the method and frequency by which it determines the eligibility of its principals. Each timber sale purchaser may, but is not required to, check for those listed as Excluded in the System for Award Management.

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 provision. The knowledge and information of a timber sale purchaser is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

Except for transactions authorized in paragraph 5 of the instructions for certification, if a contractor knowingly enters into a subcontractor transaction with a person who is proposed for debarment under 48 CFR 9.4, or who is suspended, debarred, ineligible, or voluntarily excluded under 48 CFR 9.4, from participation in this contract, in addition to other remedies available to the Federal Government, the Forest Service may terminate this contract for cause or default and/or pursue suspension and/or debarment.

USDA FOREST SERVICE

REPORT OF TIMBER SALE

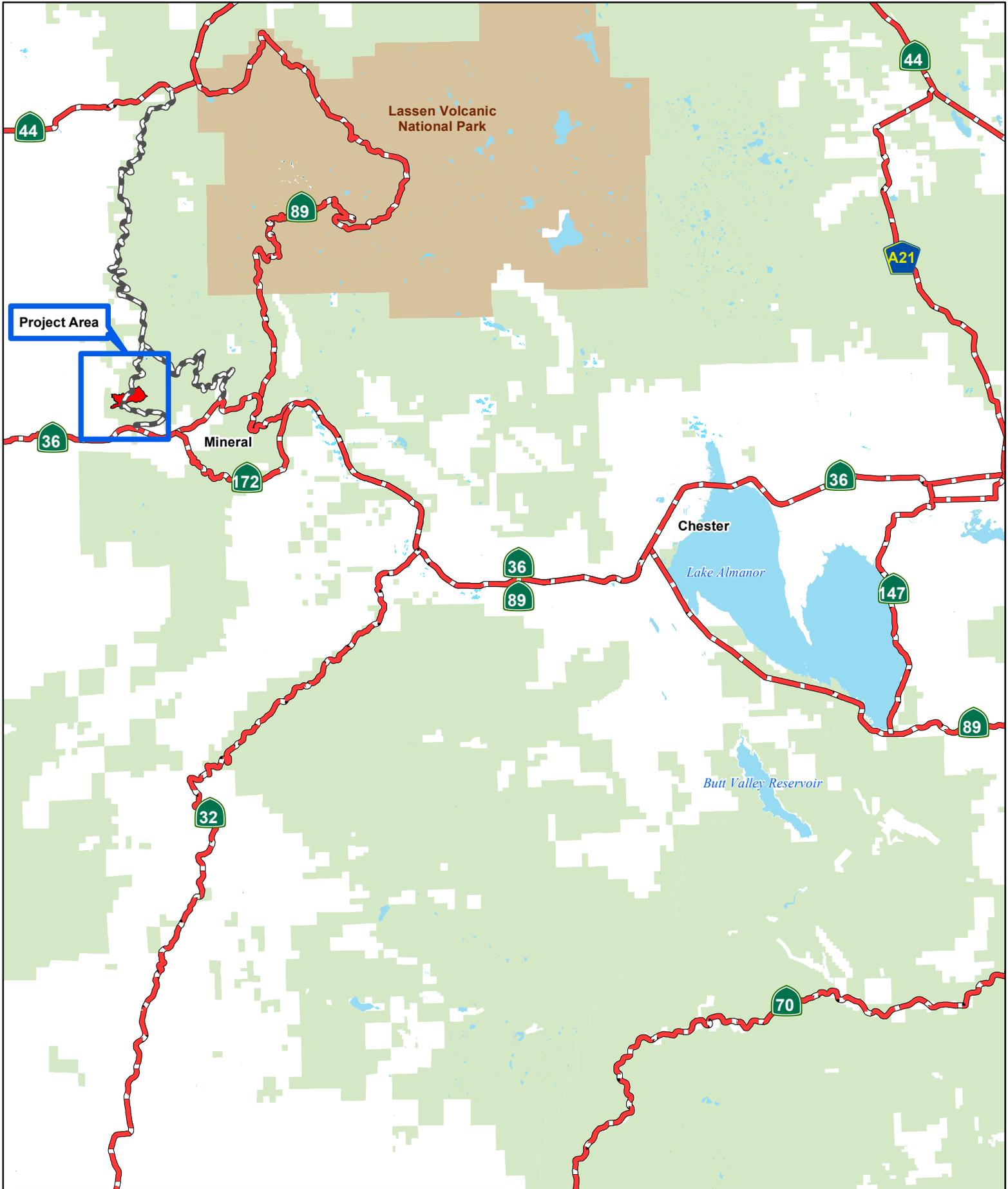
APPRAISAL SUMMARY

Region: 5 Forest: Lassen-06 Appr To: Chester, CA (saw) - Anderson, CA (bio) Appraisal Date: 16-Jun-20
 Reviewed By: [redacted] District: Almanor-51 Appraisal Type: **TEA** Rollback Factor: 10%
 Sale #: 10172 Sale Name: Drought MP Thin Base Period: 6/22/19-6/16/20 Required KV Cost: 45,483.00

Species and Volumes	1	2	3	4	5	6	7	Average	Total	
1. Species		SP/WWP	WF/RF		IC		CS			
2. Species Code		117	025		081		007			
3. Product-Unit of Measure		01-03	01-03		01-03		20-03			
4. % by Species Volume		0.2%	78.7%		0.0%		21.0%		100.0%	
5. Volume - CCF Total Conv.		15.21	4,842.69		0.07		1,292.00		6,149.97	
5a. Volume - MBF Sawtimber		6.87	2,734.19		0.03				2,741.09	
5b. Volume - Green Tons Tot C		51.49	16,480.48		0.19		3,552.25		20,084.41	
6a.				255.00		144.00				
6b. Base Period Avg Bid - \$/CCF								18.90		
Sale Costs Adjustments - \$/CCF	Base	Sale	Adjustment	Road & Haul Information			Miles	Total Cost		
7.							Specified Road Constuction	0.37	9,047.65	
8. PAL Fire Protection	6.39	6.39					Specified Road Reconstruction	3.76	24,098.40	
9. Stump-to-Truck	95.01	77.78	17.23				Temp Road Construction	0.20	2,000.00	
10.							Haul Miles (sawlogs)	37.90		
11. Hauling	50.41	34.97	15.44				Haul Miles (biomass)	73.70		
12. Sale Specific	4.11	0.37	3.74							
13. Slash Work	2.19	0.58	1.61							
14. Erosion Control	2.34	1.72	0.62							
15. Specified Road Cost	1.02	6.82	-5.80							
16. Road Maintenance	5.84	8.29	-2.45							
17. Brush Disposal Deposit	0.42	0.54	-0.12							
18. Surface Replacement Deposit	1.87	3.35	-1.48							
19. Road Maintenance Deposit										
20. Engineering Deposit	0.11	0.75	-0.64							
21. Temporary Road Cost	0.73	0.41	0.32							
22. Average Quality Values	186.03	211.45	25.42						Total Adj	
23. Total Adj. & Adjusted Bid									53.89	Adj. Bid
										72.79
Advertised Rates - \$/CCF	1	2	3	4	5	6	7	Average	Total	
24. Avg Bid Alloc to Species		42.59	72.89		59.01		-41.07	48.87	300,555.61	
25. Rollback Percent		10.0%	10.0%		10.0%		10.0%	10.0%		
26. Indicated Advertised Rate		38.33	65.60		53.11		-45.18	42.26	259,887.56	
27. Regional Minimum Rates		0.25	0.25		0.25		0.25	0.25	1,537.49	
28. Base Rates		5.71	9.62		7.83		0.25	7.65	47,020.49	
29. Adjustment to Base Rates		-7.05	-12.10		-9.79		45.43	0.00	0.00	
30a. Advertised Rates		31.28	53.50		43.33		0.25	42.26	259,887.56	
30b. Total Sale Value									259,887.56	
Appraisal Factors	1	2	3	4	5	6	7	Average	Total	
31. Base Indices		284.58	228.28		NA		NA			
32. Index Name Code		WWPAB	WWPAD		NA		NA			
33. Rollback Amount		4.26	7.29		5.90		4.11			
34. Quadratic Mean Diameter		12.1	16.8		13.8		NA			
35. Conversion Factor (mbf/ccf)	0.5000	0.4517	0.5646	0.5000	0.4286	0.5000		0.5642	saw timber	
36. Timber Property Value										
37. Quality Value - \$/CCF		123.71	211.73	255.00	171.43	144.00		211.45		

Species	Net MBF 6"-12"	Net MBF 13"-15"	Net MBF 16"-24"	Net MBF 25"-32"	Net MBF 33" +	Net MBF 6"-11"	Net MBF 12"-19"	Net MBF 20"-23"	Net MBF 24" +	Net MBF 6"-15"	Net MBF* 16" +	Net MBF camp run
PP/JP												
SP/WWP										5.70	1.17	
WF/RF												2,734.19
DF												
IC												0.03
LP												

Drought MP Thin Vicinity Map



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE

TIMBER SALE CONTRACT
(Applicable to Sales to be Scaled after Felling)

Name of Purchaser

National Forest Lassen	Ranger District Almanor	Region Pacific S-West	Contract Number
Sale Name DROUGHT MP THIN		Award Date	Termination Date 03/31/2024

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 Purchaser.

Forest Service having advertised a sale at which either (1) Purchaser, whose required bid deposit is now held by Forest Service as an initial deposit, was the successful bidder, or (2) no bids were received and Purchaser having subsequently offered at least the minimum advertised price and made an initial deposit in the same amount as the bid deposit specified in the sale advertisement; and the parties hereto desiring to record their agreement; now therefore,

Unless provided otherwise herein, Forest Service agrees to sell and permit Purchaser to cut and remove Included Timber and Purchaser agrees to purchase, cut, and remove Included Timber.

This contract consists of three Divisions: A - Specific Conditions, B - Standard Provisions, and C - Special Provisions, together with Sale Area Map, Plans and specifications for developments (if any), and such attachments as may be provided for in Division C. Specific Conditions are numbered and apply to the Part, Section, Subsection, or Item of the Standard Provisions, as indicated hereunder. Other conditions of this contract are stated in Division C - Special Provisions.

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

UNITED STATES OF AMERICA

Two Witnesses: ^{1/}

(Name)

(Address)

(Name)

(Address)

By: _____
Contracting Officer

(Title)

(Purchaser) ^{2/}

By: _____

(Title)

(Business Address)

I, ^{3/} _____, certify that I am the _____
Secretary of the corporation named as Purchaser herein; that _____
who signed this contract on behalf of Purchaser, 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 ^{4/}**

INSTRUCTIONS:

- 1/ The signatures and addresses of two witnesses are required if Purchaser is other than a corporation.
- 2/ If Purchaser is a co-partnership, the signatures should be: XYZ Company, by John Doe, a member of the firm. If Purchaser 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.
- 3/ The certificate must be completed if Purchaser is a corporation.
- 4/ 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/	
<p><u>Subcontractor Certification</u> <u>Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion</u></p>	
<p>Timber Sale Name: _____ National Forest: _____</p>	
<p>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 timber sale by any Federal department or agency.</p>	
<p>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.</p>	
<p>Name of Subcontractor: _____ Business Address: _____ _____</p>	
<p>_____</p> <p>Date</p>	<p>_____</p> <p>Signature</p>
<p>1/ It is the Purchaser'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.</p>	

The following conditions apply to the indicated portions of Division B - Standard Provisions issued June 2006.

A1 - Location and Area, applicable to B1.1

This Sale Area of 350.3 acres more or less is located in:

T29N R3E Sections 11, 14, 15, 22 & 23; T29N R4E Sections 6 & 7 Mount Diablo Meridian (MDM)

A2 - Volume Estimate and Utilization Standards, applicable to B2.1, B2.2, B2.4, and B6.4

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
Combined Softwood	Sawtimber	16,531.00	Ton	10.0	1	10	6.0	12
Combined Softwood	Grn Bio Cv	3,552.00	Ton	3.0	1	6	1.0	N/A
Total Quantity		20,083.00	Ton					

A3- Timber Designations, applicable to B2.3; acres are approximate:

	<u>Number</u>	<u>Acres</u>
Clearcutting Units (B2.31)	_____	_____
Specified Road Clearing (B2.32)	_____	_____
Overstory Removal Units (B2.33)	_____	_____
Understory Removal Units (B2.34)	_____	_____
Individual Trees (B2.35)	_____	209.78
Incompletely Marked Timber (B2.36)	_____	_____

A4 - Timber Payment Rates, applicable to B3.1 and B4.0

A4a - For Species and Products to be Paid for at Rates Escalated under B3.2

Not Applicable

A4b - 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) \$	
Combined Softwood	Sawtimber	Ton	2.34	12.94			.16
Combined Softwood	Grn Bio Cv	Ton	2.34	12.94			.16

For purposes of convenience in collection and bookkeeping, Bid Rates stated in A4 include payment of deposits for sale area betterment required pursuant to 16 USC 576b. Such deposits are not included as Required Deposits defined hereunder.

The following definitions are established for the terms used in A4:

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 B3.31, B3.32, or B3.33.

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 A7, but are never less than Base Rates.

Bid Premium Rates are the amounts by which Purchaser's bid is in excess of Advertised Rates. The Bid Premium Rates are constant during this contract, except as provided in B3.31, B3.32, and B3.33.

Bid Rates are the rates bid by Purchaser (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 A4a is the Tentative Rate that is subject to quarterly adjustment under B3.2; for species and products in A4b, the Bid Rate is the Flat Rate.

Required Deposits are deposits that Purchaser 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 C5.32#; and contract scaling deposits, if any, are given in C6.816#.

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 B3.2.

A5 - Indices Used in Quarterly Adjustment, applicable to B3.2

Not Applicable

A6 - High Stumps, applicable to B6.412

Species	Product	Maximum Stump Height (inches)
Combined Softwood	Sawtimber	12
Combined Softwood	Grn Bio Cv	12

A7 - Specified Roads, applicable to B5.2

Name and Date of Governing Road Specifications: FP-14 Federal Highway Administration Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, as amended and supplemented (English)

Project		Design Class	Appro. Length (mi./km.)	Sheet Numbers and Approval Date	Performance Responsibility		
Road No.	Name				Survey	Design	Construction Staking 1/
31N17I	E Hampton Butte 1 (C) (segment 0 to .37)	Single Lane - 15 mph	.37 / .6	11 03/11/2019	FS	FS	FS BC
31N17W	E Hampton Butte (R) (segment 0 to .19)	Single Lane - 10 mph	.19 / .31	11 03/11/2019	FS	FS	FS BC
31N17H	Hampton Butte (R) (segment 0 to .27)	Single Lane - 10 mph	.27 / .43	11 03/11/2019	FS	FS	FS BC
31N17	Mineral Viola Hwy (R) (segment 0 to 3.3)	Single Lane - 20 mph	3.3 / 5.31	11 03/11/2019	FS	FS	FS BC

1/ Indicate timing, i.e., before clearing (BC) or after clearing (AC). Applicable to B5.212.

A8 - Forest Service Engineering Completion Schedule, applicable to B5.21

Road No.	Road Name	Type of Work	Completion Date
31N17	Mineral Viola Hwy (R) (segment 0 to 3.3)	Survey and Design and Construction Staking	03/11/2019
31N17H	Hampton Butte (R) (segment 0 to .27)	Survey and Design and Construction Staking	03/11/2019
31N17W	E Hampton Butte (R) (segment 0 to .19)	Survey and Design and Construction Staking	03/11/2019
31N17I	E Hampton Butte 1 (C) (segment 0 to .37)	Survey and Design and Construction Staking	03/11/2019

A9 - Scaling Instructions and Specifications, applicable to B6.8

Name and Date of Governing Instructions: National Forest Cubic Scaling Handbook, FSH 2409.11a, as amended. Cubic Taper 4 as authorized by Regional Forester, February 2001.

Scaling Specifications					
Species	Product	Maximum Scaling Length (feet)	Trim Allowance		
			Diameter Range (inches)	Length Range (feet)	Trim Allowance (inches)
<i>Combined Softwood</i>	<i>Sawtimber</i>	20	ALL	ALL	6

A10 - Scaling Services, applicable to B6.81

Species	Product	Unit of Measure	Site and Geographic Location	Method	Standard Estimated Cost per Unit \$
Combined Softwood	All	Ton	Sale Area (B6.811)	Total (100%) Weight Scale	.00

A11 - Minimum Scaling Volumes, applicable to B6.81

Minimum volume for Continuous Scaling Services in two-week period 0 Ton per scaler

Minimum volume for Intermittent Scaling Services 0 Ton on a MONTH basis

A12 - Fire Precautionary Period, applicable to B7.2

May 01 to December 01, inclusive

A13 - Purchaser Responsibility to Furnish Crews and Equipment for:

Initial Fire Suppression, applicable to B7.3

Within 25 road miles

Fire Suppression Reinforcement, applicable to B7.312 and B 7.313

Within 100 road miles

A14 - Purchaser's Obligation per Operations Fire, applicable to B7.41

Maximum Amount: \$ \$47,400.00

A15 - Termination Date, applicable to B8.2

March 31, 2024

A16 - Normal Operating Season, applicable to B6.31, B6.66, B8.21 and B9.3

First Period: June 01 to October 31, inclusive

Second Period: _____ to _____, inclusive

A17 - Performance Bond Amount, applicable to B9.1

A18 - Downpayment, applicable to B4.211

Downpayment Amount: _____

A19 - Periodic Payment Amount, applicable to B4.213

	<u>Periodic Payment Determination Date</u>	<u>Amount</u>
Initial Payment:	<u>January 15, 2023</u>	_____
Additional Payment:	<u>August 16, 2023</u>	_____

A20 - Market-Related Contract Term Addition Producer Price Index, applicable to B8.212

Index Name: Softwood Lumber Index Number: 0811

A21 - Inapplicable Standard Provisions

The following listed Sections, Subsections, or Items of Division B-Standard Provisions - are hereby made inapplicable. (Instructions: List by reference number and title.)

B4.211	DOWNPAYMENT
B4.4	PAYMENTS NOT RECEIVED
B8.212	MARKET-RELATED CONTRACT TERM ADDITION
B8.64	DEBARMENT AND SUSPENSION CERTIFICATION

A22 - List of Special Provisions

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

C2.21#	UTILIZATION, REMOVAL, AND AMOUNT PAYABLE FOR NON-SAWTIMBER (05/2008)
C2.3#	RESERVE TREES (04/2004)
C2.35#	DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES (06/2012)
C2.351#	DESIGNATION BY SPACING (04/2004)
C4.211	DOWNPAYMENT (06/2007)
C4.212	TEMPORARY REDUCTION OF DOWNPAYMENT (08/2009)
C4.4	PAYMENTS NOT RECEIVED (08/2012)
C5.11#	REQUIREMENTS OF RIGHTS-OF-WAY AND LAND USE AGREEMENTS (05/2008)
C5.12#	USE OF ROADS BY PURCHASER (06/1999)
C5.125#	SHARE COST ROAD LIABILITY INSURANCE (08/2006)
C5.13#	ROAD COMPLETION DATE (04/2004)
C5.213#	DEPOSIT FOR RECONSTRUCTION ENGINEERING SERVICES (01/2020)
C5.221#	MATERIAL SOURCES (04/2004)
C5.31#	ROAD MAINTENANCE REQUIREMENTS (07/2001)
C5.35#	ROAD AND WATER SUPPLY USE (05/2008)
C6.241	SITE SPECIFIC SPECIAL WILDLIFE SURVEY MEASURES (08/2018)
C6.315#	SALE OPERATIONS SCHEDULE (08/2006)
C6.32#	PROTECTION OF RESERVE TREES (04/2004)
C6.331	LOG TRUCKING (08/2006)
C6.37	SUBSTITUTE METHODS (08/2006)
C6.41#	FELLING, BUCKING, AND LIMBING (08/2007)
C6.42#	GROUND BASED SKIDDING (08/2006)
C6.5	STREAMCOURSE PROTECTION (08/2006)
C6.6#	EROSION PREVENTION AND CONTROL (05/2008)
C6.7#	SLASH TREATMENT (08/2006)
C6.815	THIRD PARTY SCALING SERVICES (04/2004)
C7.2#	SPECIFIED FIRE PRECAUTIONS (06/2012)
C7.22#	EMERGENCY PRECAUTIONS (06/2012)
C8.212	MARKET-RELATED CONTRACT TERM ADDITION (11/2008)
C8.64	DEBARMENT AND SUSPENSION CERTIFICATION (03/2018)
C8.66# (Option 1)	USE OF TIMBER (04/2004)

UNITED STATES DEPARTMENT OF AGRICULTURE
Forest Service

TIMBER SALE CONTRACT
DIVISION B

June 2006
(Date of Issue)

STANDARD PROVISIONS FOR SCALED TIMBER SALES

(Applicable to Timber Sales to be Scaled after Felling)

This Division is organized into Parts, Sections, Subsections, and Items. These are numbered in accordance with the following scheme: Part B1.0, Section B1.1, Subsection B1.11, and Item B1.111. References to a Part include all Sections, Subsections, and Items within that Part; references to a Section include all Subsections and Items within that Section; and references to a Subsection include all Items within that Subsection. Cross-references within this contract cite the reference number of the applicable Division, Part, Section, Subsection, and Item. Descriptive headings used are not to be considered in determining the rights and obligations of the parties.

The Standard Provisions in this Division are subject to Specific Conditions of the contract stated in Division A. Wherever appropriate, Specific Conditions established in Division A are cited by reference number. The listing of Sections, Subsections, or Items of this Division in A21 has the effect of striking or deleting them from Division B. A22 lists Special Provisions that comprise Division C. Where appropriate, references to Special Provisions are made by citing the applicable reference numbers.

Where appropriate, references to Special Provisions are made by citing the applicable reference numbers.

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B1.0—SALE AREA

B1.1 Sale Area Map. The boundaries of “Sale Area” and any subdivision thereof, are as shown on the attached “Sale Area Map” that is made a part hereof, and were, before timber sale advertisement, designated on the ground by Forest Service to meet the anticipated needs of the parties. The location of Sale Area and its approximate acreage are stated in A1. Subdivisions may be revised and additional ones may be established only by written agreement. Subdivisions or cutting units may be eliminated from Sale Area under conditions described in B6.36. Catastrophically Damaged areas may be removed from Sale Area under B8.32.

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

- (a) Identified claims limiting Purchaser’s rights under B1.2;
- (b) Subdivisions defined in B2.3 where timber is to be Marked after date of timber sale advertisement;
- (c) Boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units under B2.3;
- (d) Diameter limits for Overstory Removal Units and Understory Removal Units under B2.33 and B2.34;
- (e) Areas where leave trees are Marked to be left uncut under B2.35;
- (f) Specified Roads listed in A7;
- (g) Sources of base course, surface rock, and rock riprap listed in the Schedule of Items under C5.221;
- (h) Roads where log hauling or use is prohibited or restricted under B5.12;
- (i) Roads and trails to be kept open under B6.22;
- (j) Improvements to be protected under B6.22;
- (k) Locations of known wildlife or plant habitat and cave resources to be protected under B6.24;
- (l) Locations of areas known to be infested with specific invasive species of concern under B6.35;
- (m) Maximum stump heights when more than one height is listed by areas in A6 under B6.412;
- (n) Skidding or yarding methods specified under B6.42;
- (o) Streamcourses to be protected under B6.5;
- (p) Locations of meadows requiring protection under B6.61;
- (q) Locations of wetlands requiring protection under B6.62;
- (r) Locations of temporary roads to be kept open under B6.631; and
- (s) Other features required by Division B or C.

B1.2 Claims. Valid claims are excluded from Sale Area, except those on which timber cutting is authorized in writing by the claimant and except mining claims on which cutting is authorized by the Act of July 23, 1955 (30 USC 614). Claims that limit Purchaser’s rights to operate under this contract and that Forest Service has been able to identify are shown on Sale Area Map. Purchaser is not obligated to operate contrary to existing claim limitations. Forest Service shall designate boundaries of claims on the ground to the extent necessary to identify Included Timber.

B2.0—TIMBER SPECIFICATIONS

B2.1 Included Timber. “Included Timber” consists of:

B2.11 Standard Timber. Live and dead trees and portions thereof that meet Utilization Standards under B2.2 and are designated for cutting under B2.3.

B2.12 Substandard Timber. Live and dead trees that:

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

B2.13 Damaged Timber.

B2.131 Damaged by Purchaser. Undesignated live trees meeting Utilization Standards:

(a) Within 200 feet slope distance from centerline of roads constructed hereunder that are damaged by Purchaser’s construction to the extent that considerable deterioration or mortality is imminent and are designated by Forest Service for felling before the nearest road segment is Substantially Completed or

(b) That are damaged by Purchaser in logging and are subsequently Marked before Purchaser has completed skidding or yarding operations in the immediate area.

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

B2.132 Negligent or Willful Damage. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer.

B2.133 Damage by Catastrophe. As provided under B8.32, undesignated live and dead timber within Sale Area, meeting Utilization Standards, and affected by Catastrophic Damage. “Catastrophic Damage” as used hereunder is major change or damage to Included Timber on Sale Area, to Sale Area, to access to Sale Area, or a combination thereof:

(a) Caused by forces, or a combination of forces, beyond control of Purchaser, occurring within a 12-month period, including, but not limited to, wind, flood, earthquake, landslide, fire, forest pest epidemic, or other major natural phenomenon and

(b) Affecting the value of any trees or products meeting Utilization Standards, within Sale Area and estimated to total either:

- (i) More than half of the estimated timber volume stated in A2 or
- (ii) More than two hundred thousand cubic feet (2,000 CCF) or equivalent.

Catastrophic Damage does not include changes caused by forest pest epidemics or foreseeable deterioration if Included Timber was sold for salvage or pest control.

B2.134 Minor Damage by Natural Causes. Undesignated trees within Sale Area and meeting Utilization Standards, in amounts less than specified in B2.133, that become insect infested, windthrown, suffer serious damage, or die, as designated by agreement.

B2.14 Unintentionally Cut Timber. Trees, within or immediately adjacent to Sale Area or to road

construction or other authorized clearing outside Sale Area, not designated for cutting under B2.3 but that are cut through mistake by Purchaser, when included by Contracting Officer.

B2.15 Construction Timber. Trees to be used for construction under B5.1.

B2.16 Other Material. Species or products not listed in A2, upon written approval of Contracting Officer under B3.41.

B2.2 Utilization and Removal of Included Timber. "Utilization Standards" for trees and minimum pieces are stated in A2. To meet minimum tree specifications, trees must equal or exceed tree diameters listed in A2 and contain at least one minimum piece. Except for timber required or authorized to be left, Purchaser shall fell and buck such trees and shall remove from Sale Area and present for Scaling all pieces that:

(a) Meet minimum piece standards in A2 or

(b) Do not meet such standards, but would have qualified as part of minimum pieces if bucking lengths were varied to include such material.

B2.3 Timber Designations. Timber designated for cutting shall be confined to Sale Area, except as provided in B2.131, B2.14, B2.15, B2.32, and B5.1. Sale Area Map indicates subdivisions, if any, where Marking under B2.35 is to be done after timber sale advertisement, except for construction clearing under B2.32, minor changes under B2.37, and damaged timber.

The boundaries of Clearcutting Units, Overstory Removal Units, and Understory Removal Units were plainly Marked on ground before timber sale advertisement and are shown on Sale Area Map. Boundary trees shall not be cut. The number of units and approximate acreage of timber designations are stated in A3.

B2.31 Clearcutting Units. All trees that meet Utilization Standards within "Clearcutting Units" are designated for cutting.

B2.32 Construction Clearing. All timber is designated for cutting that is within the clearing limits of roads constructed hereunder or is in other authorized clearings. All dead or unstable live trees are designated for cutting that are sufficiently tall to reach Purchaser's landings or the roadbed of Specified and Temporary Roads when Marked in advance of felling of timber in the immediate vicinity. Pieces meeting Utilization Standards from such dead or unstable live trees shall be removed, unless there is agreement that to do so could damage the road. Such designation may be revised as part of agreed changes in road location under B5.2.

B2.33 Overstory Removal Units. All trees within "Overstory Removal Units" are designated for cutting when they meet Utilization Standards and equal or exceed the diameter limits shown on Sale Area Map.

B2.34 Understory Removal Units. All trees within "Understory Removal Units" are designated for cutting when they meet Utilization Standards and are smaller than the diameter limits shown on Sale Area Map.

B2.35 Individual Trees. All trees to be cut, other than in the units described in B2.31, B2.32, B2.33, and B2.34, are Marked or designated by description. Trees

are "Marked" when individually designated by Forest Service with paint marks above and below stump height.

Sale Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.

B2.36 Incompletely Marked Timber. Trees within incompletely Marked subdivisions shown on Sale Area Map at time of timber sale advertisement shall be designated in accordance with C2.36. A representative sample of the timber to be designated has been Marked prior to timber sale advertisement in accordance with such rules. The approximate locations of the representative sample areas are shown on Sale Area Map.

B2.37 Minor Changes. Within Sale Area, minor adjustments may be made in boundaries of cutting units or in the timber individually Marked for cutting when acceptable to Purchaser and Forest Service.

B2.4 Volume Estimate. The estimated volumes of timber by species designated for cutting under B2.3 and expected to be cut under Utilization Standards are listed in A2. If Sale Area Map indicates that there are incompletely Marked subdivisions, the objective of Forest Service shall be to designate for cutting in such subdivisions sufficient timber so that Sale Area shall yield the approximate estimated volume by species or species groups stated in A2. However, the estimated volumes stated in A2 are not to be construed as guarantees or limitations of the timber volumes to be designated for cutting under the terms of this contract.

Volume adjustments shall not be made under this Section after there is modification for Catastrophic Damage under B8.32.

B2.41 Adjustment for Volume Deficit. If Sale Area Map indicates that there are incompletely Marked subdivisions and if Contracting Officer determines that a deficit in the estimated volume will cause the volume cut to be less than 90 percent of the total estimate shown in A2, Forest Service, upon request by Purchaser, shall designate additional timber within Sale Area. Such additional timber shall be limited to that estimated to be necessary to reach approximately the estimated volumes by species listed in A2. Any such additional designation shall be consistent with land and resource management plans.

B2.42 Adjustment for Excess Volume. If Sale Area Map indicates that there are incompletely Marked subdivisions and if Contracting Officer determines that the volume cut will be more than 120 percent of the total estimated volume listed in A2, Forest Service, upon request by Purchaser, shall make an adjustment in Marking or cutting unit boundaries with the objective of designating for cutting the approximate estimated volumes by species listed in A2. Such adjustments in volumes shall be confined to (a) Marking adjustments on Sale Area and (b) reduction in area to be cut over. Such adjustments or reductions shall not conflict with the silvicultural treatment being applied on Sale Area and shall not materially change the average value by species of the timber designated for cutting. Such adjustments may be made notwithstanding the provisions of B1.1 and B2.3.

If the timber designated for cutting is not reduced by such adjustments to less than 120 percent of the total es-

timated quantity listed in A2, Purchaser, after cutting 120 percent of the total estimated volume listed in A2, may elect to have Sale Area reduced to eliminate the remaining Included Timber. However, where felling operations have been started, units of minimum practical size shall be retained in Sale Area.

B3.0—RATES OF PAYMENT

B3.1 Current Contract Rates. Included Timber that is removed by Purchaser and presented for Scaling in the product form stated in A2 shall be paid for at Current Contract Rates determined under this Section. "Current Contract Rates" shall be (a) Flat Rates and (b) Tentative Rates adjusted by the escalation procedures in B3.2. Flat Rates and Tentative Rates shall be those listed in A4, unless superseded by rates redetermined under B3.3 or established for Contract Term Extension. In addition, Required Deposits shall be made as listed in A4, C5.32, and C6.816, or established under B3.3 or B8.23.

In the event Termination Date is adjusted under B8.21 or B8.212, Current Contract Rates shall be continued in the same manner as immediately prior to the adjustment period.

Notwithstanding B8.23, Current Contract Rates for timber cut and removed from Sale Area that remains unscaled after Termination Date, as adjusted or extended, shall be Current Contract Rates in effect on Termination Date.

"Current Contract Value" is the sum of the products of Current Contract Rates and estimated remaining unscaled volumes by species of Included Timber meeting Utilization Standards.

B3.2 Escalation Procedure. Tentative Rates for those species and products listed in A4a are subject to quarterly escalation in accordance with the following procedures: The calendar quarter index average for each price index described in A5 is the arithmetic average of the three such monthly price indices preceding January 1, April 1, July 1, and October 1. The difference between calendar quarter index average and Base Index listed in A4a shall be the basis for quarterly escalation. To arrive at Current Contract Rates for timber Scaled during the preceding calendar quarter, Tentative Rates for each species shall be reduced or increased by such difference, except when the calendar quarter index average is:

(a) Less than the Base Index, the reduction shall not result in a rate below Base Rate or

(b) Greater than the Base Index, the increase shall not exceed the difference between Tentative Rate and Base Rate.

In the event of Contract Term Extension, the escalation procedure will be used during the extension period, except that adjusted payment rates for any calendar quarter cannot be less than Tentative Rates, for each species and product group, established under B8.23 for the extension period.

B3.21 Unavailable Index. If an index described in A5 is no longer available, Contracting Officer may replace that index. If Contracting Officer determines that a replacement index does not exist, Current Contract Rates

for the remainder of the timber sale shall be a Flat Rate. Flat Rates will be Tentative Rates adjusted by the arithmetic average of the index described in A5 for a 12-month period prior to its becoming unavailable using the quarterly adjustment procedure outlined in B3.2. Contracting Officer will determine availability and a beginning point to average the index for Flat Rates. Such Flat Rates are subject to rate redetermination as provided elsewhere under this contract.

B3.3 Rate Redetermination. Rates may be redetermined as set forth in this Section. Bid Premium Rates shall be added to all redetermined rates, except as provided in B3.31, B3.32, and B3.33.

Rate redeterminations shall be made in accordance with the standard Forest Service methods in effect 45 days prior to rate redetermination. Such methods shall take into consideration factors that may affect timber value at rate redetermination date.

Redetermined rates shall not be less than Base Rates listed in A4, except for reduction under B3.31, B3.32, or B3.33. Required Deposits shall be redetermined. Redetermined Specified Road construction cost is subject to the limitations of B5.26.

B3.31 Rate Redetermination for Environmental Modification. In the event of a contract modification under B8.33 or partial termination under B8.34, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber remaining immediately prior to the revision and the appraised unit value of Included Timber to be cut under the modification. The appraisal shall consider the estimated cost of any construction work listed in the Schedule of Items that was performed and abandoned.

Tentative Rates and Flat Rates in effect at the time of the revision will be adjusted by said differences to become Current Contract Rates. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to a new Base Rate limitation of the cost of essential reforestation or 25 cents per hundred cubic feet or equivalent, whichever is larger. However, existing Base Indices shall not be changed under this Subsection.

Redetermined rates, or differences for rates subject to B3.2, and Required Deposits shall be considered established under B3.1 for timber Scaled subsequent to the contract revision.

B3.32 Rate Redetermination after Catastrophic Damage. In event of Catastrophic Damage and adjustment, if any, of Included Timber, Contracting Officer shall make an appraisal to determine for each species the catastrophe-caused difference between the appraised unit value of Included Timber remaining immediately prior to the catastrophe and the appraised unit value of existing and potential Included Timber immediately after the catastrophe. Included Timber is any that would not be eliminated under B8.32. Potential Included Timber is any that would be added under B8.32.

Tentative Rates and Flat Rates in effect at the time of catastrophe shall be adjusted by said differences to be-

come the redetermined rates for the purpose of a contract modification under B8.32. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to new Base Rate limitations of 25 cents per hundred cubic feet or equivalent. However, existing Base Indices shall not be changed under this Subsection.

Upon agreement under B8.32, redetermined rates and Required Deposits shall be considered established under B3.1 for timber Scaled subsequent to Catastrophic Damage.

At time of such appraisal, Specified Road construction cost shall include the estimated cost of any construction work listed in the Schedule of Items performed and abandoned.

B3.33 Rate Redetermination for Market Change. In the event of delay or interruption, exceeding 90 days, under B8.33, Contracting Officer shall make an appraisal to determine for each species the difference between the appraised unit value of Included Timber immediately prior to the delay or interruption and the appraised unit value of Included Timber immediately after the delay or interruption. The appraisal shall be done after any rate redetermination done pursuant to B3.31, using remaining volumes.

Tentative Rates and Flat Rates in effect at the time of delay or interruption or established pursuant to B3.31 will be reduced, if appraised rates declined during the delay or interruption, to become Current Contract Rates. Increases in rates will not be considered. Accordingly, Base Rates shall be adjusted to correspond to the redetermined rates if redetermined rates are less than the original Base Rates, subject to a new Base Rate limitation of the cost of essential reforestation or 25 cents per hundred cubic feet or equivalent, whichever is larger. However, existing Base Indices shall not be changed under this Subsection.

Redetermined rates shall be considered established under B3.1 for timber Scaled subsequent to the delay or interruption.

B3.34 Emergency Rate Redetermination. Forest Service shall redetermine rates if, upon Purchaser's application, Forest Service determines that, because of changes in the timber market since the award date or the last rate redetermination under this provision, the Producer Price Index identified in A20 has declined by 25 percent. Rates shall be redetermined under B3.3 and shall be considered established under B3.1 for timber Scaled subsequent to Purchaser's application. This Subsection shall not apply during Contract Term Extension.

B3.4 Other Payment Rates.

B3.41 Material Not in A2. Incidental amounts of products or portions of trees of species listed in A2 that do not meet Utilization Standards may be removed without charge. Such material may be purposely removed in more than incidental amounts without charge upon written approval of Contracting Officer, and subject to agreement on deposits if needed for road maintenance and use.

Other species or products not listed in A2 may be cut and removed upon written approval of Contracting Officer and subject to agreement on rates of payment and deposits if needed for road maintenance and use.

When any material suitable for use in a product form included in A2 is removed in another product form, the rates of payment shall be not less than but approximately equivalent to Current Contract Rates and Required Deposits.

B3.42 Timber Cut Through Mistake. Undesignated timber meeting Utilization Standards, cut by Purchaser through mistake and included by Contracting Officer under B2.14, shall be removed and paid for at Current Contract Rates and Required Deposits, unless such material is not listed in A2. In such event, Contracting Officer, in accord with standard Forest Service methods, shall establish rates to be paid.

B3.43 Designated Timber Cut But Not Removed. Standard timber shall be removed, as provided in B2.2, prior to acceptance of subdivision for completion of logging under B6.36. There shall be no charge when:

(a) The leaving of incidental material is justified under existing conditions, including those under B6.4, or

(b) Cut timber is left by option or requirement, as under B2.31, B2.32, and B6.4.

B3.44 Undesignated Timber Damaged Without Negligence. Undesignated timber meeting Utilization Standards, damaged without negligence by Purchaser and designated by Forest Service under B2.131, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits.

B3.45 Undesignated Timber Unnecessarily Damaged or Negligently or Willfully Cut. Undesignated timber meeting Utilization Standards and unnecessarily damaged or negligently or willfully cut by Purchaser, if included by Contracting Officer under B2.132, shall be cut, removed, and paid for at Current Contract Rates and Required Deposits that are in addition to liquidated damages under B3.46.

If such timber is of a species or size not listed in A2 or is of a quality different from designated timber, Contracting Officer shall establish payment rates in accord with standard Forest Service methods.

B3.46 Liquidated Damages. Unnecessary damage to or negligent or willful cutting of undesignated timber, as described in B3.45, on portions of Sale Area cut over under this contract is likely to cause substantial silvicultural or other damage to the National Forest. It will be difficult, if not impossible, to determine the amount of such damage. Therefore, Purchaser shall pay as fixed, agreed, and liquidated damages an amount equivalent to the amount payable at Current Contract Rates. If designated by Contracting Officer, Purchaser shall remove such damaged or cut timber and pay for it at Current Contract Rates.

B3.47 Defect Caused by Abnormal Delay. Scaling deductions made for rot, check, or other defect resulting from abnormal delay in Scaling caused by Purchaser shall be recorded separately and charged to Tim-

ber Sale Account at Current Contract Rates and applicable deposits.

B4.0—PAYMENTS

B4.1 Amount Payable for Timber. Current Contract Rates and Required Deposits in effect when the timber is Scaled shall be applied to the Scaled volume to determine the amount Purchaser shall pay.

B4.2 Timber Sale Account. "Timber Sale Account" is an account maintained by Forest Service of all Purchaser's deposits, credits, payment guarantees, and the charges for:

- (a) Timber at Current Contract Rates;
- (b) Slash disposal, road maintenance, and contract scaling at Required Deposit rates;
- (c) Cooperative work at rates established by specific agreement under B4.218; and
- (d) Other charges provided in this contract.

Cash deposits shall be recorded currently in such account.

Charges for timber cut shall be made when Forest Service prepares and furnishes to Purchaser periodic statements of volume and value of timber cut and Scaled. Charges subject to escalation under B3.2 shall be made initially on the basis stated in B4.214 and shall be adjusted at the end of each calendar quarter, as provided in B3.2.

B4.21 Cash Deposits. Within the limitations of this Subsection, Purchaser shall make cash deposits to meet Purchaser's obligations within 15 days of billing by Forest Service. Deposits shall be made to Forest Service, U.S.D.A., by mail or delivery to the address to be furnished by Forest Service. Forest Service shall explain the bill at the time it requests each deposit.

B4.211 Downpayment. The downpayment amount shown in A18 may not be applied toward any other payment required under the provisions of this contract, except damages determined pursuant to B9.4, transferred to other timber sales, or refunded until stumpage value representing 25 percent of the total bid value of the timber sale has been charged and paid for, or if 36 CFR 223.49(e) is applicable, the estimated value of the unscaled timber is equal to or less than the amount of the downpayment.

If Forest Service makes a determination that this contract should not have been included under increased downpayment requirements (36 CFR 223.49(e)), the downpayment shall be revised and applied in accordance with 36 CFR 223.49(f).

B4.212 Advance Deposits. Purchaser agrees to make cash deposits in advance of cutting to meet charges under B4.2.

Forest Service billings for advance cash deposits shall be in such amounts that Timber Sale Account will maintain an unobligated balance equal to the applicable charges for timber that Forest Service estimates will be cut in not less than 30 days and not more than 60 days. This advance cash deposit may be reduced to a smaller amount by the terms of B4.211, B4.213, B4.215, and/or B4.217. Except for amounts required pursuant to B4.211,

B4.213, and B4.217, Purchaser shall not be required to make advance deposits above those required under this Item.

When the credit balance in Timber Sale Account is less than the amount due for timber estimated to be cut in 10 days, Contracting Officer will suspend all or any part of Purchaser's Operations until payment or acceptable payment guarantee is received.

B4.213 Periodic Payment Schedule. Purchaser shall make periodic payments for stumpage value, as shown in A19.

In the event Purchaser has not paid the amount(s) stated in A19 as stumpage for volume removed by the periodic payment determination date(s), Forest Service shall issue a bill for collection for the difference between the required amount and payments made by Purchaser. If payment(s) fall due on a date other than a normal billing date, the payment date shall be extended to coincide with the next Timber Sale Account billing date.

The amount of the periodic payment(s) will be reduced if the payment(s) would result in Purchaser's credit balance for timber charges exceeding the Current Contract Value.

Only cash may be used for this purpose. No other form of payment is acceptable. Forest Service will apply the payments to subsequent charges on this contract under the terms of B4.212.

Except for Contract Term Extension under B8.23, periodic payment determination date(s) that have not been reached shall be adjusted one day for each additional day of contract time granted.

B4.214 Deposits for Charges Subject to Escalation. Deposits requested to cover estimated charges for timber subject to escalation under B3.2 shall be based upon Current Contract Rates and related deposits in effect during previous calendar quarter.

B4.215 Deposits When Payment Guaranteed. To the extent payment guarantee is provided under B4.3, requirements for advance cash deposits under B4.212 shall be waived for the value of timber on Sale Area that is cut, but not removed, and for the value of products removed from Sale Area for not more than a monthly billing period, subject to the provisions of B4.4.

B4.216 Blanket Cash Deposits. Purchaser may make cash deposits under a written agreement to cover charges made under this and other timber sale contracts within the same National Forest. Forest Service shall allocate such deposits to such timber sales. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales within the same National Forest at Purchaser's request. Purchaser shall not start cutting until allocation has again been made to this timber sale.

B4.217 Extension Deposits. In the event of Contract Term Extension, Forest Service shall divide the difference between Current Contract Value as of the start of any Contract Term Extension and the credit balance of any deposit made pursuant to B4.213 by the number of whole months remaining in Normal Operating Season(s)

within the extension period to determine the amount of each "Extension Deposit."

Purchaser shall make the initial Extension Deposit prior to Forest Service executing the contract modification. In response to Forest Service billing under B4.21, Purchaser shall make advance cash deposits. Such deposits shall at least equal each Extension Deposit required for each whole month remaining in Normal Operating Season(s) during the extension period. Extension Deposits shall be due by the last day of each month during Normal Operating Season whether or not the volume that is covered by such deposits has been Scaled.

Due dates for Extension Deposits during the extension period may be delayed when Purchaser earns Contract Term Adjustment if Termination Date, as adjusted, results in one or more additional complete months within Normal Operating Season(s).

B4.218 Cooperative Deposits. On a basis of cooperation or assistance (16 USC 572) and by a written agreement, Forest Service shall perform all or portions of the work that Purchaser is obligated to perform under this contract, as well as furnish other services in connection with activities under this contract. When Forest Service is to perform such work, Purchaser shall make one or more deposits to cover the estimated cost of the work. On request of Purchaser, Forest Service shall render monthly accounts, as may be specified in such agreement.

B4.22 Temporary Reduction of Downpayment. When, under B8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the downpayment amount required shall be temporarily reduced upon the written request of Purchaser or at the discretion of the Contracting Officer. For the period of the delay or interruption, the downpayment on deposit may be reduced to \$1,000 or two (2) percent of the downpayment amount listed in A18, whichever is larger.

Any downpayment amount temporarily reduced pursuant to this Subsection may be refunded or transferred at the request of Purchaser. However, if Purchaser has outstanding debt owed to the United States, Contracting Officer must apply the amount of downpayment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3701, *et seq.*).

Upon Purchaser's receipt of bill for collection and written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall restore the downpayment to the full amount shown in A18 within 15 days after the date the bill for collection is issued, subject to the provisions of B4.4. Purchaser shall not resume contract operations until the downpayment amount is fully restored.

B4.23 Refund of Excess Cash. If at any time the credit balance of Timber Sale Account exceeds the charges for timber that Forest Service estimates will be cut within the next 60 days, any portion of such excess that is due to cash in the account shall be refunded, if requested by Purchaser, unless deposited under B4.211,

B4.213, or B4.217. If Purchaser plans no cutting within the next 60 days, Forest Service may refund the entire unencumbered cash balance, except as provided in this Subsection. After a refund for a shutdown, deposits shall be made to meet the requirements of B4.212 before additional timber may be cut.

B4.24 Refund after Scaling Completed. Any cash deposit, in excess of that required to meet charges under B4.2, shall be refunded or transferred within 15 days of Purchaser's request after Scaling is completed, except for amounts estimated to be required under B9.5.

B4.3 Payment Guaranteed by Bond or Deposited Securities. To guarantee payment, Purchaser may furnish and maintain an acceptable surety bond or deposit in a Federal Depository negotiable securities of the United States. The securities shall be deposited through the Regional Fiscal Agent accompanied by a power of attorney and agreement authorizing the bond-approving officer to sell or collect such securities if payment is not made within 15 days of billing by Forest Service. The penal sum of such surety bond or the market value at time of deposit of such negotiable securities shall be the maximum amount of the payment guaranteed.

For payment purposes, penal sum of the surety bond or market value at time of deposit of negotiable securities shall be in lieu of the performance bond furnished under B9.1.

B4.31 Blanket Bond. If Purchaser furnishes an acceptable bond, or deposits securities, in accordance with B4.3, to guarantee payment for timber from this and other timber sales within the same National Forest, the amount of such bond or deposited securities shall be allocated to such timber sales by Forest Service. When there is to be no timber cutting hereunder for 30 days or more and payment of current charges has been made, the allocation to this timber sale shall be reallocated to other timber sales at Purchaser's request. Purchaser shall not start cutting hereunder until this timber sale receives an allocation that will meet the obligation for payment guarantee.

B4.32 Letters of Credit for Payment Bond. Notwithstanding the provisions of B4.3, Purchaser may use letters of credit in lieu of a surety bond for payment bond purposes when approved by Contracting Officer.

B4.4 Payments Not Received. (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 allowed in the bill for collection for receipt of payment, Contracting Officer will suspend all or any part of Purchaser'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 B4.218;
- (iii) Damages pursuant to B9.4;
- (iv) Road use fees;

(v) Restoration of downpayment pursuant to B4.22;

(vi) Periodic payments pursuant to B4.213;

(vii) Extension Deposits pursuant to B4.217; and

(viii) Other mandatory deposits.

(b) Failure to pay amounts due by the date allowed in the bill for collection for receipt of payment shall be considered a breach under B9.3. The 30-day notice period prescribed therein shall begin to run as of the end of business on the date allowed 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 higher of the Current Value of Funds Rate or the Prompt Payment 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 Purchaser'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 Purchaser's Operations, and administrative offset, shall be stayed for so long as:

(i) A bona fide dispute exists as to Purchaser's obligation to make such payment and

(ii) Purchaser files and prosecutes a timely Claim.

B5.0—TRANSPORTATION FACILITIES

B5.1 Authorization. Purchaser is authorized to construct and maintain roads, bridges, and other transportation facilities, as needed for harvesting Included Timber on National Forest and other lands where Forest Service has such authority. As used in this contract "construct" includes "reconstruct."

Location and construction of Specified Roads shall be in accordance with B5.2. Unless otherwise provided herein, construction may be progressive during this contract. Maintenance shall be governed by B5.3. The location and clearing widths of all Temporary Roads or facilities shall be agreed to in writing before construction is started. "Temporary Roads" are roads other than Specified Roads that are constructed by Purchaser for the purpose of harvesting Included Timber.

Purchaser is authorized to cut and use for construction without charge construction timber designated by agreement.

B5.11 Requirements of Rights-of-Way. Purchaser's road construction and use of rights-of-way identified in attached list or C5.11 shall be confined to rights-of-way and limited by the related easements and stipulations, if any, unless Purchaser makes other arrangements that will not infringe upon or adversely affect the grantee's rights. Easements or right-of-way documents are available in the offices of the Forest Supervisor and District Ranger.

B5.12 Use of Roads by Purchaser. Except as provided herein, Purchaser is authorized to use existing National Forest system roads and Specified Roads listed in A7, when Forest Service determines that such use will not cause damage to the roads or National Forest resources.

If Purchaser's use of an existing temporary or National Forest system road, not listed in A7, cannot be satisfactorily accommodated without reconstruction, Purchaser shall be authorized to use such road upon agreement as to the minimum reconstruction work that Purchaser shall perform before hauling. When appropriate, such road shall be included in A7 as an alternate facility under B5.26.

C5.12 lists existing roads shown on Sale Area Map that for such reasons as limitations in structural capacity, safety, and protection of soil, water, and roads:

(a) Cannot be used for log hauling or

(b) May be used only under the restrictive limitations stated therein.

B5.2 Specified Roads. "Specified Roads" are roads, including related transportation facilities and appurtenances, shown on Sale Area Map and listed in A7. Purchaser shall construct Specified Roads used under this contract. Construction initiated by Purchaser on any such Specified Road shall be completed to an agreed terminus that meets Purchaser's needs and prevents unnecessary impact on National Forest resources. Construction to such terminus shall be in full accordance with Plans and specifications and the Schedule of Items identified in A7 or specifications attached hereto, except for agreed adjustments needed to accommodate such terminus. The "Schedule of Items" is a list and description of construction items, quantities, units of measure, methods of measurement, unit price, and total amount. Forest Service shall revise the Schedule of Items to show the estimated cost for the portion constructed to the revised terminus as a separate segment.

A Temporary Road shall not be constructed substantially on the location for a Specified Road, except by agreement.

In event of agreed substitution or revision of construction design, specifications, or performance responsibility under B5.212, B5.25, B5.26, or C5.215, A7 shall be modified. If Purchaser does not need a Specified Road or a portion of a Specified Road for harvesting Included Timber and the Specified Road is not constructed, the deletion of the road or road segment will be a mutually agreed Design Change and Timber Sale Account will be adjusted for the reduction in cost, as provided in B5.25.

References in the contract to specifications, standards, or test methods adopted by the American Association of State Highway and Transportation Officials (AASHTO), American Society for Testing and Materials (ASTM), General Services Administration (GSA), or other recognized national technical associations shall mean specifications, standards, or test methods, including interim or tentative issues, that are in effect on the date of timber sale advertisement.

B5.21 Engineering. Forest Service completed survey and design for Specified Roads prior to timber sale advertisement, unless otherwise shown in A8 or Purchaser survey and design are specified in A7. On those roads for which Forest Service completes the design during the contract, the design quantities shall be used as the basis for revising estimated costs stated in the Schedule of Items and adjusting Timber Sale Account.

Forest Service engineering shall be completed according to the schedule in A8. Should Forest Service be unable to perform the designated survey and design by the completion date or other agreed to time, upon written agreement, Purchaser shall assume responsibility for such work. In such event, Contracting Officer shall revise:

(a) A7 to show Purchaser's performance responsibility.

(b) The Schedule of Items to include costs of survey and design, as provided under B5.24, and adjust Timber Sale Account, as provided in B5.25. Forest Service shall calculate such costs, using unit rates comparable with those used in the Schedule of Items.

Purchaser shall furnish a schedule to Forest Service of specific dates for the start of construction. The schedule of construction shall be submitted to Forest Service for approval within 60 days after contract award and prior to beginning work. Purchaser's construction schedule shall reflect Forest Service survey and design completion dates. Forest Service may agree to Purchaser's request for an alternate date for starting construction.

Purchaser shall perform survey, design, and construction staking of Specified Roads to be engineered by Purchaser in accordance with specifications attached hereto. Based upon the quantities developed by such design, as approved by Forest Service, Contracting Officer shall revise the estimated costs stated in the

Schedule of Items and adjust Timber Sale Account. The methods of computing such revised costs shall be consistent with the methods that would have been used had the engineering been performed prior to timber sale advertisement.

B5.211 Contract Plans. "Plans" are documents that show location, details, and dimensions of the work to be performed. On any of the contract Plans where a portion of the work is drawn out and the remainder is shown in outline, the parts drawn out shall apply to all other like portions of the work.

"Shop Drawings" include drawings, diagrams, layouts, schematics, descriptive literature, illustrations, lists or tables, performance and test data, and similar materials furnished by Purchaser to explain in detail specific portions of the work required by the contract. Purchaser shall submit a minimum of five (5) sets of required Shop Drawings to Forest Service, three (3) sets of which will be retained by Forest Service. Shop Drawings shall not exceed 24 inches by 36 inches in size. Approval or rejection and date will be noted or stamped on each set. Unless agreed otherwise, Forest Service shall approve or reject the Shop Drawings within 10 days of submission. Such approval of the Shop Drawings shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is satisfactory. If the Shop Drawings are rejected, Purchaser must make the noted revisions and resubmit the Shop Drawings.

A change in the amount of construction work that exceeds construction tolerances specified in the specifications identified in A7 caused by a Forest Service error in construction staking shall be treated as a Design Change. When incompatible situations arise between Plans, specifications, and actual conditions on the ground, Purchaser shall make corrections pursuant to B5.253.

B5.212 Construction Staking. Purchaser shall avoid careless or negligent damage to construction stakes, flags, or marks. If such damage occurs, Purchaser shall be required to replace stakes necessary to construction. Purchaser's replacement staking shall be approved by Forest Service. Alternatively, upon Purchaser's request, Contracting Officer may agree to perform such work under B4.218.

When A7 shows that construction stakes are to be set by Forest Service after clearing, Purchaser shall submit to Forest Service a written schedule for clearing, construction staking, and construction that will provide Forest Service a reasonable period for setting construction stakes. Time for setting construction stakes may be modified by written agreement.

If Forest Service performs construction staking for Specified Roads, timing of such staking shall permit Purchaser's clearing and other construction activity to proceed without hindrance or delay, provided Purchaser's construction activity is reasonably consistent with needs identified in Purchaser's Operating Schedule or amendments thereto.

Should Forest Service be unable to perform construction staking in such reasonable period, upon written agreement, Purchaser shall assume the responsibility for construction staking for agreed upon portions of Specified Roads. In such event, Contracting Officer shall revise:

(a) A7 to show Purchaser's performance responsibility.

(b) The Schedule of Items to include costs of construction staking, as provided under B5.24, and adjust Timber Sale Account, as provided in B5.25. Forest Service shall calculate such costs, using unit rates comparable with those used in the Schedule of Items.

B5.22 Material Delivery. Within 60 days after award date, Purchaser shall provide Forest Service a written schedule showing the desired delivery dates of any material to be supplied by Forest Service. With reasonable notice, schedule may be amended by agreement. Forest Service agrees to make delivery within 15 days after the scheduled delivery dates that are at least 60 days after the schedule is submitted, unless prevented by causes beyond control of Forest Service.

If Purchaser does not provide Forest Service the written schedule within the period provided in this Subsection, Forest Service agrees to make delivery within 90 days after a late schedule is submitted, unless prevented by causes beyond control of Forest Service. After delivery to and written receipt by Purchaser, Purchaser is responsible for installation of needed material and for any loss of or damage to such material due to Purchaser's negligence prior to installation or return of unused material to Forest Service.

At Purchaser's option, Forest Service deliveries shall be to Purchaser's storage area, as agreed, or to the nearest practicable point to the job site along existing roads. Unused material shall be returned to Forest Service at location of delivery, unless agreed otherwise.

B5.23 Use of Partially Constructed Roads. Unless Contracting Officer determines that there is justification under existing conditions and ground conditions permit hauling without undue damage, portions of Specified Roads shall be Substantially Completed prior to their use for hauling timber. When necessary to facilitate construction and protect bridges and roads from damage, timber felled in construction and timber logged directly to the road from areas immediately adjacent thereto may be hauled before road construction is Substantially Completed. Such hauling shall be confined to periods when abnormal soil erosion and damage to National Forest lands will not result.

"Substantially Completed" means:

(a) Completion of grading and installation of drainage structures so they will function effectively and

(b) Laying the specified depth of base course, if any.

No more than half of Included Timber to be hauled over such portions of road shall be hauled until the base course has been applied.

Unless agreed otherwise, specified reconstruction shall be completed on any portion of road prior to hauling on that portion.

B5.24 Estimated Cost. Estimated costs by construction phases for Specified Roads listed in A7 are stated by segments in the Schedule of Items. Such estimated costs are subject to adjustment under B3.3, B5.2, B5.21, B5.212, B5.25, and B5.26. Appropriately adjusted costs shall be made a part of a revised Schedule of Items and shown as adjustments to Timber Sale Account. The revised Schedule of Items shall supersede any prior Schedule of Items when it is dated and signed by Contracting Officer and a copy is furnished to Purchaser.

B5.25 Construction Cost Adjustment. Contracting Officer, as provided in B5.21, B5.212, B5.251, B5.252, and B5.253, shall adjust Specified Road construction cost estimates in the Schedule of Items and show the adjustments as credits or debits to Timber Sale Account in the month when the road segment is accepted.

B5.251 Variation in Quantities. (a) This Item applies only to differences between quantities shown in the Schedule of Items and measured quantities actually constructed and accepted that are not covered under B5.252 or B5.253. Only changes in quantities where other than contract quantity or lump sum is specified in the Schedule of Items are subject to this Item.

(b) Adjustments to the Specified Road construction cost for variation in quantities shall be computed at unit rates established in the Schedule of Items for units of work actually constructed and measured in accordance with specified method of measurement shown in the Schedule of Items and described in the specifications identified in A7, except that:

(i) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is more than 115 percent of original quantity, use Current Unit Rates to calculate the adjustment for that portion of work above 115 percent of original quantity.

(ii) When quantity of authorized work performed or material furnished by Purchaser, under any item shown in the Schedule of Items and covered by this Item, is less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work. Any revised estimate shall use the same procedures as those used in original estimates using rates comparable to those used in computing the most recent cost estimate for the timber sale. The revised cost estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

(c) "Current Unit Rates" are Forest Service estimates of the unit rates for doing the work at the time the adjustment is approved.

B5.252 Physical Change. (a) Forest Service shall adjust the Specified Road construction cost if, prior to acceptance under B6.36, a physical change, caused by a single event and not due to negligence of Purchaser, results in an increase or decrease in work and/or materials furnished by Purchaser involving additional estimated cost of:

(i) More than \$10,000 or

(ii) More than 10 percent of total Specified Road construction cost, whichever is less.

(b) Increases to the Specified Road construction cost shall include cumulative estimated costs of repairing damage from things such as slides, washouts, landslips, and fire. Plans and specifications shall be revised when necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with estimated quantities of work and/or materials abandoned, shall be the basis for the revised Specified Road construction cost.

(c) Forest Service shall determine difference in quantities for portions of Specified Road affected by physical change by comparing most recent previous quantities with total of:

(i) Estimated quantities actually constructed prior to physical change, including work abandoned, and

(ii) Estimated quantities to be constructed following physical change.

(d) Forest Service shall calculate the amount of increase to the Specified Road construction cost by applying:

(i) Current Unit Rates to differences when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimate for the timber sale when quantities decrease.

(e) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost for such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in the original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. The revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

B5.253 Design Change. (a) "Design Change" is a change in work and/or materials shown in the Schedule of Items and described in Plans or specifications that has been mutually agreed to in writing or ordered by Contracting Officer. Changes of a minor nature (such as adjustment in horizontal and vertical alignment, that do not exceed specified tolerance, necessary to maintain or balance earthwork quantities substantially as designed) and variation in quantities, as described in B5.251, shall not be considered Design Changes.

(b) Additions, deletions, or changes in types or diameter of culverts shown in Plans and changes in designated water sources shown on Plans shall be considered Design Changes.

(c) Forest Service may, by written notice from Contracting Officer, order changes in work to be performed and/or materials to be furnished by Purchaser within general scope of the contract. Such work shall:

(i) Be due to differences between anticipated and actual field conditions,

(ii) Be necessary to construct Specified Roads to design standards, or

(iii) Be necessary to assure stability of Specified Roads.

(d) In addition, Contracting Officer may include work to protect resource values in ordered Design Changes. Such work must be related to construction of Specified Roads and be necessary to prevent damage to soil and water values immediately tributary to Specified Roads. Other Design Changes may be made by mutual written agreement.

(e) Forest Service shall revise Plans and specifications as necessary to meet new conditions. Quantities of work and/or materials determined from such revised Plans and specifications, together with quantities of work and/or materials abandoned, shall be the basis for adjusting the Specified Road construction cost.

(f) Forest Service shall determine the difference in quantities for the portion of Specified Road affected by Design Change by comparing the most recent previous quantities with the total of:

(i) Estimated quantities actually constructed prior to Design Change and

(ii) Estimated quantities to be constructed following Design Change.

(g) Calculate the amount of adjustment to the Specified Road construction cost by applying:

(i) Current Unit Rates to difference when quantities increase and

(ii) Unit rates comparable to those used in computing most recent cost estimates of the timber sale when quantities decrease.

(h) When quantity of authorized work to be performed or material furnished by Purchaser, under any item shown in the Schedule of Items, is reduced to less than 85 percent of original quantity, Forest Service shall make a revised estimate of cost of such work and adjust the Specified Road construction cost. Any revised estimate shall use the same procedures as those used in the original estimates using rates comparable to those used in the most recent cost estimate for the timber sale. The revised estimate shall take into account any increase or decrease in unit rates that results from a reduction in quantity of work.

B5.26 Alternate Facilities. If under Purchaser's Operating Schedule, roads needed for the removal of Included Timber differ substantially from Specified Roads, other roads may be added to A7. Contracting Officer shall assure that road routing, location, design, and needed easements will make such other roads acceptable as parts of the National Forest transportation facilities. Purchaser shall provide survey, design, and construction staking for such other roads.

Based on design quantities from such engineering, Forest Service shall estimate Specified Road construction costs of alternate facilities, using methods consistent with those used in the original computation of the Schedule of Items. If Specified Road construction costs for acceptable alternate facilities are less than the estimated costs of facilities listed in the original Schedule of Items that

Purchaser does not construct, Timber Sale Account shall be adjusted by Forest Service to reflect the reduction in costs. In event of rate redetermination under B3.3, such allowed costs shall be the redetermined estimated costs of facilities listed in the original Schedule of Items that Purchaser does not construct.

B5.27 Temporary Credit for Unamortized Specified Road Construction Cost. When, under B8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the Contracting Officer shall credit the unamortized cost of Specified Roads to Purchaser's Timber Sale Account, upon the written request of Purchaser or at the discretion of Contracting Officer. The amount credited to Purchaser shall be limited to stumpage paid above Base Rates.

Any Specified Road construction cost credited to Purchaser pursuant to this Subsection may be refunded or transferred at the request of Purchaser. However, if Purchaser has outstanding debt owing the United States, Contracting Officer must apply the amount of credit that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act of 1996, as amended.

Upon written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall pay for timber a per unit amount, in addition to Current Contract Rates, that is equal to the amount credited to Purchaser's Timber Sale Account divided by 80 percent of the estimated remaining volume of the contract, until the full amount credited to Purchaser has been returned.

B5.3 Road Maintenance. Purchaser shall maintain roads, commensurate with Purchaser's use, in accordance with Road Maintenance Requirements in C5.31 and the Road Maintenance Specifications. Performance of road maintenance work by Purchaser may be required prior to, during, or after each period of use. The timing of work accomplishment shall be based on Purchaser's Operating Schedule under B6.31.

When two or more commercial users are simultaneously using the same road where Forest Service is not requiring maintenance deposits, the commercial users will develop maintenance responsibilities and arrangements for accomplishing the work. Forest Service must agree to this plan. If the commercial users cannot agree on maintenance responsibilities, Forest Service shall resolve the differences.

If Purchaser elects to use different roads than those listed in C5.31, Forest Service shall determine Purchaser's commensurate share of road maintenance and revise road maintenance deposits in C5.32.

If Forest Service cannot perform its full commensurate share of road maintenance, Forest Service shall make a cash payment to Purchaser for performance of such work.

Unless agreed in writing, prehaul maintenance shall be completed on any portion of road prior to hauling on that portion. Maintenance, as used in this contract, does

not include road reconstruction or repairs of an extraordinary nature.

B5.4 Use by Others. Forest Service shall have the right to use any road constructed by Purchaser under this contract for any and all purposes in connection with the protection and administration of the National Forest. Other parties, in connection with the logging of tributary National Forest timber, may use roads constructed by Purchaser hereunder when Contracting Officer determines that such use will not materially interfere with Purchaser's Operations. Third party use shall be contingent upon Contracting Officer determining, and third party agreeing to pay, a fair share of maintenance cost commensurate with such commercial use.

Unless otherwise provided in C5.4, Forest Service shall authorize other uses of roads constructed by Purchaser hereunder only if:

(a) Contracting Officer makes appropriate arrangements to relieve Purchaser of related maintenance costs commensurate with such other uses and

(b) Such other uses will not materially interfere with Purchaser's Operations.

Where Purchaser reconstructs a road having established use, Purchaser's use during reconstruction and thereafter shall be such as to reasonably accommodate such established use. Contracting Officer shall ensure that other users do not materially interfere with Purchaser's right to use such reconstructed road.

B6.0—OPERATIONS

B6.1 Representatives. Unless otherwise agreed, Purchaser shall designate, in writing, a representative who is authorized to receive notices in regard to performance under this contract and take related action. In no case shall Purchaser designate any representative to this contract who is currently debarred, proposed for debarment, or suspended by the Federal Government. Purchaser's representative shall provide a copy of the contract to Purchaser's field supervisor and persons authorized to assume responsibilities in the field supervisor's absence. Prior to initial operations and after shutdowns of 10 days or more, Purchaser's representative shall notify Forest Service 2 days, excluding weekends and Federal holidays, before any operations begin on Sale Area.

Purchaser's representative shall designate, in writing, a field supervisor, one of whose responsibilities shall be on-the-ground direction and supervision of Purchaser's Operations. The field supervisor shall be readily available to the area of operations when operations are in progress and shall be authorized to receive notices in regard to performance under this contract and take related action. The responsibilities of the field supervisor shall include the safeguarding of National Forest resources and performance within the terms of the contract. Purchaser representative will furnish Forest Service with names of persons authorized to assume responsibilities in field supervisor's absence. Such delegations may be made a part of Purchaser's annual Operating Schedule under B6.31.

Unless Contracting Officer designates another Forest Service representative and notifies Purchaser in writing,

the District Ranger is the representative of Forest Service. Forest Service representative shall:

(a) Receive notice in regard to performance under this contract,

(b) Take action in relation to this contract, and

(c) Be readily available to the area of construction and logging operations.

Contracting Officer or Forest Service representative shall designate other on-the-ground representatives in writing along with their specific contractual responsibilities and authority. Representatives with authority delegated in writing are the only Forest Service personnel authorized to provide notice or take related actions under the contract. Such delegation shall be made within 30 days of receipt of Purchaser's Plan of Operations.

B6.11 Notices. Notices by either party as to action taken or to be taken by the other respecting this contract shall be made in writing to the other party's designated representative.

B6.2 Improvements. Purchaser is authorized to construct on National Forest land, buildings, facilities, and other improvements needed to log Included Timber. Such construction shall be located where approved in writing by Forest Service and shall be constructed and used in a manner that will protect National Forest values.

Purchaser shall comply with the rules and regulations governing the operation of premises that are occupied and shall perform the contract in a manner that will not interrupt or interfere with the conduct of Forest Service business.

Forest Service shall grant written permission before any camp, quarry, borrow pit, storage, or service area, other than as shown on Plans, is opened or operated on National Forest land or administered lands. A camp is interpreted to include the campsite or trailer parking area of any employee agent, contractor, Subcontractor or their employees or agents working on the project for Purchaser. Such permission, if granted, shall be without charge to Purchaser.

B6.21 Removal. Unless Forest Service authorizes continued use, Purchaser shall remove or dispose of all improvements when no longer needed. Should Purchaser fail to remove or dispose of improvements within 6 months after Termination Date, Forest Service may dispose of improvements at Purchaser's expense under B9.5 or may, upon written notice to Purchaser, assume title to improvements in the name of the United States. In the latter event, Purchaser shall not be required to remove such improvements.

B6.22 Protection of Improvements. So far as practicable, Purchaser shall protect Specified Roads and other improvements (such as roads, trails, telephone lines, ditches, and fences):

(a) Existing in the operating area,

(b) Determined to have a continuing need or use, and

(c) Designated on Sale Area Map.

Purchaser shall keep roads and trails needed for fire protection or other purposes and designated on Sale Area Map reasonably free of equipment and products,

slash, and debris resulting from Purchaser's Operations. Purchaser shall make timely restoration of any such improvements damaged by Purchaser's Operations and, when necessary because of such operations, shall move such improvements, as specified in C6.22.

B6.221 Protection of Improvements Not Owned by Forest Service. Forest Service will notify all utility companies, or other parties affected, and make arrangements for all necessary adjustments of the public utility fixtures, pipelines, and other appurtenances likely to be affected by Purchaser's Operations.

When Purchaser's Operations are adjacent to properties of railway, telephone, or power companies, or other property, work shall not begin until Purchaser has identified actions necessary to prevent damage.

Purchaser shall cooperate with the owners of any underground or overhead utility lines in their removal and/or rearrangement operations in order that these operations may progress in a reasonable manner, utility duplication or rearrangement work may be reduced to a minimum, and services shall not be unnecessarily interrupted.

In the event of interruption to utility services because of accidental breakage or as a result of lines being exposed or unsupported, Purchaser shall promptly notify the proper authority and shall cooperate with that authority in the restoration of service until the service is restored.

When materials are to be hauled across the tracks of any railway, Forest Service will make arrangements with the railroad for the use of any existing crossing or for any new crossing required. Purchaser shall make arrangements for use of alternate crossings. All construction work to be performed by Purchaser on the railroad right-of-way shall not damage railroad company's property.

B6.222 Protection of Property. In construction and reconstruction of Specified Roads, Purchaser shall not unnecessarily remove, deface, injure, or destroy trees, shrubs, or other natural features, unless specifically authorized. To the extent practicable, Purchaser shall confine operations to within the clearing limit or other areas designated in the contract and prevent the depositing of rocks, excavated materials, stumps, or other debris outside these limits.

Material that falls outside these limits shall be retrieved, disposed of, or incorporated in the work to the extent practicable and necessary to protect adjacent resource values, unless otherwise agreed.

B6.23 Protection of Land Survey Monuments. Forest Service shall appropriately designate on the ground all known survey monuments, section corners, and other corner accessories. Forest Service shall post identifying signs on two sides of each known bearing tree.

Forest Service shall arrange protective or perpetual action that does not cause unnecessary delay to Purchaser in authorized clearings, such as Clearcutting Units and road construction, and in other instances where damage to monuments, section corners, and other corner accessories is unavoidable.

Purchaser shall protect all known survey monuments, witness corners, reference monuments, and bearing trees against avoidable destruction, obliteration, or damage

during Purchaser's Operations. If any known monuments, corners, or accessories are destroyed, obliterated, or damaged by Purchaser's Operations, Purchaser shall hire the appropriate county surveyor or a registered land surveyor to reestablish or restore at the same location the monuments, corners, or accessories. Such surveyors shall use procedures in accordance with the Bureau of Land Management "Manual of Instructions for the Survey of the Public Lands of the United States" for General Land Office surveys and in accordance with State law for others. Purchaser shall record such survey in appropriate county records.

B6.24 Protection Measures Needed for Plants, Animals, Cultural Resources, and Cave Resources.

(a) Areas, known by Forest Service prior to timber sale advertisement, needing special measures for the protection of plants, animals, cultural resources, and/or cave resources are shown on Sale Area Map and/or identified on the ground, and shall be treated as follows:

(i) Unless agreed otherwise, wheeled or track laying equipment shall not be operated in areas identified as needing special measures except on roads, landings, tractor roads, or skid trails approved under B5.1 or B6.422. Purchaser may be required to backblade skid trails and other ground disturbed by Purchaser's Operations within such areas in lieu of cross ditching required under B6.6. Additional special protection measures needed to protect such known areas are identified in C6.24.

(ii) Unless agreed otherwise, trees will not be felled into areas identified as needing special measures.

(iii) Purchaser shall conduct operations in a manner that does not damage or disturb identified areas. In the event that protective measures identified by the Forest Service are for any reason inadequate, Contracting Officer may delay or interrupt Purchaser's operations, under this Contract, and/or modify this Contract pursuant to B8.33.

(iv) Purchaser shall immediately notify the Forest Service if its operations disturb or damage any area identified as needing special protection, and shall immediately halt its operations in the vicinity of such area until the Forest Service authorizes continued operations. In the event that Purchaser's operations disturb or damage an area identified as needing special protection, then Purchaser shall reimburse the Forest Service for the full cost and expense of any evaluative and remedial measures undertaken by the Forest Service in connection with such disturbance or damage. Such payment shall not relieve Purchaser from civil or criminal liability under applicable law.

(b) Nothing contained in this Subsection shall establish, or be deemed to establish any express or implied warranty on the part of the Forest Service (i) that the Forest Service has identified all areas within the Sale Area requiring special protection, or (ii) that measures prescribed by the Forest Service for protection of such areas are adequate.

(c) Following sale advertisement, additional areas needing special measures for protection may be

discovered or identified; protective measures may be revised or newly prescribed; and, additional species of plants and/or animals may be added to federal lists of protected species. In such event, Contracting Officer may delay or interrupt Purchaser's operations, under this Contract, and/or modify this Contract pursuant to B8.33.

(d) Discovery, by either the Purchaser or the Forest Service, of additional areas, resources, species, or members of species needing special protection shall be promptly reported to the other party.

B6.3 Control of Operations. Under this contract, "Purchaser's Operations" shall include activities of or use of equipment of Purchaser, Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, acting in the course of their employment in operations hereunder on National Forest system lands or within Forest Service protection boundary (unless acting under the immediate supervision of Forest Service).

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

B6.31 Operating Schedule. Purchaser shall, before commencing operations, provide in writing an annual Operating Schedule of anticipated major activities and needs for logging Included Timber, such as logging, road maintenance, Scaling, and road construction, including construction staking under B5.212 and material delivery under B5.22. Upon reasonable notice to Forest Service, such schedule shall be subject to modifications necessitated by weather, markets, or other unpredictable circumstances.

Subject to B6.6 and when the requirements of B6.66 are met, Purchaser's Operations may be conducted outside Normal Operating Season. "Normal Operating Season" is the period(s) beginning and ending on the dates stated in A16 of any year.

B6.311 Plan of Operations. For timber sales with 2 or more years between award date and Termination Date, within 60 days of final award of contract, Purchaser shall furnish Forest Service a written general Plan of Operations that shall be in addition to the annual Operating Schedule required under B6.31. The Plan of Operations shall set forth planned periods for and methods of road construction, timber harvesting, and completion of slash disposal, erosion control measures, and other contractual requirements. Forest Service written approval of the Plan of Operations is prerequisite to commencement of Purchaser's Operations. Purchaser may revise this Plan of Operations when necessitated by weather, markets, or other unpredictable circumstances, subject to approval of Contracting Officer. In the event of delays beyond the control of Purchaser that qualify for Contract Term Adjustment, the Plan of Operations shall be adjusted by mutual agreement to accommodate the adjusted contract period.

B6.312 Plan of Operations for Road Construction. Annually, prior to start of construction, Purchaser shall submit a supplement to the Plan of Opera-

tions that shall include a schedule of proposed progress and a description of planned measures to be taken to provide erosion control for work in progress, including special measures to be taken on any segments of construction not Substantially Completed prior to periods of seasonal precipitation or runoff. Purchaser shall submit a revised schedule when Purchaser proposes a significant deviation from the progress schedule.

Prior to beginning construction on any portion of Specified Roads identified as sensitive on Plans, Purchaser and Forest Service shall agree on proposed method of construction.

B6.32 Protection of Residual Trees. Purchaser's Operations shall not unnecessarily damage young growth or other trees to be reserved.

B6.33 Safety. Purchaser's Operations shall facilitate Forest Service's safe and practical inspection of Purchaser's Operations and conduct of other official duties on Sale Area. Purchaser has all responsibility for compliance with safety requirements for Purchaser's employees.

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

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

B6.34 Sanitation and Servicing. Purchaser shall take all reasonable precautions to prevent pollution of air, soil, and water by Purchaser's Operations. If facilities for employees are established on Sale Area, they shall be operated in a sanitary manner. In the event that Purchaser's Operations or servicing of equipment result in pollution to soil or water, Purchaser shall conduct cleanup and restoration of the polluted site to the satisfaction of Forest Service.

Purchaser shall maintain all equipment operating on Sale Area in good repair and free of abnormal leakage of lubricants, fuel, coolants, and hydraulic fluid. Purchaser shall not service tractors, trucks, or other equipment on National Forest lands where servicing is likely to result in pollution to soil or water. Purchaser shall furnish oil-absorbing mats for use under all stationary equipment or

equipment being serviced to prevent leaking or spilled petroleum-based products from contaminating soil and water resources. Purchaser shall remove from National Forest lands all contaminated soil, vegetation, debris, vehicle oil filters (drained of free-flowing oil), batteries, oily rags, and waste oil resulting from use, servicing, repair, or abandonment of equipment.

B6.341 Prevention of Oil Spills. If Purchaser maintains storage facilities for oil or oil products on Sale Area, Purchaser shall take appropriate preventive measures to ensure that any spill of such oil or oil products does not enter any stream or other waters of the United States or any of the individual States.

If the total oil or oil products storage exceeds 1,320 gallons in containers of 55 gallons or greater, Purchaser shall prepare a Spill Prevention Control and Countermeasures Plan. Such plan shall meet applicable EPA requirements (40 CFR 112), including certification by a registered professional engineer.

Purchaser shall notify Contracting Officer and appropriate agencies of all reportable (40 CFR 110) spills of oil or oil products on or in the vicinity of Sale Area that are caused by Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, directly or indirectly, as a result of Purchaser's Operations. Purchaser will take whatever initial action may be safely accomplished to contain all spills.

B6.342 Hazardous Substances. Purchaser shall notify the National Response Center and Contracting Officer of all releases of reportable quantities of hazardous substances on or in the vicinity of Sale Area that are caused by Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents, directly or indirectly, as a result of Purchaser's Operations, in accordance with 40 CFR 302.

B6.35 Equipment Cleaning. (a) Areas, known by Forest Service prior to timber sale advertisement, that are infested with invasive species of concern are shown on Sale Area Map. A current list of invasive species of concern and a map showing the extent of known infestations is available at the Forest Supervisor's Office. For purposes of this provision, "Off-Road Equipment" includes all logging and construction machinery, except for log trucks, chip vans, service vehicles, water trucks, pickup trucks, cars, and similar vehicles.

(b) Purchaser shall adhere to the following requirements with regard to cleaning "Off-Road Equipment":

(i) Prior to moving Off-Road Equipment onto the Sale Area, Purchaser shall identify the location of the equipment's most recent operation. Purchaser shall not move any Off-Road Equipment that last operated in an area infested with one or more invasive species of concern onto Sale Area without having cleaned such equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds, and having notified Forest Service, as provided in (iii). If the location of prior operation cannot be identified, then Purchaser shall assume that the location is infested with invasive species of concern.

(ii) Prior to moving Off-Road Equipment from a cutting unit that is shown on Sale Area Map to be infested with invasive species of concern to, or through any other area that is shown as being free of invasive species of concern, or infested with a different invasive species, Purchaser shall clean such equipment of seeds, soil, vegetative matter, and other debris that could contain or hold seeds, and shall notify the Forest Service, as provided in (iii).

(iii) Prior to moving any Off-Road Equipment subject to the cleaning requirements set forth above, Purchaser shall advise Forest Service of its cleaning measures and make the equipment available for inspection. Forest Service shall have 2 days, excluding weekends and Federal holidays, to inspect equipment after it has been made available. After satisfactory inspection or after such 2 day period, Purchaser may move the equipment as planned. Equipment shall be considered clean when a visual inspection does not disclose seeds, soil, vegetative matter, and other debris that could contain or hold seeds. Purchaser shall not be required to disassemble equipment unless so directed by the Forest Service after inspection.

(iv) If Purchaser desires to clean Off-Road Equipment on National Forest land, such as at the end of a project or prior to moving to, or through an area that is free of invasive species of concern, Purchaser shall obtain prior approval from Contracting Officer as to the location for such cleaning and measures, if any, for controlling impacts.

(v) Contracting Officer may order delay, interruption, or modification of this Contract pursuant to B8.33.

(c) Nothing contained in this Section shall be interpreted as creating any warranty on the part of the Forest Service that all locations of invasive species of concern have been described herein, elsewhere in this Contract, or designated on the ground. Following sale advertisement, additional locations may be described or designated, and other species may be added to the list of invasive species of concern. In such event, Contracting Officer may order delay, interruption, or modification of this Contract pursuant to B8.33.

(d) The parties shall promptly communicate with one another with respect to description or designation of additional locations; discovery of locations of new species or new infestation; and, addition of species to the list of invasive species of concern.

B6.36 Acceptance of Work. Upon Purchaser's written request and assurance that work has been completed, Forest Service shall perform an inspection within 5 days, excluding weekends and Federal holidays, so as not to delay unnecessarily the progress of Purchaser's Operations. Such a request may be for acceptance of:

(a) Any reasonable portion of Specified Road listed in the Schedule of Items;

(b) Specific requirements on a subdivision of Sale Area (such as logging, slash disposal, erosion control, or snag felling); or

(c) All contract requirements on a subdivision of Sale Area.

Forest Service may perform such inspections without request from Purchaser.

Within 2 days of inspection, excluding weekends and Federal holidays, Forest Service shall furnish Purchaser with written notice either of acceptance or of work remaining to be done.

In the event that Forest Service is unable to make such inspection within 5 days of Purchaser's request, Purchaser shall be notified in writing of necessity for postponement and time when inspection can be made. The same final approval procedure shall be used at the end of Purchaser's construction period on any completed portion of road.

When all contractual work of Purchaser has been accepted for any subdivision of Sale Area or cutting unit identified on Sale Area Map, subdivision or cutting unit shall be eliminated from Sale Area on written notice of either party to this contract.

B6.361 Acceptance of Specified Roads. Specified Road work may be accepted subject to completion of clearing work that does not affect the road structure when completion is delayed for reasons beyond control of Purchaser, such as adverse weather.

Specified Road work may be accepted subject to completion of planting and seeding for soil stabilization when completion is delayed for reasons beyond control of Purchaser, such as seasonal limitations. Purchaser shall complete planting or seeding on such road during the next suitable planting season.

Specified Road work may be conditionally accepted prior to the application of dust palliatives when application is not necessary to prevent dusting of the road surface due to climatic conditions. Purchaser shall apply dust palliative on such roads prior to use during periods when dusting may occur.

Prior to request for final inspection, Specified Road work, roadways, borrow pits, and quarries, occupied and no longer needed by Purchaser in connection with Purchaser's Operations, shall be cleared of all rubbish, excess materials, and temporary structures.

B6.4 Conduct of Logging. Unless otherwise specifically provided herein, Purchaser shall fell trees designated for cutting and shall remove the portions that meet Utilization Standards, as provided in B2.2, prior to acceptance of subdivision for completion of logging under B6.36. Forest Service may make exceptions for occasional trees inadvertently not cut or trees or pieces not removed for good reason, including possible damage to forest resources or gross economic impracticability at the time of removal of other timber. Logging shall be conducted in accordance with the following, unless C6.4 provisions set forth requirements to meet special or unusual logging conditions:

B6.41 Felling and Bucking. Felling shall be done to minimize breakage of Included Timber and damage to residual timber. Unless agreed otherwise, felling shall be done by saws or shears. Bucking shall be done to permit removal of all minimum pieces set forth in A2.

Purchaser may buck out cull material when necessary to produce pieces meeting Utilization Standards. Such bucked out material shall contain a minimum amount of sound wood, not in excess of the net scale in percentage of gross scale, or based on the merchantability factor, whichever is stated in A2. If necessary to assess extent of defect, Purchaser shall make sample saw cuts or wedges.

B6.411 Felling in Clearings. Insofar as ground conditions, tree lean, and shape of clearings permit, trees shall be felled so that their tops do not extend outside Clearcutting Units, construction clearings, and areas of regeneration cutting.

B6.412 Stump Heights. Stumps shall not exceed, on the side adjacent to the highest ground, the maximum heights set forth in A6, except that occasional stumps of greater heights are acceptable when Purchaser determines that they are necessary for safe and efficient conduct of logging. Unless otherwise agreed, Purchaser shall re-cut high stumps so they will not exceed heights specified in A6 and shall dispose of severed portions in the same manner as other logging debris. The stump heights shown in A6 were selected with the objective of maximum reasonable utilization of the timber, unless Sale Area Map shows special areas where stump heights are lower for aesthetic, land treatment, or silvicultural reasons.

B6.413 Bucking Lengths. Trees shall be bucked in various lengths to obtain the greatest utilization of material meeting Utilization Standards.

B6.414 Limbing. When Forest Service determines it is necessary to minimize damage to the residual stand during skidding, Purchaser shall cut exposed limbs from products prior to skidding. Purchaser may leave uncut those limbs that cannot be cut with reasonable safety.

B6.42 Skidding and Yarding. Methods of skidding or yarding specified for particular areas, if any, are indicated on Sale Area Map. Outside Clearcutting Units and construction clearings, insofar as ground conditions permit, products shall not be skidded against reserve trees or groups of reproduction and tractors shall be equipped with a winch to facilitate skidding.

B6.421 Rigging. Insofar as practicable, needed rigging shall be slung on stumps or trees designated for cutting.

B6.422 Landings and Skid Trails. Location of all landings, tractor roads, and skid trails shall be agreed upon prior to their construction. The cleared or excavated size of landings shall not exceed that needed for efficient skidding and loading operations.

B6.423 Skidding on Roads. Products may be skidded on permanent roads authorized for hauling under B5.12 only by prior written agreement.

B6.424 Arches and Dozer Blades. Unless otherwise specified in C6.424, skidding tractors equipped with pull-type arches or dozer blades wider than tractor width or C-frame width, whichever is greater, shall not be used in residual timber outside Clearcutting Units and other authorized clearings, except on constructed tractor

roads or landings, unless there is written agreement that residual timber will not be damaged materially by such use.

B6.5 Streamcourse Protection. "Streamcourses" that are subject to provisions of this Section are shown on Sale Area Map. Unless otherwise agreed, the following measures shall be observed to protect Streamcourses:

(a) Purchaser's Operations shall be conducted to prevent debris from entering Streamcourses, except as may be authorized under paragraph (d). In event Purchaser causes debris to enter Streamcourses in amounts that may adversely affect the natural flow of the stream, water quality, or fishery resource, Purchaser shall remove such debris as soon as practicable, but not to exceed 2 days, and in an agreed manner that will cause the least disturbance to Streamcourses.

(b) Culverts or bridges shall be required on Temporary Roads at all points where it is necessary to cross Streamcourses. Such facilities shall be of sufficient size and design and installed in a manner to provide unobstructed flow of water and to minimize damage to Streamcourses. Trees or products shall not be otherwise hauled or yarded across Streamcourses unless fully suspended.

(c) Wheeled or track-laying equipment shall not be operated in Streamcourses, except at crossings designated by Forest Service or as essential to construction or removal of culverts and bridges.

(d) Flow in Streamcourses may be temporarily diverted only if such diversion is necessary for Purchaser's planned construction and Forest Service gives written authorization. Such flow shall be restored to the natural course as soon as practicable and, in any event, prior to a major storm runoff period or runoff season.

B6.6 Erosion Prevention and Control. Purchaser's Operations shall be conducted reasonably to minimize soil erosion. Equipment shall not be operated when ground conditions are such that excessive damage will result. Purchaser shall adjust the kinds and intensity of erosion control work done to ground and weather conditions and the need for controlling runoff. Erosion control work shall be kept current immediately preceding expected seasonal periods of precipitation or runoff.

If Purchaser fails to do seasonal erosion control work prior to any seasonal period of precipitation or runoff, Forest Service may temporarily assume responsibility for the work and any unencumbered deposits hereunder may be used by Forest Service to do the work. If needed for such work, Purchaser shall make additional deposits on request by Forest Service. Any money deposited or used for this purpose shall be treated as cooperative deposits under B4.218.

B6.61 Meadow Protection. Reasonable care shall be taken to avoid damage to the cover, soil, and water in meadows shown on Sale Area Map. Vehicular or skidding equipment shall not be used on meadows, except where roads, landings, and tractor roads are approved under B5.1 or B6.422. Unless otherwise agreed, trees felled into meadows shall be removed by endlining.

Resulting logging slash shall be removed where necessary to protect cover, soil, and water.

B6.62 Wetlands Protection. Wetlands requiring protection under Executive Order 11990 are shown on Sale Area Map. Vehicular or skidding equipment shall not be used in such wetlands, except where roads, landings, and tractor roads are approved under B5.1 or B6.422. Additional measures needed to protect such areas are provided in C6.62.

B6.63 Temporary Roads. As necessary to attain stabilization of roadbed and fill slopes of Temporary Roads, Purchaser shall employ such measures as out-sloping, drainage dips, and water-spreading ditches.

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

B6.631 Temporary Roads to Remain Open. To maintain short term access to portions of Sale Area for post-sale treatments and other purposes after a Temporary Road has served Purchaser's purpose, pursuant to B6.63, Purchaser agrees, that on Temporary Roads designated on Sale Area Map as "Remain Open," to construct cross ditches and water bars, as designated, staked, or otherwise directed by Forest Service, that can be traversed by a normal two-wheel drive pickup truck. On "Remain Open" Temporary Roads, all bridges and culverts shall remain in place and ditches shall not be eliminated. All drainage structures shall be left in functional condition.

B6.64 Landings. After landings have served Purchaser's purpose, Purchaser shall ditch and slope them to permit water to drain or spread. Unless agreed otherwise, cut and fill banks around landings shall be sloped to remove overhangs and otherwise minimize erosion.

B6.65 Skid Trails and Fire Lines. Purchaser shall construct cross ditches and water-spreading ditches on tractor roads and skid trails, where staked or otherwise marked on the ground by Forest Service. Forest Service shall designate cross ditching on Purchaser-built fire lines prior to or during construction. By agreement, Purchaser may use other comparable erosion control measures, such as backblading skid trails, in lieu of cross ditching.

B6.66 Current Operating Areas. Where logging or road construction is in progress but not completed, unless agreed otherwise, Purchaser shall, before operations cease annually, remove all temporary log culverts and construct temporary cross drains, drainage ditches, dips, berms, culverts, or other facilities needed to control erosion.

Such protection shall be provided, prior to end of a Normal Operating Season, for all disturbed, unprotected ground that is not to be disturbed further prior to end of

operations each year, including roads and associated fills, tractor roads, skid trails, and fire lines. When weather permits operations after Normal Operating Season, Purchaser shall keep such work on any additional disturbed areas as up to date as practicable.

B6.67 Erosion Control Structure Maintenance. During the period of this contract, Purchaser shall provide maintenance of soil erosion control structures constructed by Purchaser until they become stabilized, but not for more than 1 year after their construction. Contracting Officer may agree to perform such structure maintenance under B4.218, if requested by Purchaser, subject to agreement on rates. Purchaser shall not be responsible for repair of such structures damaged by other National Forest users whose activities are not a part of Purchaser's Operations.

B6.7 Slash Disposal. Purchaser's timing of product removal and preparatory work shall not unnecessarily delay slash disposal. Specific slash disposal measures to be employed by Purchaser are stated in C6.7 and are in addition to Required Deposits for slash disposal.

B6.8 Scaling. "Scaling," as used herein, involves:

(a) Various volume determination methods, such as log rule, sampling, measuring, linear measuring, counting, weighing, or another method or combination of methods;

(b) Various sites, such as truck Scaling stations, rollways, weighing stations, woods landings, water Scaling stations, or other sites; and

(c) Various geographic locations.

B6.81 Scaling Services. Scaling services shall be performed by Forest Service personnel or parties under contract to Forest Service, except that weighing services may be performed by personnel or parties approved by Forest Service. Scaling shall be provided in accordance with the instructions and specifications in A9. Scalers shall be currently certified to perform accurate Scaling services. The Scaling services provided shall be selected exclusively by Forest Service.

Scaling services may be Continuous, Intermittent, or Extended. "Continuous Scaling Services" is Scaling at one site five (5) 8-hour shifts a week, exclusive of Sundays and Federal holidays. "Intermittent Scaling Services" are non-continuous Scaling services. "Extended Scaling Services" are Scaling services exceeding Continuous Scaling Services and may include Sundays and designated Federal holidays.

Upon written request of Purchaser and approval of Contracting Officer, Forest Service may provide other services, such as but not limited to grading, tagging, or marking of Scaled logs.

B6.811 Scaling Location. Forest Service shall provide Scaling services at the Scaling site(s) shown in A10. The Scaling site(s) shown in A10 normally will be a non-exclusive site where more than one National Forest timber sale Purchaser may be served.

Purchaser may request, in writing, an alternate Scaling site, such as at a private mill yard, private truck ramp, or a privately operated log transfer facility. Contracting Officer may approve an alternate Scaling site, when Contracting Officer determines that Scaling conditions at an

alternate site are acceptable. Such conditions shall include at a minimum:

- (a) Scaler safety and comfort,
- (b) Product accountability and security,
- (c) Facilities and practices conducive to accurate and independent Scaling, and
- (d) The ability to provide for remote check Scaling.

Upon approval of an alternate Scaling site, Forest Service and Purchaser shall enter into a written memorandum of agreement governing Scaling at that alternate location. Purchaser agrees that Forest Service personnel or persons under contract with Forest Service shall perform Scaling services at an alternative Scaling site. In no instance shall Purchaser or employees of Purchaser perform Scaling services.

B6.812 Scaling Adjustments. Forest Service shall check the accuracy of the Scaling performed on National Forest logs. Scaling will be satisfactory if performed within the accuracy standards stated in governing instructions identified in A9. In the event Forest Service check Scale(s) shows a variance in net Scale in excess of the allowable variance, an adjustment to volume reported Scaled may be made by Forest Service.

Such adjustment will be based on the difference between Forest Service check Scale(s) and original Scale for sale volume Scaled within the adjustment period. The volume to which this difference will be applied will be:

(a) One-half of the volume Scaled between the last satisfactory check Scale and the first unsatisfactory check Scale or, if a period of 120 days or more occurs without Scaling National Forest timber for stumpage, the adjustment will be applied to 100 percent of the volume Scaled after this period and

(b) 100 percent of the volume Scaled between unsatisfactory check Scales and

(c) One-half of the volume Scaled between the last unsatisfactory check Scale and the next satisfactory check Scale, or if no satisfactory check Scale is completed and a period of 120 days or more occurs without Scaling of National Forest timber for stumpage, the adjustment will be applied to 100 percent of the volume Scaled since the last unsatisfactory check Scale.

Adjustments may increase or decrease the original Scaled volume. Adjustments will be applied to Timber Sale Account to correct charges for Included Timber, plus deposits, Scaled during the adjustment period.

B6.813 Delayed or Interrupted Scaling Services. In the event Scaling services are delayed or interrupted, Purchaser shall discontinue hauling. Purchaser agrees that in the event such a delay or interruption occurs for reasons not caused by Purchaser, its sole and exclusive remedy shall be:

- (a) Contract Term Adjustment and
- (b) Out-of-Pocket Expenses incurred as a direct result of the delay or interruption of Scaling services under this Item.

Purchaser further agrees that no logs will be presented for Scaling outside agreed upon Scaling services schedule.

B6.814 Weighing Services. Weighing services for stumpage payment purposes may be provided by either public or privately owned and operated weighing facilities. A "Weighing Services Agreement," approved by the Forest Supervisor, must be executed at each weighing facility providing weighing services.

Scales used to weigh National Forest products for payment purposes must be a currently certified scale in accordance with State law and be capable of weighing the entire load of logs in a single operation. The weighing of less than the entire load or weighing two loads at once is prohibited. Unless otherwise agreed, the minimum sized weighing facility shall be a 60-ton capacity scale with a 10 foot by 70 foot platform or larger. The weighmaster must work in a position where it is possible to verify that the truck wheels are on or off the scales.

Weighing facilities shall meet the following minimum requirements:

- (a) Be an electronic design,
- (b) Use electronic load cells or have a fully enclosed and sealed weigh-beam,
- (c) Have digital weight meters sealed with a seal approved by the State,
- (d) Have a zero interlocking device on the printer,
- (e) Have an automatic zero-setting mechanism,
- (f) Have an automatic motion-detecting device,
- (g) Be shielded against radio or electromagnetic interference, and
- (h) Have a date and time stamp and gross and tare weights that print electronically with each weighing. Contracting Officer may waive electronic printing for public or third party weighing facilities.

Purchaser shall bear all charges or fees for weighing services.

B6.82 Presentation for Scaling. Purchaser shall present products so that they may be Scaled in an economical and safe manner. If prior to Scaling, Included Timber is to be mixed with other timber, Purchaser shall, prior to mixing, provide for distinguishing, by means approved by Forest Service, each product included in this contract.

Trees or pieces presented for Scaling that have not been bucked to separate material meeting minimum piece standards from material not meeting minimum piece standards due to diameter, shall be Scaled as though such bucking had been done.

Deductions made for rot, check, or other defects resulting from abnormal delay in Scaling caused by Purchaser shall be recorded separately and charged to Timber Sale Account under B3.47.

Any timber that has been removed from Sale Area during the period of this contract, but remains unscaled after Termination Date, shall be Scaled at the earliest reasonable date.

B6.83 Scaling Other Products. The Scaled volume of material presented for Scaling in forms other than those stated in A2, when appropriate, shall be converted to the A2 unit of measure by the application of standard converting factors and procedures in effect at the time the

sale was sold. Other converting factors may be used by written agreement.

B6.84 Accountability. When Scaling is performed away from Sale Area, products shall be accounted for in accordance with Forest Service written instructions or an Accountability Agreement between Forest Service and Purchaser and as follows:

(a) Purchaser shall plainly mark or otherwise identify products prior to hauling in accordance with B6.842;

(b) Forest Service shall issue removal receipts to Purchaser;

(c) Purchaser shall assign a competent individual at the landing to complete removal receipts and attach them to each load of products removed from Sale Area;

(d) Removal receipts shall be returned to Forest Service at periodic intervals;

(e) When products are in transit, the truck driver shall possess or display removal receipt and show it upon request as evidence of authority to move products;

(f) The scaler's portion of removal receipt shall be surrendered at point of Scaling, the unloading point, or as requested by Forest Service; and

(g) Purchaser shall notify Forest Service of lost or off-loaded logs and their location within 12 hours of such loss.

Purchaser shall not place products in storage for deferred Scaling until an accountability system has been agreed to in writing for a stated period.

B6.841 Route of Haul. As part of the annual Operating Schedule, Purchaser shall furnish a map showing the route of haul over which unscaled products will be transported from Sale Area to the approved Scaling location. Such route of haul shall be the shortest, most economical haul route available between the points.

Upon advance written agreement, other routes may be approved. All unscaled products removed from Sale Area shall be transported over the designated routes of haul. Purchaser shall notify Forest Service when a load of products, after leaving Sale Area, will be delayed for more than 12 hours in reaching Scaling location.

Purchaser shall require truck drivers to stop, if requested by Forest Service, for the following reasons:

(a) For accountability checks when products are in transit from Sale Area to the designated Scaling location or

(b) For a remote check Scale when products are in transit after being truck Scaled at the designated Scaling location.

Purchaser and Forest Service shall agree to locations for accountability checks and remote check Scales in advance of haul. Such locations shall be established only in areas where it is safe to stop trucks.

Forest Service shall notify Purchaser of the methods to be used to alert truck drivers of an impending stop.

B6.842 Product Identification. Before removal from Sale Area, unless Contracting Officer determines that circumstances warrant a written waiver or adjustment, Purchaser shall:

(a) Hammer brand all products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter.

(b) West of the 100th meridian, paint with a spot of highway-yellow paint all domestic processing products that are eight (8) feet or more in length and one-third (1/3) or more sound, on each end that is seven (7) inches or more in diameter. Each paint spot must be not less than three (3) square inches in size.

Contracting Officer shall assign brands and, if Sale Area is within a State that maintains a log brand register, brands shall be registered with the State. Purchaser shall use assigned brand exclusively on logs from this sale until Contracting Officer releases brand. Purchaser will furnish and apply highway-yellow paint of a lasting quality (oil-base or equivalent).

All hammer brands and/or highway-yellow paint must remain on logs until they are domestically processed. Purchaser shall replace identifying marks if they are lost, removed, or become unreadable. Purchaser may remanufacture products into different log lengths. Except for logs remanufactured as part of the mill in-feed process immediately before processing, remanufactured products must be rebranded with the assigned timber sale brand and repainted with highway-yellow paint, unless otherwise agreed to in writing by Contracting Officer. For such remanufactured products, Contracting Officer may approve use of a brand to be used exclusively as a catch brand, in lieu of the assigned timber sale brand.

B6.85 Scaling Lost Products. The volume of lost products shall be determined by the best methods currently available, using data from the records for the period in which the loss occurred or the most applicable period if loss should occur substantially after cutting. In the absence of specific information indicating size or species of lost products, species distribution and volume for entire truckloads shall be assumed to be the same as the average volume Scaled per truck during the report period, and for individual products it shall be assumed that the volume and species were the average volume of the highest priced species Scaled during the report period.

B6.851 Scaling Lost Sample Loads. If Scaling is being done by sampling loads of logs, Purchaser 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 will be considered as lost sample loads. It will be difficult, if not impossible, to determine the volume and species contained in such loads for payment purposes. Therefore, lost sample loads will be deemed to have a Scale volume and species composition equal to that of the highest value load Scaled during the sampling period, as established by Forest Service. If no sample loads were Scaled during the period, the Scale data for the high valued load will 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-Scaled loads.

B6.86 Scale Reports. Forest Service shall provide Purchaser a copy of Forest Service scaler's record, if requested in writing.

B6.9 Records. Upon request, Purchaser shall provide access to appropriate annual records in Purchaser's books and accounts to enable Forest Service to obtain and analyze accurate operating costs and selling price data for appropriate use in appraising Federal timber. Operating cost and selling price data shall include that applicable for appraising timber obtained from Federal sources in or processed in the Region. Purchaser shall provide access to such data on behalf of subsidiary entities owned or controlled by Purchaser to the extent they participate in harvesting, manufacturing, or marketing timber into products recognized in National Forest timber appraisals in the area. To a like extent, Purchaser shall request in writing Purchaser's contractors and Subcontractors to make such data available to Forest Service.

Information so obtained shall be treated as confidential, as provided in regulations issued by the Secretary of Agriculture (7 CFR 1.12), and shall be available for review by parties from whom such data are obtained.

B7.0—FIRE PRECAUTIONS AND CONTROL

B7.1 Plans. Prior to initiating Purchaser's Operations during Fire Precautionary Period, Purchaser shall file with Forest Service a Fire Prevention and Control Plan providing for the prevention and control of fires on Sale Area and other areas of Purchaser's Operations. Such plan shall include a detailed list of personnel and equipment at Purchaser's disposal for implementing the plan. This requirement may be met by preparing a single plan for more than one timber sale.

B7.2 Fire Precautions. Specific fire precautionary measures listed in C7.2 shall be applicable during Purchaser's Operations in "Fire Precautionary Period" described in A12. Contracting Officer may change the dates of Fire Precautionary Period by advance written notice, if justified by unusual weather or other conditions. Required tools and equipment shall be kept in serviceable condition and immediately available for fire fighting at all times during Purchaser's Operations in Fire Precautionary Period.

B7.21 Substitute Precautions. Forest Service may authorize substitute measures or equipment, or waive specific requirements by written notice, if substitute measures or equipment will afford equal protection or some of the required measures and equipment are unnecessary.

B7.22 Emergency Precautions. Forest Service may require the necessary shutting down of equipment on portions of Purchaser's Operations, as specified by the emergency fire precautions schedule of C7.22. Under such conditions, after Purchaser ceases active operations, Purchaser shall release for hire by Forest Service, if needed, Purchaser's shutdown equipment for fire standby on Sale Area or other areas of Purchaser's Operations and personnel for fire standby or fire patrol, when such personnel and equipment are not needed by Purchaser for other fire fighting or protection from fire. Equipment shall be paid for at fire fighting equipment rates common

in the area or at prior agreed rates and, if Purchaser requests, shall be operated only by personnel approved by Purchaser. Personnel so hired shall be subject to direction and control by Forest Service and shall be paid by Forest Service at fire fighting rates common in the area or at prior agreed rates.

B7.3 Fire Control. Purchaser shall, both independently and in cooperation with Forest Service, take all reasonable and practicable action to prevent and suppress fires resulting from Purchaser's Operations and to suppress any forest fire on Sale Area. Purchaser's independent initial fire suppression action on such fires shall be immediate and shall include the use of all necessary personnel and equipment at Purchaser's disposal on Sale Area or within the distance of Sale Area stated in A13.

B7.31 Purchaser's Reinforcement Obligations. Whenever an Operations Fire or Negligent Fire, whether on or off Sale Area, or any other forest fire on Sale Area, has not been suppressed by initial action and appreciable reinforcement strength is required, Forest Service may require further actions by Purchaser until such fire is controlled and mopped up to a point of safety. Such actions may include any or all of the following as necessary to fight such fire:

B7.311 Suspend Operations. To suspend any or all of Purchaser's Operations.

B7.312 Personnel. To release for employment by Forest Service any or all of Purchaser's personnel engaged in Purchaser's Operations or timber processing within the distance of Sale Area stated in A13. Any organized crew so hired shall include Purchaser's supervisor, if any. Personnel so employed shall be paid at Forest Service standard emergency fire fighting rates.

B7.313 Equipment. To make available for Forest Service rental at fire fighting equipment rates common in the area or at prior agreed rates any or all of Purchaser's equipment suitable for fire fighting and currently engaged in Purchaser's Operations within the distance of Sale Area stated in A13. Equipment shall be operated only by personnel approved by Purchaser, if so requested by Purchaser.

B7.4 Fire Suppression Costs. Purchaser's obligations for cost of fire suppression vary according to three classifications of fires as follows:

B7.41 Operations Fire. An "Operations Fire" is a fire caused by Purchaser's Operations other than a Negligent Fire.

Forest Service, except as provided in B7.3, shall use cooperative deposits under B4.218 to perform fire suppression activities on Operations Fires. Purchaser agrees to reimburse Forest Service for such cost for each Operations Fire, subject to a maximum of the dollar amount stated in A14. The cost of Purchaser's actions, supplies, and equipment on any such fire provided pursuant to B7.3, or otherwise at the request of Forest Service, shall be credited toward such maximum. If Purchaser's actual cost exceeds Purchaser's obligation stated in A14, Forest Service shall reimburse Purchaser for the excess.

B7.42 Negligent Fire. A "Negligent Fire" is a fire caused by negligence or fault of Purchaser's Operations,

including, but not limited to, one caused by smoking by persons engaged in Purchaser's Operations during the course of their employment, or during rest or lunch periods; or if Purchaser's failure to comply with the requirements of B7.2 and B7.3 results in a fire starting or permits a fire to spread. Damages and the cost of suppressing Negligent Fires shall be borne by Purchaser.

B7.43 Other Fires on Sale Area. Forest Service shall pay Purchaser, at fire fighting rates common in the area or at prior agreed rates, for equipment or personnel furnished by Purchaser pursuant to B7.3, or otherwise at the request of Forest Service, on any fire on Sale Area other than an Operations Fire or a Negligent Fire.

B7.5 State Law. Purchaser shall not be relieved by the terms of this contract of any liability to the United States for fire suppression costs recoverable in an action based on State law, except for such costs resulting from Operations Fires. Amounts due Purchaser for fire fighting expenditures in accordance with B7.41 shall not be withheld pending settlement of any such claim or action based on State law.

B7.6 Performance by Contractor. Where Purchaser's employees, agents, contractors, Subcontractors, or their employees or agents perform Purchaser's Operations in connection with fire responsibilities, Purchaser's obligations shall be the same as if performance was by Purchaser.

B8.0—OTHER CONDITIONS

B8.1 Title and Liability.

B8.11 Title Passage. All right, title, and interest in and to any Included Timber shall remain in Forest Service until it has been cut, Scaled, removed from Sale Area or other authorized cutting area, and paid for, at which time title shall vest in Purchaser. For purposes of this Subsection, timber cut under cash deposit or payment guarantee under B4.3 shall be considered to have been paid for. Title to any Included Timber that has been cut, Scaled, and paid for, but not removed from Sale Area or other authorized cutting area by Purchaser on or prior to Termination Date, shall remain in Forest Service.

B8.12 Liability for Loss. If Included Timber is destroyed or damaged by an unexpected event that significantly changes the nature of Included Timber, such as fire, wind, flood, insects, disease, or similar cause, the party holding title shall bear the timber value loss resulting from such destruction or damage; except that such losses after removal of timber from Sale Area, but before Scaling, shall be borne by Purchaser at Current Contract Rates and Required Deposits. Deterioration or loss of value of salvage timber is not an unexpected event, except for deterioration due to delay or interruption that qualifies for Contract Term Adjustment or under B8.33.

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

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

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

B8.2 Period of Contract. All obligations of Purchaser shall be discharged not later than "Termination Date" stated in A15, unless it is adjusted pursuant to B8.21 or B8.212 or extended pursuant to B8.23 or B8.32, excepting only those obligations for which Forest Service has given written permission to delay performance. Such written permission shall be considered a Contract Term Adjustment for the purpose of Purchaser completing performance of obligations covered by such permission.

B8.21 Contract Term Adjustment. "Contract Term Adjustment" 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 (b) in this Subsection.

To qualify for such adjustment, Purchaser shall give written notice of the lost time not later than 30 days after end of 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 Forest Service considers as qualifying for the adjustment. Lost portions of days shall be disregarded in computing time lost. The three circumstances qualifying for a Contract Term Adjustment are:

(a) Purchaser experiences delay in starting scheduled operations or interruptions in active operations, either of which stops removal of Included Timber from Sale Area through curtailment in felling and bucking, yarding, skidding and loading, hauling, or road construction, as scheduled under B6.31, for 10 or more consecutive days during a Normal Operating Season due to causes beyond Purchaser'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.

(b) Causes described in paragraph (a) substantially affect the disposition or processing of Included Timber during 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, Contract Term Adjustment shall not extend for more than 12 consecutive months.

(c) (i) Contracting Officer requests Purchaser, in writing, to delay or interrupt operations during the Normal Operating Season for any purpose other than suspension under B4.4 or B9.3 or

(ii) Purchaser suffers a delay or interruption of Purchaser's Operations affecting skidding, yarding, and loading because of fire emergency closure ordered by Forest Service (or another agency in its behalf), and the total of such lost time is 10 or more days during any Normal Operating Season.

If Termination Date is adjusted, as described in this Subsection, and later extended under B8.23, 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 Termination Date, shall be the adjusted Termination Date.

B8.211 Delay in Reconstruction of Processing Facilities. Notwithstanding the 12-month limitation in B8.21, if Purchaser demonstrates a diligent effort has been made to replace primary timber processing facilities and that delays in doing so have been beyond Purchaser's control, Contracting Officer may authorize Contract Term Adjustment up to a total of 24 months.

B8.212 Market-Related Contract Term Addition. 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 A20. Purchaser 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 Purchaser'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. Contracting Officer must receive Purchaser's written request for a market-related contract term addition before the expiration of this contract.

The total amount of contract term addition is limited to the lesser of twice the length of the original contract or 3 years. The revised contract term may not 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 will result from delay.

B8.22 Termination for Catastrophe. In event of Catastrophic Damage, this contract may be modified under B8.32, following rate redetermination under B3.32, or terminated under this Subsection. Such termination shall not be considered a termination under B8.34.

B8.221 Termination by Purchaser. This contract shall be terminated, upon election and written notice by Purchaser, if Catastrophic Damage rate redetermination under B3.32 shows that the appraised weighted average Indicated Advertised Rate of all Included Timber remaining immediately prior to the catastrophe has been reduced through Catastrophic Damage

by an amount equal to or more than the weighted average Current Contract Rate.

"Indicated Advertised Rates" are Forest Service estimates of fair market value of the timber.

B8.222 Termination by Forest Service. This contract may be terminated by written notice from Contracting Officer, if there is Catastrophic Damage and Purchaser does not agree, under B8.32, within 30 days of receipt from Contracting Officer of contract modifications proposed to permit the harvest of the catastrophe-affected timber.

B8.23 Contract Term Extension. "Contract Term Extension" means an extension of the term of this contract, at the request of Purchaser, under this Subsection. This Subsection does not obligate Contracting Officer to grant Contract Term Extension.

When such extension is made, Forest Service shall make an appraisal using standard Forest Service methods and appraisal data in effect 45 days prior to the original Termination Date. Bid Premium Rates shall be added to such appraised rates to establish Flat Rates or Tentative Rates for the extension period. In event rates so established would develop Current Contract Value immediately prior to such an extension that is less than Current Contract Value at that time, Flat Rates and Tentative Rates in effect immediately prior to extension shall be retained for the extension period.

In consideration for granting an extension, Purchaser shall pay the Government for Purchaser's failure to cut and remove timber meeting Utilization Standards prior to Contract Term Extension, an amount that shall be the total of the costs to the Government resulting from the delay in harvest of Included Timber. Such costs will be determined by Forest Service and shall include, but not be limited to, the following:

(a) Interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on Current Contract Value of timber remaining on Sale Area, less the credit balance of any deposit made pursuant to B4.213, as of the original Termination Date, or as adjusted pursuant to B8.21 or B8.212, until the midpoint of the extension period;

(b) Increased costs of regeneration, including nursery stock loss, carryover, or replacement costs; and

(c) Costs of remarking timber on Sale Area, reestablishing cutting unit boundaries, and/or remarking areas requiring protection on Sale Area.

B8.231 Conditions for Contract Term Extension. Contracting Officer may grant Purchaser's written request for Contract Term Extension, if Purchaser has met all of the following conditions at time of Purchaser's request:

(a) At least 75 percent of estimated volume in A2 has been cut and removed from Sale Area.

(b) Specified Roads needed by Purchaser for removal of all Included Timber, in accordance with the approved Plan of Operations submitted pursuant to B6.311, were constructed and accepted by Forest Service prior to the applicable road completion date shown in C5.13.

(c) Purchaser's Operations to date have been in reasonable compliance with contract terms and the approved Plan of Operations under B6.311.

(d) All contractual requirements have been met by Purchaser and accepted by Forest Service on area cut over at time of Purchaser's request, except for areas where logging is in progress at time of Purchaser's request. Purchaser's burning of current slash or seeding or planting for erosion control may be temporarily waived, if weather or other considerations make such work impractical.

(e) Any payment required under B4.213 has been made.

Contract Term Extension shall not become effective, unless payments required by B8.23 have been paid and the initial Extension Deposit required by B4.217 has been made by the effective date of any extension.

B8.3 Contract Modification. The conditions of this timber sale are completely set forth in this contract. Except as provided in B8.32 and B8.33, this contract can be modified only by written agreement between the parties. Only Contracting Officer may make contract modifications, with compensating adjustments to Current Contract Rates where appropriate, on behalf of Forest Service.

B8.31 Changed Conditions. When it is agreed that the completion of certain work or other requirements hereunder would no longer serve the purpose intended because of substantial change in the physical conditions of Sale Area or Included Timber since the date of this contract, the requirements shall be waived in writing. The estimated cost of such waived work or other requirement shall be charged to Timber Sale Account.

B8.32 Modification for Catastrophe. In event of Catastrophic Damage, Forest Service, in consultation with Purchaser, shall outline on Sale Area Map:

(a) Any areas of catastrophe-affected live and dead timber meeting Utilization Standards and having undesignated timber so situated that it should be logged with the designated timber;

(b) If needed, any such areas where the damaged undesignated timber can reasonably be logged separately; and

(c) Areas of affected or unaffected timber that are to be eliminated from Sale Area.

Forest Service shall locate and post the boundaries of all such areas, as needed.

After Sale Area Map has been outlined under this Subsection, Forest Service may propose contract modification to permit the harvest of catastrophe-affected timber. If Purchaser accepts Forest Service proposed modifications, this contract shall be modified to include rates redetermined under B3.32 and other related revisions as necessary, such as revision of Operating Schedule to ensure prompt removal of affected timber when necessary to avoid further loss and provision for additional contract time, if needed.

B8.33 Contract Suspension and Modification.

(a) Contracting Officer may, by written order, delay or interrupt authorized operations under this contract or,

notwithstanding B8.3, modify this contract, in whole or in part:

(i) To prevent environmental degradation or resource damage, including, but not limited to, harm to habitat, plants, animals, cultural resources, or cave resources;

(ii) To ensure consistency with land and resource management plans or other documents prepared pursuant to the National Environmental Policy Act of 1969, 42 USC 4321-4347;

(iii) To conduct environmental analysis, including, but not limited to, engaging in consultation pursuant to the Endangered Species Act of 1973, 16 USC 1531, et seq.; or

(iv) Upon agreement of the Regional Forester, due to administrative appeal or litigation, regardless of whether Contracting Officer's order is required by a court order or this contract is named in such a proceeding.

(b) In the event of an order delaying or interrupting Purchaser's Operations under this Subsection, Purchaser's remedy shall be:

(i) Contract Term Adjustment,

(ii) reimbursement for Out-of-Pocket Expenses,

(iii) rate redetermination to measure any decline in the market,

(iv) temporary reduction of downpayment,

(v) temporary credit for unamortized Specified Road construction cost, and

(vi) temporary bond reduction.

However, the foregoing remedies shall be available only to the extent that the Contracting Officer's order was the sole and exclusive cause of the delay or interruption of Purchaser's operations.

(c) In cases of modification under this Subsection, Purchaser shall only receive a rate redetermination pursuant to B3.31. However, if there is an order delaying or suspending operations in addition to a modification, then Purchaser shall also be entitled to the remedies provided under B8.33(b) for such delay or suspension.

(d) Remedies awarded to the Purchaser shall not be duplicative, and Contracting Officer shall have the right to structure remedies provided herein to avoid duplicative compensation.

(e) Purchaser agrees that this Subsection, and the remedies provided herein shall apply regardless of any finding by any court or administrative body that the Forest Service failed to comply with any statute, regulation and/or policy in connection with awarding, advertising, or authorizing this sale, or a similar sale. However, nothing in this Subsection precludes Purchaser from exercising rights under the Contract Disputes Act.

B8.34 Contract Termination This contract may be terminated, in whole or in part, by Forest Service or Purchaser, as provided in Items B8.341 and B8.342, respectively. In the event of any such termination, Purchaser shall be entitled to the applicable remedies, subject to the limitation upon duplicative compensation set forth in B8.33(d). Purchaser agrees that this Subsection, and the remedies contained in the following Items shall apply regardless of any finding by any court or

administrative body that the Forest Service failed to comply with any statute, regulation and/or policy in connection with awarding, advertising, or authorizing this sale, or a similar sale. However, nothing in this Subsection precludes Purchaser from exercising rights under the Contract Disputes Act.

B8.341 Termination by Forest Service.

(a) The Chief or the Chief's designee may unilaterally terminate this contract, in whole or in part, for any of the reasons set forth in paragraph (a) of B8.33.

(b) Purchaser's compensation for termination of this contract under this Item shall be:

(i) refund or release of advanced deposits for timber cut but not removed,

(ii) reimbursement for Out-of-Pocket Expenses, and

(iii) replacement timber under subparagraph (c), and/or liquidated damages under subparagraph (d); provided that liquidated damages shall be available if, and only if, after good faith efforts, the Parties (1) cannot locate replacement timber or agree upon the applicable stumpage price, or (2) the volume of deleted timber exceeds the volume of any replacement timber.

(c) Subject to applicable laws, regulations and policies, Forest Service and Purchaser shall make good faith efforts to identify replacement timber of similar volume, quality, access, and topography within Sale Area. If suitable replacement timber cannot be located within Sale Area, the parties shall expand the search to the National Forest in which the Sale Area is located. Stumpage price shall be adjusted under B3.31 to account for differences between replacement timber and deleted timber. If Forest Service and Purchaser agree upon suitable replacement timber and the applicable stumpage price, then this contract shall not terminate and instead shall be modified pursuant to 36 CFR 223.85(c) and shall remain in force with respect to such replacement timber and, in the case of partial termination, any remaining Included Timber. If the parties cannot agree on suitable replacement timber or the applicable stumpage price of such timber, either party may end the search and Purchaser shall be compensated under subparagraph (d).

(d) Forest Service shall pay as fixed, agreed, and liquidated damages an amount equivalent to 15 percent of the estimated delivered log value of the volume of timber not harvested due to the termination or partial termination. Estimated delivered log value and volume of timber not harvested shall be determined by the Contracting Officer as of Termination Date, using Forest Service methods in use as of the Termination Date.

(e) In any instance of partial termination, in which the Forest Service deletes one or more cutting units from the Sale Area, Purchaser's sole and exclusive remedy with regard to remaining units shall be a rate redetermination pursuant to B3.31. Purchaser shall be required to complete Contract Operations with regard to remaining units and any obligations pertaining to cessation of operations on deleted units, including without limit erosion control, brush disposal, and road maintenance. If Purchaser fails to fulfill any such duty or obligation, then

Contracting Officer may make deductions from compensation due Purchaser, including without limit costs and expenses of completing such work.

B8.342 Termination by Purchaser. (a)

Purchaser may, by written notice, terminate this Contract, in whole or in part, as described herein,

(i) in the event of an order delaying or interrupting its operations pursuant to B8.33, or

(ii) in the event of an order modifying this Contract pursuant to B8.33, if Purchaser decides to reject the terms of the modification prior to its acceptance. Purchaser shall have the right to terminate this Contract in whole only when the Contracting Officer's order under B8.33 applies to all cutting units within the Sale Area. When the order affects only a portion of the cutting units, Purchaser shall have the right to terminate this Contract in part, by deleting one or more of the units covered by the Contracting Officer's order. The foregoing right of termination, in whole or in part, shall not exist when the delay, interruption, or modification arises from wind, flood, landslide, fire, forest pest epidemic, or other major natural phenomenon.

(b) Purchaser's compensation for termination of this Contract, in whole or in part, under this Item shall be:

(i) refund or release of advanced deposits for timber cut but not removed,

(ii) reimbursement for Out-of-Pocket Expenses, and

(iii) if the duration of the delay or interruption exceeds either six months of Normal Operating Season time, or one calendar year from the date of the order, then: replacement timber as provided under (c) and/or liquidated damages under (d); provided that liquidated damages shall be available if, and only if, after good faith efforts, the Parties (1) cannot locate replacement timber or agree upon the applicable stumpage price, or (2) the volume of deleted timber exceeds the volume of any replacement timber.

(c) Subject to applicable laws, regulations and policies, Forest Service and Purchaser shall make good faith efforts to identify replacement timber of similar volume, quality, access, and topography within Sale Area. If suitable replacement timber cannot be located within Sale Area, the parties shall expand the search to the National Forest in which the Sale Area is located. Stumpage price shall be adjusted under B3.31 to account for differences between replacement timber and deleted timber. If Forest Service and Purchaser agree upon suitable replacement timber and the applicable stumpage price, then this contract shall not terminate and instead shall be modified pursuant to 36 CFR 223.85(c) and shall remain in force with respect to such replacement timber and, in the case of partial termination, any remaining Included Timber. If the parties cannot agree on suitable replacement timber or the applicable stumpage price of such timber, either party may end the search and Purchaser shall be compensated under subparagraph (d).

(d) Forest Service shall pay as fixed, agreed, and liquidated damages an amount equivalent to 15 percent of the estimated delivered log value of the volume of

timber not harvested due to the termination or partial termination. Estimated delivered log value and volume of timber not harvested shall be determined by the Contracting Officer as of Termination Date, using Forest Service methods in use as of the Termination Date.

(e) In any instance of partial termination, in which Purchaser deletes one or more cutting units from Sale Area, Purchaser's sole and exclusive remedy with regard to remaining units shall be a rate redetermination pursuant to B3.31. Purchaser shall be required to complete Contract Operations with regard to remaining units and any obligations pertaining to cessation of operations on deleted units, including without limit, erosion control, brush disposal, and road maintenance. If Purchaser fails to fulfill any such duty or obligation, then Contracting Officer may make deductions from compensation due Purchaser, including without limit costs and expenses of completing such work.

B8.35 Out-of-Pocket Expenses. "Out-of-Pocket Expenses" are Unrecovered expenditures arising directly from performing the contract that were rendered unrecovered due to delay, interruption, or termination pursuant to B8.33 or B8.34. An expenditure is "Unrecovered" within the meaning of this Subsection when Purchaser did not gain the benefit of its expenditure because Contract operations were not permitted. In determining whether an expenditure is "Unrecovered," Contracting Officer shall not conclude that an award of liquidated damages constitutes the benefit of that expenditure.

(a) Out-of-Pocket Expenses shall not include, in particular and without limitation, any of the following:

- (i) attorneys fees;
- (ii) costs and expenses of operating a saw mill or other processing facility;
- (iii) expectancy damages; and,
- (iv) anticipatory profits.

(b) Forest Service shall reimburse Purchaser for only the following Out-of-Pocket Expenses:

(i) Out-of-Pocket Expenses for maintenance of the timber sale performance and payment bonds during the period when operations were delayed or interrupted or, if terminated, from the date operations were halted until the expiration of the bonds;

(ii) Out-of-Pocket Expenses for maintenance of the downpayment or other cash deposits during the period when operations were delayed or interrupted or, if terminated, from the date operations were halted until the cash is returned to Purchaser;

(iii) Out-of-Pocket Expenses for the lesser of move-out and move-in or leaving equipment and/or logging camps on site, if the Purchaser and Contracting Officer have agreed to leave equipment and/or logging camps on site in lieu of move-out and move-in;

(iv) Out-of-Pocket Expenses for felling, bucking, lopping, skidding, yarding, and decking any products so processed, but not removed from Sale Area because: (1) the sale was terminated, or (2) the products no longer meet Utilization Standards because of delay or interruption;

(v) If terminated, in whole or in part, Out-of-Pocket Expenses for unamortized Temporary Roads, road maintenance, dust abatement and improvements authorized under B6.2;

(vi) Out-of-Pocket Expenses for the investment in Specified Roads during the period when operations were delayed or interrupted or, if terminated in whole or in part, Out-of-Pocket Expenses for unamortized Specified Road construction and reconstruction; and

(vii) If terminated, in whole or in part, Out-of-Pocket Expenses for bid preparation, including review of sale offering.

(c) Purchaser shall submit documentation of claimed expenditures, including those actually paid and those for which the Purchaser has a legal obligation to pay but has not yet paid, and supporting analysis to Contracting Officer to assist in Contracting Officer's calculation of reimbursement. Contracting Officer shall determine the amount of reimbursement under this Subsection using information from Purchaser and/or Forest Service methods in use on the date that operations were delayed, interrupted, or terminated. Purchaser's failure to substantiate any claimed Out-of-Pocket Expense may constitute grounds for Contracting Officer's denial of reimbursement.

(d) Purchaser shall make reasonable efforts to minimize its Out-of-Pocket Expenses.

B8.36 Termination for Market Change. (a) In the event of delay or interruption under B8.33, exceeding 90 days, and Contract has not been modified to include replacement timber, this contract may be terminated upon election and written notice by Purchaser, if (i) a rate redetermination for market change under B3.33 shows that the appraised weighted average Indicated Advertised Rate of all Included Timber remaining immediately prior to the delay or interruption has been reduced through a market change by an amount equal to or more than the the weighted average Current Contract Rate, or (ii) the appraised value of the remaining timber is insufficient to cover the adjusted base rates as determined under B3.33.

(b) Prior to termination under this Subsection, Purchaser shall complete all obligations on areas not affected by the delay or interruption.

(c) Damages caused by termination of contract under this Subsection will be limited to Out-of-Pocket Expenses.

B8.4 Performance by Other than Purchaser. The acquisition or assumption by another party, under an agreement with Purchaser, of any right or obligation of Purchaser under this contract shall be ineffective as to Forest Service, until Forest Service has been notified of such agreement and Contracting Officer has given written approval. In no case shall such recognition or approval:

(a) Operate to relieve Purchaser of the responsibilities or liabilities Purchaser has assumed hereunder or

(b) Be given unless such other party:

(i) Is acceptable to Forest Service as a Purchaser of timber and assumes in writing all of the obligations to Forest Service under the terms of this contract as to the uncompleted portion thereof, or

(ii) Acquires the rights in trust as security and subject to such conditions as may be necessary for the protection of the public interests.

B8.5 Sale of Other Materials. Forest Service reserves the right to sell from Sale Area during the period of this contract any materials or products not subject to its terms, but shall not permit removal, possession, or use thereof that will materially interfere with Purchaser's Operations. Purchaser shall not be obligated to do any work made necessary by the action of others.

B8.6 Provisions Required by Statute.

B8.61 Covenant against Contingent Fees. Purchaser warrants that no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial agencies maintained by Purchaser for the purpose of securing business. For breach or violation of this warranty, Forest Service shall have the right to annul this contract without liability or to require Purchaser to pay, in addition to the contract price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

B8.62 Officials Not to Benefit. No member of Congress or Resident Commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom, unless it is made with a corporation for its general benefit (18 USC 431, 433).

B8.63 Nondiscrimination in Employment. If the total value of this contract is in excess of \$10,000, Purchaser agrees during its performance as follows:

(a) Purchaser will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. Purchaser will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Purchaser agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by Forest Service setting forth the provisions of this Subsection.

(b) Purchaser will, in all solicitations or advertisements for employees placed by or on behalf of Purchaser, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(c) Purchaser will send to each labor union or representative of workers with which Purchaser has a collective bargaining agreement or other contract or understanding, a notice to be provided by Forest Service, advising the labor union or worker's representative of Purchaser's commitments under this Subsection, and shall

post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) Purchaser shall comply with all provisions of Executive Order No. 11246, as amended by Executive Order No. 11375 and Executive Order No. 12086, and the rules, regulations, and relevant orders of the Secretary of Labor.

(e) Purchaser will furnish all information and reports required by Executive Order No. 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to books, records, and accounts by Forest Service and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In event of Purchaser's noncompliance with this Subsection or with any of such rules, regulations, or orders, this contract may be terminated or suspended, in whole or in part, and Purchaser may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246, as amended, and such other sanctions may be imposed and remedies invoked, as provided in Executive Order or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(g) Purchaser will include the provisions of paragraphs (a) through (f) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246, as amended, so that such provisions will be binding upon each Subcontractor or vendor. Purchaser will take such action with respect to any subcontract or purchase order as Forest Service may direct as a means of enforcing such provisions, including sanctions for noncompliance. Provided, however, that in the event Purchaser becomes involved in, or is threatened with, litigation with a Subcontractor or vendor as a result of such direction by Forest Service, Purchaser may request the United States to enter into such litigation to protect the interests of the United States.

B8.64 Debarment and Suspension Certification. Pursuant to 7 CFR Part 3017, Purchaser shall 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.

Purchaser 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 timber sales, unless Purchaser knows that the certification is erroneous.

Purchaser shall keep the certifications of its Subcontractors on file until timber sale 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 Purchaser is not

required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

If Purchaser knowingly enters into a timber sale 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 timber sales, in addition to other remedies available to the Government, Forest Service may pursue available remedies, including suspension and/or debarment.

The Subcontractor for a timber sale shall complete a "Subcontractor Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion." An example of this certification is shown following the instructions for page 101 of this contract.

B8.65 Contract Consistency With Other Laws.

The contract shall govern if State and local environmental quality laws conflict with or preclude performance of contractual requirements.

B9.0—PERFORMANCE AND SETTLEMENT

B9.1 Performance Bond. As a further guarantee of the faithful performance of the provisions of this contract, Purchaser delivers herewith and agrees to maintain a surety bond in the dollar amount stated in A17, unless the amount is adjusted as provided in B9.11 or B9.13. In lieu of surety bond, Purchaser may deposit into a Federal Depository, as directed by Forest Service under B4.21, and maintain therein, cash in the dollar amount stated in A17 or negotiable securities of the United States having market value at time of deposit of not less than the dollar amount stated in A17.

Any adjustment or extension of time for completion of this contract beyond 1 year may be granted only with the consent of surety on bond or delivery of a new bond. Should the sureties on the bond delivered herewith, or any bond delivered hereafter in connection with this contract, become unsatisfactory to Forest Service, Purchaser shall, within 30 days of receipt of demand, furnish a new bond with surety satisfactory to Forest Service.

B9.11 Bond Reduction. Upon Purchaser's written request, Contracting Officer shall redetermine the amount of Purchaser's performance bond to an amount not less than Purchaser's remaining obligations, including the value of Included Timber remaining on Sale Area, plus the estimated cost of uncompleted work required of Purchaser and any unpaid billings due on the timber sale. Contracting Officer shall provide written notice of the redetermined amount to Purchaser and to Purchaser's surety. Similarly, Contracting Officer shall report to Purchaser in writing the amount of deposited cash or deposited securities required thereafter, if such deposits exist in lieu of a surety bond.

As soon as security for the performance of this contract or the settlement of Claims incident thereto is no longer necessary, appropriate notice shall be given to surety or deposits that may have been made in lieu of surety bond shall be returned to Purchaser, subject to the conditions in B9.5.

B9.12 Letters of Credit. Notwithstanding the provisions of B9.1, approved letters of credit may be used in lieu of a surety bond for performance bond purposes. Such letters of credit shall be subject to approval by Contracting Officer.

B9.13 Temporary Bond Reduction. When, under B8.33, Contracting Officer orders a delay or interruption of Purchaser's Operations for more than 30 days when scheduled operations would be occurring but for the order, the performance bond amount required shall be temporarily reduced upon the written request of Purchaser or at the discretion of Contracting Officer. For the period of the delay or interruption, the performance bond may be reduced to an amount not less than the estimated cost of uncompleted work required of Purchaser and any unpaid billings due on the timber sale.

Upon Purchaser's receipt of written notice from Contracting Officer that the basis for the delay or interruption no longer exists, Purchaser shall restore the performance bond to the full amount shown in A17 within 15 days. Purchaser shall not resume contract operations until the performance bond amount is fully restored.

B9.2 Disputes. This contract is subject to the Contract Disputes Act of 1978 (41 USC 601, *et seq.*). Except as provided in the Contract Disputes Act of 1978, all disputes arising under or relating to this contract shall be resolved in accordance with this Section.

As used herein, "Claim" means a written demand or assertion by one of the parties seeking, as a legal right, the payment of money, adjustment or interpretation of contract terms, or other relief, arising under or relating to this contract. A voucher, invoice, or request for payment that is not in dispute when submitted is not a Claim. However, where such submission is subsequently not acted upon in a reasonable time, or disputed either as to liability or amount, it may be converted to a Claim. A Claim by Purchaser shall be made in writing and submitted to Contracting Officer for decision. A Claim by the Government against Purchaser shall be subject to a decision by Contracting Officer.

For Purchaser Claims of more than \$100,000, Purchaser shall submit with the Claim a certification that the Claim is made in good faith; the supporting data are accurate and complete to the best of Purchaser's knowledge and belief; and the amount requested accurately reflects the contract adjustment for which Purchaser believes the Government is liable. Purchaser, if an individual, shall execute the certification. When Purchaser is not an individual, the certification shall be executed by a senior company official in charge at Purchaser's plant or location involved or by an officer or general partner of Purchaser having overall responsibility for the conduct of Purchaser's affairs.

For Purchaser Claims of \$100,000 or less, Contracting Officer must render a decision within 60 days. For Purchaser Claims in excess of \$100,000, Contracting Officer must decide the Claim within 60 days or notify Purchaser of the date when the decision will be made.

Contracting Officer's decision shall be final unless Purchaser appeals or files a suit.

The authority of Contracting Officer does not extend to Claims or disputes that by statute or regulation other agencies are expressly authorized to decide.

Interest, at the Prompt Payment Rate established by the Secretary of the Treasury, on the amount found due on Purchaser's Claim shall be paid from the date the Claim is received by Contracting Officer until the date of the payment.

Except as the parties may otherwise agree, pending final resolution of a Claim of Purchaser arising under the contract, Purchaser shall proceed diligently with the performance of the contract in accordance with Contracting Officer's decision.

B9.21 Time Limits for Submission of Claim.

Failure by Purchaser to submit a Claim within established time limits shall relinquish the United States from any and all obligations whatsoever arising under the contract or portions thereof. Purchaser shall file such Claim within the following time limits:

(a) When Purchaser constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification of acceptance;

(b) When Forest Service constructs Specified Road, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification authorizing use of road;

(c) For subdivisions or cutting units, Purchaser must file any Claim not later than 60 days after receipt of Forest Service written notification that subdivision or cutting unit has been accepted; and

(d) In all other cases, Purchaser must file any Claim not later than 60 days after receipt of Contracting Officer written notification that timber sale is closed.

B9.22 Contract Documents. All contract documents are intended to be consistent with each other. In case of discrepancy, the following is the order of precedence:

(a) Special Provisions (C)

(b) Sale Area Map

(c) Specific Conditions (A) and Schedule of Items

(d) Standard Provisions (B)

(e) Special project specifications

(f) Plans, such as slash, erosion control, and dust abatement

(g) Agreements between Purchaser and Forest Service, as authorized under the contract

(h) Plans:

(i) Figured dimensions over scaled dimensions

(ii) Large scale Plans over small scale Plans

(j) Standard specifications

(k) Lists and/or tables in Plans over any conflicting notations on Plans

(l) Shop Drawings

B9.3 Breach. In event Purchaser breaches any of the material provisions of this contract, Forest Service shall give Purchaser notice of such breach and, allowing reasonable time for remedy of such breach and of Forest Service's election to suspend, may give notice to suspend all or any part of Purchaser's Operations. Such notice of breach and notice to suspend Purchaser's Operations

shall be written, except oral notices may be given if such breach constitutes an immediate threat to human life or a threat of immediate and irreparable damage to National Forest resources. Notwithstanding Section B6.1, such oral suspension notice may be given to Purchaser's work supervisor or, in work supervisor's absence, to those performing the operation. An oral suspension notice shall be promptly followed by telephone notice and a written explanation from Forest Service to Purchaser.

Suspension under this Section shall not entitle Purchaser to any remedies arising under B8.33.

Immediately upon oral or written suspension, Forest Service representative shall notify Contracting Officer of the suspension and related circumstances. Contracting Officer shall promptly review the suspension to determine if the suspension should be continued or lifted. Such suspension shall be lifted as early as conditions permit.

Upon receipt of oral or written notice of such breach, Purchaser shall remedy the breach as follows:

(a) If remedying such breach requires on-the-ground action by Purchaser, Purchaser shall have 30 practicable operating days during Normal Operating Season to remedy the breach, except under emergency conditions when action should not be delayed to prevent major damage or

(b) If such breach does not require on-the-ground action by Purchaser, such breach shall be remedied within 30 days.

B9.31 Termination for Breach. Contracting Officer, with the concurrence of the Regional Forester, may terminate this contract for breach in the event Purchaser:

(a) Is convicted for violation of criminal statutes, civil standards, or any other offense indicating a lack of business integrity or honesty that seriously and directly affects the responsibility of Purchaser; including, but not limited to:

(i) Theft, forgery, bribery, embezzlement, falsification or destruction of records, making false statements, or receiving stolen property, any of which occurred in connection with obtaining, attempting to obtain, selling, trading, or processing public timber;

(ii) Fraud, criminal offenses, or violation of Federal or State antitrust laws, any of which occurred in connection with obtaining, attempting to obtain, or performing a public contract or subcontract; or

(iii) Threatening, resisting, intimidating, or interfering with Forest Officers engaged in, or on account of, the performance of their official duties involving the protection, improvement, or administration of National Forest lands;

(b) Is convicted for violation of criminal statutes or civil standards, orders, permits, or other regulations for environmental protection issued by a Federal agency, State agency, or political subdivision thereof in the conduct of operations hereunder on National Forest lands, pursuant to B6.01;

(c) Has engaged in a pattern of activity that demonstrates flagrant disregard for the terms of this contract, such as, but not limited to, repeated suspensions for breach pursuant to B9.3, causing undesignated timber meeting Utilization Standards to be unnecessarily dam-

aged or negligently or willfully cut, or causing other serious environmental degradation or resource damage;

(d) Fails to comply with contract provisions related to nondiscrimination in employment; or

(e) Fails to remedy a breach of contract within time limits stated in B9.3.

Damages due the United States for termination under this Subsection shall be determined pursuant to B9.4.

B9.4 Damages for Failure to Cut or Termination for Breach. (a) In event of Purchaser's failure to cut designated timber on portions of Sale Area by Termination Date or termination for breach under B9.31, Forest Service shall appraise remaining Included Timber, unless termination is under B8.22 or B8.34. Such appraisal shall be made with the standard Forest Service method in use at time of termination.

(b) If the sale is resold, damages due shall be the amount by which Current Contract Value, plus costs described in paragraph (d) of this Section, exceeds the resale value at new Bid Rates.

(c) If the contract is not reoffered or there are no responsive bids on the reoffered contract, damages due shall be the amount by which Current Contract Value exceeds the value determined by appraisal, plus costs described in paragraph (d) of this Section.

(d) If applicable, the following costs shall be included in damages:

(i) The cost of resale or reoffering, including, but not limited to, salary costs, document preparation and duplication costs, mailing costs, and timber sale advertisement costs.

(ii) If Purchaser has failed to cut individual trees in the portions of Sale Area cut over and there is no

resale of such individual trees, Purchaser shall pay Forest Service for cost of felling and removal or otherwise eliminating such uncut trees, except for occasional trees not cut for reasons stated in B6.4.

(iii) The Government's loss caused by the delay in receipt of stumpage payments. Such loss will be measured by interest at the Current Value of Funds Rate established by the Secretary of the Treasury, on the unpaid contract value at Termination Date. Interest will be charged for the total number of months, or portions thereof, from Termination Date until midpoint of the contract resale period, less any time in excess of 1 year needed to make the resale.

(iv) Any increase in reforestation costs, including site preparation, seeding, and planting caused by Purchaser's failure to harvest Included Timber by Termination Date.

B9.5 Settlement. If obligations of Purchaser have not been fully discharged by Termination Date, any money advanced or deposited hereunder shall be retained and applied toward unfulfilled obligations of Purchaser without prejudice to any other rights or remedies of Forest Service. Such funds may be treated as cooperative deposits under B4.218 for uncompleted work 30 days after receipt of written notice from Contracting Officer to Purchaser of work to be done and Purchaser's failure to deny the obligation or to do the work.

B9.6 Contract Closure. Contracting Officer shall give appropriate written notice to Purchaser when Purchaser has complied with the terms of this contract. Purchaser shall be paid refunds due from Timber Sale Account under B4.24 and excess cooperative deposits under B4.218.

DIVISION C

Special Provisions

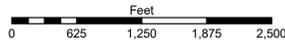
In accordance with A21, the Sections, Subsections, and Items therein listed are attached and made a part hereof. The material is indexed by the numbering system used in Division B. The numbers after the C (that identifies material in this Division) indicates the Part, Section, Subsection, or Item of Division B that is being supplemented or modified by each particular provision included in this Division.

Drought MP Thin

Sale Area Map

7/15/2020

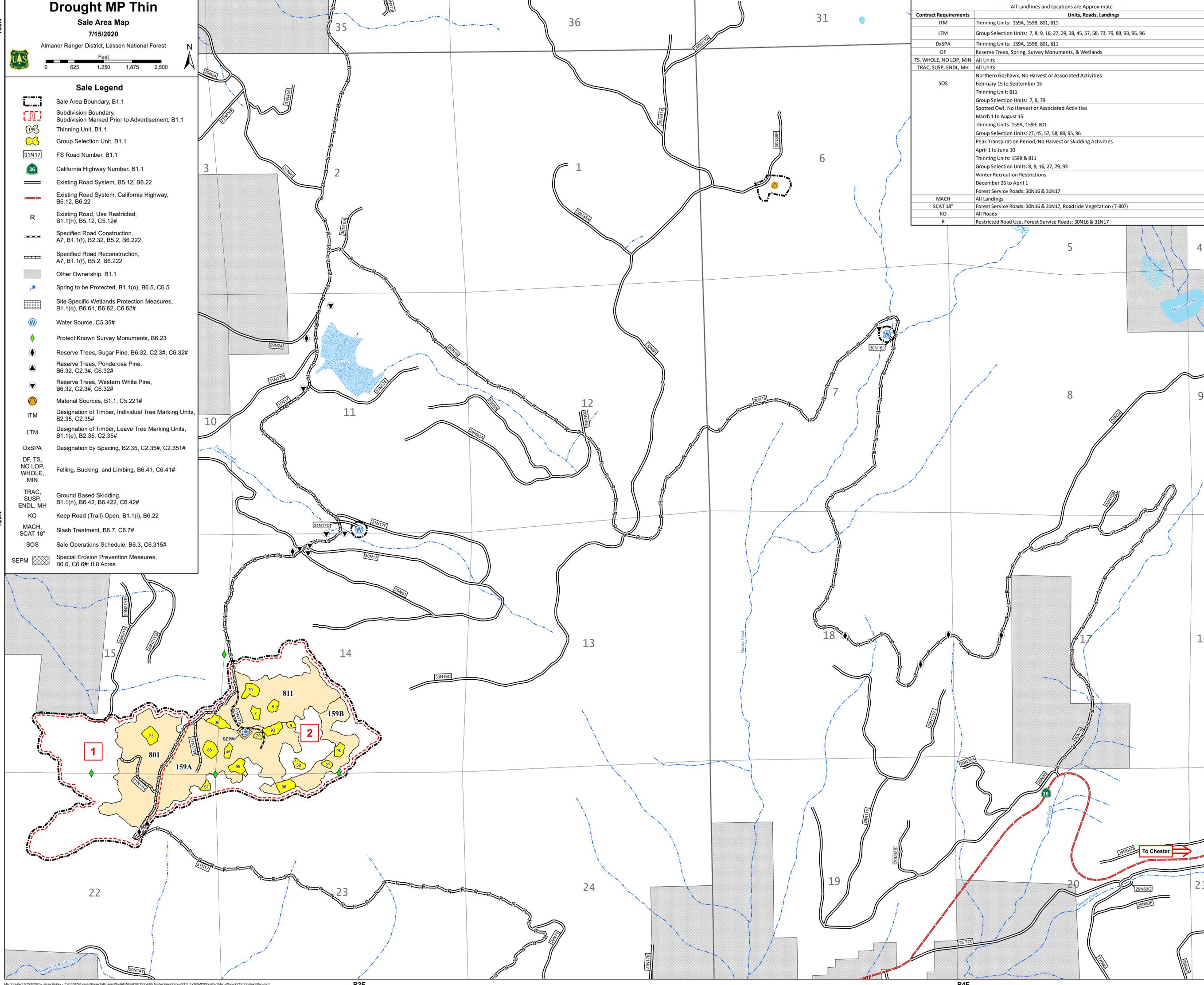
Almanor Ranger District, Lassen National Forest



Sale Legend

- Sale Area Boundary, B.1.1
- Subdivision Boundary, Subdivision Marked Prior to Advertisement, B.1.1
- Thinning Unit, B.1.1
- Group Selection Unit, B.1.1
- FS Road Number, B.1.1
- California Highway Number, B.1.1
- Existing Road System, B.5.12, B.6.22
- Existing Road System, California Highway, B.5.12, B.6.22
- Existing Road, Use Restricted, B.1.1(h), B.5.12, C.5.12#
- Specified Road Construction, A.7, B.1.1(f), B.2.32, B.5.2, B.6.222
- Specified Road Reconstruction, A.7, B.1.1(f), B.5.2, B.6.222
- Other Ownership, B.1.1
- Spring to be Protected, B.1.1(o), B.6.5, C.6.5
- Site Specific Wetlands Protection Measures, B.1.1(q), B.6.61, B.6.62, C.6.62#
- Water Source, C.5.35#
- Protect Known Survey Monuments, B.6.23
- Reserve Trees, Sugar Pine, B.6.32, C.2.3#, C.6.32#
- Reserve Trees, Ponderosa Pine, B.6.32, C.2.3#, C.6.32#
- Reserve Trees, Western White Pine, B.6.32, C.2.3#, C.6.32#
- Material Sources, B.1.1, C.5.221#
- ITM Designation of Timber, Individual Tree Marking Units, B.2.35, C.2.35#
- LTM Designation of Timber, Leave Tree Marking Units, B.1.1(e), B.2.35, C.2.35#
- DxSPA Designation by Spacing, B.2.35, C.2.35#, C.2.351#
- DF, TS, NO LOP, WHOLE, MIN Felling, Bucking, and Limbing, B.6.41, C.6.41#
- TRAC, SUSP, ENDL, MH Ground Based Skidding, B.1.1(n), B.6.42, B.6.422, C.6.42#
- KO Keep Road (Trail) Open, B.1.1(i), B.6.22
- MACH, SCAT 18" Slash Treatment, B.6.7, C.6.7#
- SOS Sale Operations Schedule, B.6.3, C.6.315#
- SEPM Special Erosion Prevention Measures, B.6.6, C.6.6# 0.8 Acres

Contract Requirements	
ITM	Thinning Units: 159A, 159B, 801, 811
LTM	Group Selection Units: 7, 8, 9, 16, 27, 29, 38, 45, 57, 58, 73, 79, 88, 93, 95, 96
DxSPA	Thinning Units: 159A, 159B, 801, 811
DF	Reserve Trees, Spring, Survey Monuments, & Wetlands
TS, WHOLE, NO LOP, MIN	All Units
TRAC, SUSP, ENDL, MH	All Units
SOS	Northern Goshawk, No Harvest or Associated Activities February 15 to September 15 Thinning Unit: 811 Group Selection Units: 7, 8, 79 Spotted Owl, No Harvest or Associated Activities March 1 to August 15 Thinning Units: 159A, 159B, 801 Group Selection Units: 27, 45, 57, 58, 88, 95, 96 Peak Transpiration Period, No Harvest or Skidding Activities April 1 to June 30 Thinning Units: 159B & 811 Group Selection Units: 8, 9, 16, 27, 79, 93 Winter Recreation Restrictions December 26 to April 1 Forest Service Roads: 30N16 & 31N17
MACH	All Landings
SCAT 18"	Forest Service Roads: 30N16 & 31N17, Roadside Vegetation (T-807)
KO	All Roads
R	Restricted Road Use, Forest Service Roads: 30N16 & 31N17



To Chester

C2.21# - UTILIZATION, REMOVAL, AND AMOUNT PAYABLE FOR NON-SAWTIMBER (05/2008)

Notwithstanding B2.2, Purchaser is required to pay for, cut, and remove the Non-Sawtimber Products of Included Timber listed in A2 and those Non-Sawtimber Products listed in the following table, unless otherwise agreed.

If Purchaser can sufficiently demonstrate that no market exists within the normal delivery distance for specific Non-Sawtimber Products, Forest Service and Purchaser may agree to alternate removal requirements of such Non-Sawtimber Products as specified in the alternate removal agreement. See Agreement Example.

The agreement for alternate removal requirements shall be executed prior to removing any timber from the Unit(s) included in the agreement. Alternate removal requirements shall apply only to whole units and not to portions of units. All material meeting alternate removal specifications shall be cut and moved to locations designated in the agreement.

Volumes of material with alternate removal requirements will be determined from the cruise report for the sale.

Purchaser will be charged for the following:

- a) Stumpage value at current contract rates of the alternatively removed product;
- b) Plus the cost of other work required by the Forest Service to dispose of alternatively removed material;
- c) Plus the difference between the appraised transportation cost of the non-sawtimber material involved and the appraised transportation cost of the alternative;
- d) Minus any work required to be completed by the Purchaser associated with alternate removal requirements.

Charges will be debited to the Purchaser's timber sale account.

Upon acceptance of the alternative removal requirements, the affected Unit(s) will be removed from the Sale Area under B6.36.

Title to material included in the alternate removal agreement shall remain with the Forest Service.

See Table A

TABLE A

SPECIFICATIONS PURSUANT TO C2.21# - UTILIZATION, REMOVAL, AND AMOUNT
PAYABLE FOR NON-SAWTIMBER

<u>Subdivision /Unit</u>	<u>Products to be Removed</u>																																			
ALL	1. All limbs and tops that are attached after skidding to whole trees and portions of trees meeting specifications for Non-Sawtimber Products. Limbwood from Sawtimber is considered Logging Slash and shall be treated under C6.7#.																																			
ALL	2. All tops that are attached after skidding to whole trees and portions of trees meeting specifications for Sawtimber products.																																			
N/A	<p><u>Amount Payable for Non-Sawtimber Products.</u></p> <p>Notwithstanding B4.0, Purchaser shall make payment for Non-Sawtimber Products prior to the start of felling any Included Timber. The amount payable has been computed by applying Bid Rates and Required Deposits to the estimated quantities listed in A2 for Non-Sawtimber Products and Payment Schedule A, attached hereto. Estimated quantities are final and are not subject to adjustment.</p> <p>Payment Schedule</p> <table border="1"> <thead> <tr> <th>Subdiv ision</th> <th>Product Item</th> <th>Unit of Measure</th> <th>Estimated Quantity</th> <th>Payment at Bid Rates</th> <th>Payment of Deposits</th> <th>Total Payments</th> </tr> </thead> <tbody> <tr> <td></td> <td>Nonsaw</td> <td>CCF</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Subdiv ision	Product Item	Unit of Measure	Estimated Quantity	Payment at Bid Rates	Payment of Deposits	Total Payments		Nonsaw	CCF																									
Subdiv ision	Product Item	Unit of Measure	Estimated Quantity	Payment at Bid Rates	Payment of Deposits	Total Payments																														
	Nonsaw	CCF																																		

C2.3# - RESERVE TREES (04/2004)

Notwithstanding the designations for cutting under B2.31, B2.32, B2.33, or B2.34, live or dead Sugar Pine, Ponderosa Pine and Western White Pine reserve trees or groups of reserve trees within such cutting units or clearings shall be left uncut. Reserve trees are identified by red painted "RT" facing the road or RED painted band at DBH and shall be protected in accordance with C6.32#. Units with reserve trees are shown on Sale Area Map.

C2.35# - DESIGNATION OF TIMBER, CUTTING UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES (06/2012)

Trees are designated for cutting under B2.35 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 C2.35# - DESIGNATION OF TIMBER. CUTTING UNIT BOUNDARIES, AND SUBDIVISION/PAYMENT UNIT BOUNDARIES

SPECIFICATIONS PURSUANT TO C2.35# - 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
Sale Area	GREEN	<u>Hazard Tree.</u> Notwithstanding B2.32 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 Purchaser's landings or the roadbed of National Forest System roads within Sale Area, shall be felled by Purchaser 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 Purchaser 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 Sale Area Map or on the ground.
Thinning Units- 159A, 159B, 801 and 811.	BLUE	<u>Individual Tree Mark.</u> Individual trees are designated for cutting only if Marked above and below stump height with the specified paint color.
Group Selections- 7-9, 16, 27, 29, 38, 45, 57, 58, 73, 79, 88, 93, 95 and 96.	PINK	<u>Leave Tree Mark.</u> All live conifer trees are designated for cutting unless Marked as leave trees. Trees 30" DBH and greater are not designated for cutting. Leave trees are Marked above and below stump height with the specified paint color. Sale Area Map indicates areas plainly identified on the ground where leave trees are Marked to be left uncut.
N/A	N/A	<u>Wildlife Trees.</u> Notwithstanding the designation for cutting under B2.31, B2.33, B2.34, or B2.35, trees which are identified by standard Forest Service metal wildlife tree sign or painted with a N/A on the uphill and downhill side, shall be left uncut. In event such trees are destroyed in Purchaser's Operations, Forest Service may designate alternate trees to be saved.
Thinning Units & Group Selection Units	BLACK	<u>Marked Out Trees.</u> 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.
Thinning Units- 159A, 159B, 801 and 811.		<u>Designation by Spacing C2.351#</u>
N/A		<u>Designation by Species and Diameter, C2.352#</u>
N/A		<u>Designation by Damage Class, C2.353#</u>
N/A		<u>Designation by Row Spacing, C2.354#</u>

Subdivision/Payment Unit and Cutting Unit Boundary Designation Table

<u>Subdivision/Payment Unit</u>	<u>Boundary Paint Color</u>	<u>Boundary Designation</u>
All Thinning Units	ORANGE	Unit boundaries have been designated with BLUE flagging and have been marked with ORANGE paint. Three vertical stripes are painted on boundary trees at or above DBH with one stripe facing into the harvest unit and one on each side of tree following the direction to the next boundary line tree and two stump marks at ground level. Harvest unit numbers are painted at road intersections and major corners along the boundary line. Boundaries are not painted along existing roads.
All Group Selections	PINK	Group Selections are designated with BLUE flagging and PINK paint. The boundary on Group Selections are double banded with PINK paint. Group selection unit numbers are painted periodically along the boundary.
RHCA Outer Zones Within 159 and 811.	WHITE	RHCA Outer Zones are designated with BLUE and WHITE CANDY STRIPE flagging and WHITE paint. Boundaries are marked with two vertical painted dots at or above DBH facing away from the riparian feature that is being protected, and stump marks on the uphill and downhill side of the tree at ground level.

C2.351# - DESIGNATION BY SPACING (04/2004)

Within Subdivisions or cutting unit(s) 159A, 159B, 801 and 811, as shown on Sale Area Map, all LIVE conifer biomass (Grn Bio Cv) 3.0" to 9.9" DBH in order of leave preference: sugar pine, western white pine, Douglas-fir, Jeffrey/ponderosa pine, lodgepole pine, incense-cedar, white fir and red fir trees, except trees Marked with N/A paint or described to be left uncut, that meet Utilization Standards and one or more of the following criteria are designated for cutting.

(a) The required spacing is a maximum average of 25 feet and a minimum average of 20 feet. The tree is within 20 feet of a live conifer tree that has a larger stump diameter than it; and the larger tree is not designated for cutting.

(b) The tree is within 25 feet of a 10.0 inch DBH live conifer tree greater than or equal to 11.0 inches stump diameter; and this tree is not designated for cutting.

(c) The tree is Marked with BLUE paint.

Distances are measured horizontal distance, outside bark stump height to outside bark stump height. Stump diameter is measured outside bark at stump height in a horizontal plane and is the average of a measurement across the short axis through the true center of the stump and a second measurement at right angles to the short axis.

All trees greater than or equal to 10.0" DBH shall be left as leave trees, unless Marked with BLUE paint. No tree greater than or equal to 11.0 inches stump diameter shall be cut, unless Marked with BLUE paint. Cutting unit boundaries and other trees that shall be left uncut are Marked with PINK, ORANGE or WHITE paint.

Purchaser and Forest Service shall agree to skid trail location under B6.422. Skid trails shall be no greater than N/A feet wide with a N/A foot spacing.

C4.211 - DOWNPAYMENT (06/2007)

The downpayment amount shown in A18 may not be applied toward any other payment required under the provisions of this contract, except damages determined pursuant to B9.4, transferred to other timber sales, or refunded until (a) stumpage value representing 25 percent of the total bid value of the timber sale has been charged and paid for, or (b) the estimated value of the unscaled timber is equal to or less than the amount of the downpayment, or (c) if 36 CFR 223.49(e) is applicable, the estimated value of the unscaled timber is equal to or less than the amount of the downpayment.

If Forest Service makes a determination that this contract should not have been included under increased downpayment requirements (36 CFR 223.49(e)), the downpayment shall be revised and applied in accordance with 36 CFR 223.49(f).

C4.212 - TEMPORARY REDUCTION OF DOWNPAYMENT (08/2009)

Notwithstanding B4.211 or C4.211, upon the Purchaser's written request Forest Service may temporarily reduce the downpayment when Purchaser's scheduled operations are delayed or interrupted for 30 or more consecutive days, or the contract term is extended for 30 or more consecutive days for any of the following reasons:

- (1) Forest Service requests or orders Purchaser to delay or interrupt operations for reasons other than breach;
- (2) Purchaser interrupts or delays scheduled operations to work on a sale designated by the Forest Service as in urgent need of harvesting; or
- (3) An adjustment of the contract term authorized upon a determination of substantial overriding public interest, including a market-related contract term addition, or an urgent removal contract term extension under 36 CFR 223.53.

When Purchaser is not cutting or removing timber under contract during a qualifying period of delay, interruption, or extension listed above the downpayment may be reduced to \$1000 or 2 percent of the downpayment amount stated in the contract, whichever is greater. The Purchaser must restore the downpayment to the full amount stated in the contract within 15 days from receipt of the bill for collection and written notice from the Contracting Officer that the basis for temporarily reducing the downpayment no longer exists. Purchaser shall not cut or remove timber on a contract where the downpayment has been temporarily reduced until the downpayment amount stated in the contract is fully restored.

C4.4 - 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 for, Contracting Officer will suspend all or any part of Purchaser'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 B4.218;
- (iii) Damages pursuant to B9.4;
- (iv) Road use fees;
- (v) Restoration of downpayment pursuant to B4.22;
- (vi) Periodic payments pursuant to B4.213;
- (vii) Extension Deposits pursuant to B4.217; 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 B9.3. 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 Purchaser'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 Purchaser's Operations, and administrative offset, shall be stayed for so long as:

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

C5.11# - REQUIREMENTS OF RIGHTS-OF-WAY AND LAND USE AGREEMENTS (05/2008)

Contract requirements for Rights-of-Way and land use agreements are listed in the following table.

See Table A

Table A

SPECIFICATIONS PURSUANT TO C5.11# - REQUIREMENTS OF RIGHTS-OF-WAY AND LAND USE AGREEMENTS

Grantor	Road Name & Number	Termini	Timber Requirements
N/A			<p>Unless otherwise agreed or required by right-of-way document, said timber shall be bucked into standard log sizes and decked along the right-of-way. Forest Service shall designate limits of said work on ground prior to initiation of construction by Purchaser.</p>
N/A			<p>Unless otherwise agreed or required by right-of-way document, said timber shall be bucked into standard log sizes and decked along the right-of-way. Forest Service shall designate limits of said work on ground prior to initiation of construction by Purchaser.</p> <p>Purchaser shall notify grantor in writing no less than ____ days prior to start of falling rights-of-way timber. Said timber shall be bucked into log lengths as specified by grantor. The logs shall be decked in loading areas designated on the ground and on Drawings, or other areas agreed to by grantor prior to skidding. Logs shall be decked parallel to one another and available for loading by a front-end loader within ____ days of falling.</p>
N/A			<p>Purchaser shall make a lump sum payment of ____ to the ____ through Forest Service for an estimated ____ CCF of timber on listed rights-of-way. Volume of this timber is not included in A2.</p> <p>Payment shall be made within 30 days of award of contract. Timber listed on rights-of-way is subject to the same requirements as Included Timber except the requirements of B3.0, B4.0, B6.8 and C8.66. Unless otherwise agreed in writing, products from listed rights-of-way shall not be mixed with Included Timber before or during removal from Sale Area.</p>

REQUIREMENTS OF RIGHTS-OF-WAY. Purchaser's obligations under B5.11 shall apply to roads or road segments listed below

<u>Road Number</u>	<u>Road Name</u>	<u>Termini</u>	<u>Grantor</u>
30N16	Rocky Peak	From CA36 to T29N R4E NW ¼ SE ¼ Sec. 17	W.M Beaty & Associates

ENCROACHMENT CONSTRUCTION: Unless agreed otherwise in writing, construction of road covered by Encroachment Permit or Letter of County Approval, as shown in A7, shall be completed according to Drawings and Specifications prior to use for log hauling other than hauling right-of-way logs that must be removed to complete the encroachment.

REQUIREMENTS OF TEMPORARY LAND USE AGREEMENT: Purchaser's Operations and use of identified land listed below shall be limited by the related easement and stipulations unless Purchaser makes other arrangements which will not infringe on or adversely affect the grantees rights. The land use agreement is available in the offices of the Forest Supervisors and District Ranger.

Temporary Land Use Agreement

Grantor

C5.12# - USE OF ROADS BY PURCHASER (06/1999)

Purchaser's use of existing roads identified on Sale Area Map by the following codes is prohibited or subject to restrictive limitations, unless agreed otherwise:

Code	Use Limitations
X	Hauling prohibited
R	Hauling restricted
U	Unsuitable for hauling prior to completion of agreed reconstruction
P	Use prohibited
A	Public use restriction
W	Regulation waiver

Roads coded A will be signed by the Forest Service to inform the public of use restrictions. Purchaser's use of roads coded R, A, or W shall be in accordance with the following restrictions:

See Restricted Road List Table.

SPECIFICATIONS PURSUANT TO C5.12# - Restricted Road List

Table A

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
30N16	Plantation Gulch	0.00	8.53	R	No use of road, which includes product hauling, road maintenance, construction and/or plowing of snow from December 26 through April 1. Winter Recreation (McGowan Cross-Country Ski Trail)
31N17	Mineral Viola Hwy			R	No use of road, which includes product hauling, road maintenance, construction and/or plowing of snow from December 26 through April 1. Winter Recreation

Purchaser is authorized to use cooperative roads constructed under provisions of W.M. Beaty & Associates, Inc., Cooperator, and Forest Service, and subsequent easements, supplements, and agreements thereto, available for inspection at the Forest Supervisor's Office, Susanville, California, and subject to the following liability insurance requirements.

Purchaser shall provide a satisfactory certificate of insurance covering Purchaser's and all subcontractor's operations on cost share roads referred to above.

Purchaser shall present the certificate of insurance to Forest Service prior to use of cost share roads.

Insurance shall be of the following form and limits:

Comprehensive Automobile Bodily Injury/Property Damage Liability Insurance covering all owned, leased, hired and non-owned automobiles.

Minimum limits: \$1,000,000 per person bodily injury or death
\$1,000,000 per occurrence bodily injury or death
and \$1,000,000 per occurrence property damage or a
combined single limit of \$1,000,000

-
In addition to above, Purchaser and Purchaser's assigns shall carry the following limits of insurance for the purpose of covering fire suppression expense, property damage to timber land due to fire, and property damage to non-owned automobiles and equipment due to fire.

Comprehensive General Liability Bodily Injury/Property Damage Insurance for minimum limits of:
\$1,000,000 per person bodily injury or death
\$1,000,000 per occurrence bodily injury or death
and \$1,000,000 per occurrence property damage or a
combined single limit of \$1,000,000

-
Such Comprehensive General Liability policy shall include an endorsement covering fire suppression expense, property damage to timber land due to fire, and property damage to non-owned automobiles and equipment due to fire. Said endorsement shall have minimum property damage limits of 1,000,000 and be designated separately on the Certificate of Insurance.

The Certificate of Insurance shall require insurance carrier to notify Cooperator by mail ten (10) days prior to cancellation or expiration of above coverage. The Certificate of Insurance shall also name W.M. Beaty & Associates, Inc. as additionally insured solely as respects operations conducted by or on behalf of the Purchaser involving use of the cost shared roads referred to above.

C5.13# - ROAD COMPLETION DATE (04/2004)

Construction of Specified Roads shall be completed no later than 10/31/2021 ; except for earlier construction completion dates for roads listed below:

Road Number	Road Name	Station		Completion Date
		From	To	

N/A

Completion date is binding on the party that constructs road, whether Purchaser or Forest Service. Contracting Officer shall modify the completion date in writing to conform to the approved Plan of Operations under B6.311 at the request of Purchaser.

When Purchaser elects Forest Service construction of Specified Roads shown in sale advertisement, Forest Service may adjust construction completion date when road construction is delayed or interrupted for causes that qualify for an adjustment of the completion date of Forest Service's road construction contract. When qualifying delays or interruptions of road construction occur, Forest Service shall evaluate such occurrences and document any findings. The current status of any adjustment shall be available to Purchaser on request. Promptly after the end of Normal Operating Season in which qualifying days occur, Forest Service shall give Purchaser written notice of (a) number of qualifying days claimed, and (b) new construction completion dates. After all road construction is complete, Forest Service shall grant Contract Term Adjustment. Such adjustment shall be limited to road completion date delays that occurred during Normal Operating Season.

If Forest Service is responsible for road construction and the actual date of road completion is 1 year or more after the completion date stated above, Purchaser may request a rate redetermination under B3.3 for remaining volume. Such request must be made within 30 days of notification that road construction has been completed. Upon receipt of such request, Forest Service shall redetermine rates using standard methods in effect on the completion date of road construction. Rates to be established shall apply to all timber removed from Sale Area after the effective date of the rate redetermination.

Forest Service shall in no way be responsible for any delay or damage caused by road contractor in performing the road construction, except such delay as may be the fault or negligence of Forest Service.

When Purchaser constructs Specified Roads and requests Contract Term Adjustment, completion dates shall be adjusted by number of days that qualify for such adjustment, provided such qualifying days occur before specified construction completion date. When Purchaser desires to construct an alternate facility under B5.26, Forest Service and Purchaser shall agree, in writing, on a construction completion date for alternate facility. Contract Term Adjustment as noted above will apply. Completion date shall be adjusted where a Design Change or physical changes necessitate a modification of Specified Road construction work that increases the scope or magnitude of the required work.

If Purchaser fails to complete construction of any or all Specified Roads by applicable completion date, as adjusted, Contract Term Extension shall not be granted.

As used in this Subsection, construction of a road is completed when:

(a) Purchaser constructs Specified Roads and Forest Service furnishes Purchaser with written notice of acceptance under B6.36 or

(b) Forest Service constructs road and furnishes Purchaser with written notice authorizing use of

road.

Notwithstanding B5.1, Purchaser shall not use a road that Purchaser has elected for Forest Service to construct, until construction is completed and Forest Service furnishes Purchaser with written notice authorizing use of road.

C5.213# - DEPOSIT FOR RECONSTRUCTION ENGINEERING SERVICES (01/2020)

Purchaser shall make a cash deposit for engineering services (preconstruction and construction) provided by Forest Service for reconstruction of National Forest system roads necessary to accommodate Purchaser's use under this contract, pursuant to 16 USC 537.

The total amount to be deposited by Purchaser for reconstruction related engineering services to be completed by Forest Service personnel or by public works contract is \$ \$4,602.00. Purchaser shall make this deposit at the end of the first full Normal Operating Season or 12 months from contract award, whichever occurs first. If payment falls due on a date other than a normal billing date, the payment date shall be extended to coincide with the next Timber Sale Account billing date. In the event a different deposit schedule is agreed to, such deposit shall be due within 15 days after the date of issue indicated on the initial bill for collection, pursuant to B4.4.

The amount of the required deposit will be shown as an associated charge on Purchaser's Timber Sale Account. Forest Service shall retain any unexpended deposit for reconstruction related engineering services.

The deposit for reconstruction related engineering services shall be commensurate with project need and Purchaser's road use. Forest Service shall complete reconstruction related engineering services on the following schedule unless a different completion schedule is agreed in writing:

Road or Facility No.	Termini		Engineering Services Completion Date
	From	To	
Road-31N17	0	3.3	07/01/2020
Road-31N17H	0	.27	07/01/2020
Road-31N17I	0	.37	07/01/2020
Road-31N17W	0	.19	07/01/2020

Reconstruction related engineering services may consist of some or all of the engineering work and expense of: preparing, setting out, controlling, inspecting, and measuring the reconstruction of a National Forest system road.

C5.221# - MATERIAL SOURCES (04/2004)

Sources of local materials are designated on Drawings and Sale Area Map. Forest Service assumes responsibility for the quality and quantity of material in designated sources. Purchaser shall determine the equipment and work required to produce the specified product, including the selection of acceptable material that is reasonably available in the source that meets specifications. The designation of source includes the rights of Purchaser to use certain area(s) for plant site, stockpiles, and haul roads.

Should the designated source, due to causes beyond the control of Purchaser, contain insufficient acceptable material, Forest Service will provide another source with adjustment in accordance with B5.253.

When Purchaser elects not to use designated sources, Purchaser shall furnish the specified product with no adjustment in unit rates. Quality testing shall be the responsibility of Purchaser. Test results shall be furnished to Forest Service.

When Purchaser elects not to use designated sources and the Schedule of Items lists pit development separately, cost allowance will be reduced under B5.253 when Forest Service determines the work will not be required.

When materials are subject to a weight measurement, the specific gravity or weight/volume relationship used as a basis for determination of estimated quantities shall be:

Source I N/A, Source II N/A, and Source III N/A.

Purchaser may, when agreed in writing, use on the project such suitable stone, gravel, and sand, or other material found in the excavation, and will earn a cost allowance for the excavation of such materials at the corresponding contract unit price and for the pay items for which the excavated material is used. Purchaser shall replace, without additional cost allowance, sufficient suitable materials to complete the portion of the work that was originally contemplated to be constructed with such material. Purchaser shall not excavate or remove any material, except that which is within the excavation limits, without written authorization from Forest Service.

When material is appraised from non-National Forest designated sources, owner charges for the material in terms of unit cost for royalties, purchase of raw materials, or finished products shall be as follows until N/A:

See Material Source Table.

Should quantity vary from that estimated, payment to owners shall be for units actually obtained. Purchaser shall make arrangements with owner(s) for measurement and payment for royalties, purchase of raw materials, or finished products, as shown above.

Materials produced or processed from National Forest lands in excess of the quantities required for performance of this contract are the property of Forest Service, unless prior written agreement has been obtained to use excess material on other National Forest sales. Forest Service is not obligated to reimburse Purchaser for the cost of their production.

Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials shall be located to facilitate their prompt inspection. Sites on Forest Service administered land, approved by Forest Service, may be used for storage purposes and for the placing of Purchaser's plant equipment. All storage sites provided by Forest Service shall be restored at Purchaser's expense. Purchaser shall be responsible for making arrangements for storage on other than Forest Service administered lands.

When the construction of the portion of the project for which Temporary Roads used for hauling materials is completed, all such Temporary Roads shall be restored as nearly as practicable to their original ground profile, unless otherwise agreed in writing.

C5.221# - MATERIAL SOURCES. (4/04)

Material	Type of Purchase	Owner(s)	Unit of Measure	Unit Price	Estimated Quantity	Total
N/A						

C5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

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

See Contract Road Maintenance Requirements Summary Table.

C5.31# – ROAD MAINTENANCE REQUIREMENTS. (7/01)

Contract Road Maintenance Requirements Summary
Table A

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications							
	From	To		T802	T803	T804	T805	T806	T807	T809	T810
30N16	Int. Highway 36	Int. 31N17	8.58	P	P					P	
31N17	Int. 30N16	Landing	3.30	P	P					P	
31N17H	Int. 31N17	Landing	0.27								
31N17I	Int. 31N17	End Road	0.37								
31N17W	Int. 31N17	End Road	0.19								

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable During haul Road Maintenance Specifications							
	From	To		T802	T803	T804	T805	T806	T807	T809	T810
30N16	Int. Highway 36	Int. 31N17	8.58	P	P			P	P		
31N17	Int. 30N16	Landing	3.30	P	P			P	P		
31N17H	Int. 31N17	Landing	0.27		P			P			
31N17I	Int. 31N17	End Road	0.37		P			P			
31N17W	Int. 31N17	End Road	0.19		P			P			

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable Post haul Road Maintenance Specifications							
	From	To		T802	T803	T804	T805	T806	T807	T809	T810
30N16	Int. Highway 36	Int. 31N17	8.58	P	P						
31N17	Int. 30N16	Landing	3.30	P	P						
31N17H	Int. 31N17	Landing	0.27		P						
31N17I	Int. 31N17	End Road	0.37		P						
31N17W	Int. 31N17	End Road	0.19		P						

P = Purchaser Performance Item D = Deposit to Forest Service D3 = Deposit to Third Party

C5.35# - 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 Purchaser's Operations, other than fire suppression activities, shall be repaired by Purchaser in a timely and agreed manner to the extent practicable to restore and prevent further resource damage.

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

See Table A

C5.35# - ROAD AND WATER SUPPLY USE. (05/2008)

TABLE A

SPECIFICATIONS PURSUANT TO C5.35# - REQUIREMENTS OF ROAD AND WATER SUPPLY USE.

<p>Load Limitations</p>	<p>Purchaser 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 B6.311. Within 15 days after receipt of the written notice Forest Service shall notify Purchaser 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 Sale Area Map may be used as Temporary Roads if there is agreement before use is started.</p>
<p>Snow Removal</p>	<p>If Purchaser 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 4 inches snow depth must be left to protect the roadway. If the road surface is damaged, Purchaser 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>If Purchaser utilizes the water site located <n/a>, for any listed activity, Purchaser shall make deposit with Forest Service for that activity at the time and in the amount shown in the Water Supply Deposit Schedule table below.</p> <p style="text-align: center;">WATER SUPPLY DEPOSIT SCHEDULE</p>

	Activity	Unit of Payment	Unit Cost	Total Cost	Time of Payment															
	n/a																			
Surface Replacement Deposits	<p>Purchaser shall make Required Deposits for deferred surface replacement (16 U.S.C. 537) for use of existing surfaced roads. If applicable, such deposits shall be based upon the volume and distance hauled on the roads and at the applicable rates listed in the table below titled Surface Replacement Deposit Schedule. If Purchaser uses surfaced roads under jurisdiction of Forest Service other than those listed, Forest Service may establish applicable rates for such surfaced roads.</p> <p style="text-align: center;">SURFACE REPLACEMENT DEPOSIT SCHEDULE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Road No.</th> <th style="width: 20%;">From</th> <th style="width: 20%;">To</th> <th style="width: 15%;">Miles</th> <th style="width: 30%;">Rate</th> </tr> </thead> <tbody> <tr> <td>30N16</td> <td>Int Hwy 36</td> <td>Int Rd 31N17</td> <td>8.58</td> <td>1.03</td> </tr> <tr> <td>31N17</td> <td>Int Road 30N16</td> <td>Landing</td> <td>3.30</td> <td>1.03</td> </tr> </tbody> </table> <p>Sale Area Average Rate: \$1.03/Ton</p>					Road No.	From	To	Miles	Rate	30N16	Int Hwy 36	Int Rd 31N17	8.58	1.03	31N17	Int Road 30N16	Landing	3.30	1.03
Road No.	From	To	Miles	Rate																
30N16	Int Hwy 36	Int Rd 31N17	8.58	1.03																
31N17	Int Road 30N16	Landing	3.30	1.03																

C6.241 - SITE SPECIFIC SPECIAL WILDLIFE SURVEY MEASURES (08/2018)

Notwithstanding C6.315#, 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.

C6.315# - SALE OPERATIONS SCHEDULE (08/2006)

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

See Table A

SCHEDULE PURSUANT TO C6.315# - SALE OPERATIONS SCHEDULE. (08/2006)

Table A

Subdivision/ Area/Unit	Conditions of Operation	Purpose
Sale Area	<p>Included Timber must be removed from the Sale Area within:</p> <ul style="list-style-type: none"> - Four weeks of felling from March 1 to June 30. - Six weeks of felling from July 1 to September 30. - Eight weeks of felling from Oct 1 to Dec 31. <p>If the Forest Service agrees in writing to allow Included Timber to remain on site from the end of the Normal Operating Season to March 1, material must be removed from the Sale Area before March 1. Logging slash must be treated in accordance with C6.7#</p>	Control of slash breeding insects and/or to capture full value of green material.
Sale Area	Purchaser shall complete felling and substantially complete removal of included products in one subdivision before entering another subdivision, unless otherwise agreed in writing.	Needed to ensure completion of biomass operations in a timely manner and to improve control of operations.
Thinning Units: Unit 801 and 159A and 159B. Group Selections: 57, 88, 45, 95, 96, 58 and 27.	No harvest or associated activities shall occur within ¼ mile of Protected Activity Centers (PACS) during the period from March 1 through August 15. Product hauling from areas outside of the Limited Operating Period (LOP) and road maintenance activities are permissible on haul routes through the area identified for wildlife protection during the designated LOP.	Protection of Spotted Owl
Thinning Units: 811. Group Selections: 7, 8 and 79.	No harvest or associated activities shall occur within ¼ mile of Protected Activity Centers (PACS) during the period from February 15 through September 15. Product hauling from areas outside of the Limited Operating Period (LOP) and road maintenance activities are permissible on haul routes through the area identified for wildlife protection during the designated LOP.	Protection of Goshawk
Thinning Units 159B, 811. Group Selections: 8, 9, 16, 27, 79 and 93.	No harvest or skidding activities shall occur within the true fir forest zone from April 1 through June 30. See Sale Area Map.	Protection from damage to residual stand during Peak Transpiration Period in true fir forest zone
FS Rd. 30N16 and 31N17.	Winter Recreation- These roads are annually closed to motorized vehicles from Dec. 26-April 1, winter recreation.	Winter Recreation

C6.32# - PROTECTION OF RESERVE TREES (04/2004)

Purchaser's damage or destruction of reserve trees described in C2.3# will cause serious and substantial silvicultural or other damage to the National Forest. It will be difficult if not impossible to determine the amount of such damage. Therefore, Purchaser shall pay as fixed, agreed, and liquidated damages \$ 20,000 for each proven rust resistant sugar pine and candidate rust resistant sugar pine reserve tree and \$ 3000 for each proven rust resistant western white pine and candidate rust resistant western white pine reserve tree damaged or destroyed by Purchaser's Operations, in addition to amounts payable under B3.45 and B3.46.

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

C6.331 - LOG TRUCKING (08/2006)

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.

C6.37 - SUBSTITUTE METHODS (08/2006)

Notwithstanding other provisions herein, for minor changes such as changes in logging systems for areas smaller than 5 acres, Purchaser 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 Purchaser's Operations.

C6.41# - FELLING, BUCKING, AND LIMBING (08/2007)

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

See Table A

**SPECIFICATIONS AND TREATMENTS PURSUANT TO C6.41# - FELLING, BUCKING
AND LIMBING**

TABLE A

Treatment Method and Applicable Map Symbol	Felling, Bucking and Limbing Specifications
Limbing	N/A
No Lop "NO LOP"	Within units or subdivisions designated NO LOP on Sale 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 Sale Area Map, trees smaller than 20 inches DBH shall be skidded/yarded to agreed landing locations prior to limbing, bucking, and lopping. Trees larger than or equal to 20 inches DBH shall be bucked into two or more pieces with the butt portion being no longer than 41 feet prior to skidding/yarding. The butt log shall be limbed prior to skidding/yarding.
Directional Felling "DF"	Within areas designated DF on Sale Area Map, Included Timber shall be directionally felled away from Reserve Trees, Spring, survey monuments, and Wetlands 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 "TS"	<p>Within areas shown on Sale Area Map, Purchaser shall treat stumps of all live CONIFER trees equal to or greater than 14 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, Purchaser 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</p>

	<p>completed no later than 4 hours after felling, otherwise stumps shall be re-cut and treated.</p> <p>Purchaser shall not apply borate compound during heavy rain fall or when such precipitation rate is predicted within 4 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 25 feet of live streamcourses and meadows/wetlands shown on Sale Area Map and 25 feet of sensitive plant location boundaries as flagged on the ground.</p> <p>Purchaser 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 25 pounds shall be reported to Forest Service within 24 hours.</p> <p>Purchaser 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>								
Maximum Log Length	N/A								
Minimum Stump Height "MIN"	<table border="1"> <thead> <tr> <th>Unit/Subdivision</th> <th>Minimum Stump Height (inches)</th> <th>Purpose or Reason</th> </tr> </thead> <tbody> <tr> <td>ALL</td> <td>2"</td> <td>1) facilitate timber accountability, 2) lessen the risk of fire starting from the cutting saw operating in the duff and creating sparks when rocks are struck, and 3) assist in the stump application of borate compound to prevent root rot disease.</td> </tr> </tbody> </table>			Unit/Subdivision	Minimum Stump Height (inches)	Purpose or Reason	ALL	2"	1) facilitate timber accountability, 2) lessen the risk of fire starting from the cutting saw operating in the duff and creating sparks when rocks are struck, and 3) assist in the stump application of borate compound to prevent root rot disease.
Unit/Subdivision	Minimum Stump Height (inches)	Purpose or Reason							
ALL	2"	1) facilitate timber accountability, 2) lessen the risk of fire starting from the cutting saw operating in the duff and creating sparks when rocks are struck, and 3) assist in the stump application of borate compound to prevent root rot disease.							

C6.42# - GROUND BASED SKIDDING (08/2006)

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

See Table A

Ground-Based Skidding Table - C6.42#

Table A

Map Symbol	Requirements
TRAC	<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. Purchaser 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>
SUSP	<p>Products shall be skidded with leading end clear of ground.</p>
ENDL	<p>Endlining shall not be required for distances in excess of <u>60</u> feet uphill, and <u>75</u> feet downhill.</p>
MH	<p>Purchaser shall cut Included Timber and move it to designated skid trails using equipment with a boom having an operating radius of at least <u>20</u> feet for bunching trees, capable of severing, lowering and placing trees up to <u>20</u> inches diameter at stump height on the ground prior to skidding. Such equipment must be capable of operating on slopes up to <u>35%</u>.</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 B6.41 - Felling and Bucking, C6.41# - Felling, Bucking, and Limbing Requirements and the above "TRAC", "SUSP", "SPACE", "ENDL", and "MAX" requirements.</p>

C6.5 - STREAMCOURSE PROTECTION (08/2006)

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 Sale 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. Purchaser in accordance with C6.6 - Erosion Prevention and Control, shall remove such structures and associated fills.

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

C6.6# - EROSION PREVENTION AND CONTROL (05/2008)

Erosion prevention and control work, including Streamcourse protection, required by C6.5 and B6.6 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 Purchaser's Operations due to causes beyond Purchaser'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 Purchaser's Operations due to failure to perform required work shall be repaired by Purchaser.

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 C6.6# - EROSION PREVENTION AND CONTROL.

TABLE A

Vegetative Soil Stabilization

N/A

Special Erosion Prevention Measures Purchaser shall give adequate treatment by spreading slash or wood chips or by agreement giving other treatment to portion of tractor roads, skid trails, landings, cable yarding corridors, tractor-end lined corridors and Temporary Road fills where necessary to supplement other erosion prevention measures required elsewhere in this contract. In no event shall Purchaser be required to treat more acres than that shown in the legend of Sale Area Map. The specific locations to be treated shall be designated on the ground by Forest Service. These special erosion prevention measures are to be done within the same date and time periods as stated above.

Soil Scarification

N/A

Backblading

N/A

Tillage

N/A

C6.7# - SLASH TREATMENT (08/2006)

Purchaser shall pile, scatter, yard, construct firelines or otherwise treat slash defined in specifications below, within designated areas. Work required of Purchaser shall be in accordance with the following slash plan and specifications, and the Sale 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 Purchaser 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 Purchaser's Operations, other than Construction Slash, is Logging Slash. Measures to be taken by Purchaser for treatment of Logging Slash are set forth below unless otherwise agreed in writing.

Forest Service and Purchaser shall jointly develop a schedule for completion of slash treatment on the various portions of Sale Area prior to Purchaser'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 C6.7# - SLASH TREATMENT (08/2006)

Table A

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

Slash Treatment Methods

<u>Symbol</u>	<u>Method</u>	<u>Definition</u>
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.
SCAT 18"	"Scattering"	Logging Slash shall be scattered to reduce slash concentrations with slash being generally left within 18 inches of the ground as shown on Sale 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.

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 N/A 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 15 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, Purchaser 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.

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 20 feet. Such slash shall be Scattered free of soil to reduce concentrations unless treatment is required by another specified method.

LANDINGS AND DISPOSAL SITES. Unutilized logs accumulated at landings and disposal sites shall be Decked by Purchaser 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	Specified Method	Maximum Height of Decks
Landings	ALL	MACH	15'

TREATMENT ALONG PERMANENT ROADS Permanent roads that require roadside slash treatment are listed in the attached table and shown on Sale Area Map. All Logging and Construction Slash within Required Disposal Strips shall be treated by Purchaser. "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 Junctions (From To)	Width of Required Disposal Strip	Specified Method	Slash Larger Than Treatment Size Requirements of Specified Method
30N16 & 30N17	Refer to C5.31# Prehaul Maintenance Requirements (T-807 Specifications)	SCAT 18"	N/A	N/A

C6.815 - THIRD PARTY SCALING SERVICES (04/2004)

Notwithstanding the requirement for Forest Service or parties under contract to Forest Service to provide Scaling services under B6.81, Scaling designated in A10 shall be conducted by a third party Scaling organization approved by Forest Service. Scaling shall be done in accordance with A9 and Purchaser 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 Purchaser'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 B6.811 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 A10 shall be charged to Timber Sale Account.

If Forest Service and Purchaser agree in writing that another party under contract to Forest Service will perform Scaling, the contract will be modified to include C6.816 and Timber Sale Account will be charged for such Scaling.

C7.2# - SPECIFIED FIRE PRECAUTIONS (06/2012)

Purchaser or a designated Purchaser's Representative shall certify compliance with specific Timber Sale Contract and California Public Resources Code (CPRC) fire precautionary measures in B7.1 Plans, C7.2# and C7.22#. 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 Purchaser in any way from compliance with State fire laws covering fire prevention and suppression equipment applicable to Purchaser'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 C7.2# and C7.22#:

Active Landing: A location Purchaser 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 C7.22#:

Table A

C7.2# - SPECIFIED FIRE PRECAUTIONS. (06/2012)

Table A

Specific equipment requirements and fire precautionary measures are shown in the following table and in C7.22#:

A. Fire Tools and Equipment Purchaser 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 Purchaser'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, Purchaser 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/skidders, 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 Purchaser 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.

Purchaser 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, Purchaser 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

Purchaser shall designate in the fire plan required by B7.1 and furnish on Sale Area during operating hours a fire supervisor, named in writing and authorized to act on behalf of Purchaser in fire prevention and suppression matters.

Unless agreed otherwise, Purchaser 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

Purchaser shall obtain written permits from Forest Service before allowing welding, warming fires or burning, subject to C7.22# - Emergency Precautions.

G. Clearing of Fuels

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

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 (C7.22#). 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, Purchaser shall notify Forest Service of any fires on Sale Area or along roads used by Purchaser.

J. Tank Truck

Purchaser shall provide a water tank truck or trailer on or in proximity to Sale Area during Purchaser'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 Sale 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:

Temp	Sea Level		1000 Feet		2000 Feet		3000 Feet		4000 Feet		5000 Feet		6000 Feet		7000 Feet		8000 Feet		9000 Feet		10000 Feet	
	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G	P	G
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.

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

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

When Purchaser 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.

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 C7.22#.

K. Compressed Air
Foam System
(CAFS)

A fire suppression system where compressed air is added to water and a foaming agent. By agreement, Purchaser 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 propellent.
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 C7.22#.

L. Communications Purchaser shall furnish a serviceable communications system such as a telephone, radio-telephone, radio system or satellite phone connecting each operating side within the Sale Area with Purchaser's headquarters, and capable of notifying Forest Service within **15 minutes** of discovery of any fires on the Sale Area or along Purchaser'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, Purchaser 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 Purchaser 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 Purchaser'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.

C7.22# - EMERGENCY PRECAUTIONS (06/2012)

Purchaser'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 Sale 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. Purchaser 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 Purchaser is notified, the revised Project Activity Levels will supersede the levels in the Project Activity Level Table below.

PROJECT ACTIVITY LEVEL (PAL) - C7.22# - EMERGENCY PRECAUTIONS

PROJECT ACTIVITY LEVEL TABLE

Level	Project Activity Minimum Requirements and Restrictions. Restrictions at each level are cumulative.
A	Minimum required by C7.2#.
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 ¼ 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 ¼ 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.
	3. All other conventional Mechanical Operations are permitted until 1:00 PM.
	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: <ul style="list-style-type: none"> • Rubber Tire Skidding • Chipping on Landings • Helicopter Yarding

	<p style="text-align: center;">• Fire Salvage</p> <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 Purchaser's equipment for prevention and suppression readiness, type of operation and social and community considerations etc. (See attached Project Activity Level Variance Agreement).</p>
<p>E</p>	<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 C7.22# - EMERGENCY PRECAUTIONS. (10/2010)

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

Project Name: Drought MP Thin _____
 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

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 A20. Purchaser 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 Purchaser'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 Purchaser'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 sale 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 Purchaser'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.

C8.64 - DEBARMENT AND SUSPENSION CERTIFICATION (03/2018)

Pursuant to 2 CFR 180 and 2 CFR 417, Purchaser 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.

Purchaser 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 timber sales, unless Purchaser knows that the certification is erroneous.

Purchaser shall keep the certifications of its Subcontractors on file until timber sale 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 Purchaser is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

If Purchaser knowingly enters into a timber sale 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 timber sales, 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 Purchaser.

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

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

C8.66# (Option 1) - USE OF TIMBER (04/2004)

(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 N/A 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 Purchaser 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, Purchaser 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 Purchaser or affiliates.

(f) Prior to delivering unprocessed Included Timber to another party, Purchaser 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 Purchaser and another party, Purchaser shall furnish to Forest Service a copy of each such agreement. Purchaser 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 Purchaser relating to the termination.

Road Maintenance T-Specifications

For

DROUGHT MP THIN

<u>NO.</u>	<u>Specification Title</u>
T-800	Definitions
T-802	Ditch Cleaning
T-803	Surface Blading
T-806	Dust Abatement
T-807	Roadway Vegetation

SPECIFICATION T-800 DEFINITIONS

Wherever the following terms or pronouns are used in Specifications T-801 through T-811, the intent and meaning shall be interpreted as follows:

800-1.1 - Agreement. Maintenance projects require a mutually acceptable method to resolve the problems which arise when incompatible situations arise between drawings and specifications and actual conditions on the ground to allow orderly and satisfactory progress of the maintenance.

These specifications have been developed in anticipation of those problem areas and have provided that such changes will be by Agreement.

It is intended that drawings and specifications will govern unless "on-the-ground" conditions warrant otherwise, when specifications call for "Agreement", "agreed", or "approval" such Agreement or approval shall be promptly confirmed in writing.

800-1.2 - Annual Road Maintenance Plan. A plan prepared by various users of one or several roads. The plan is an Agreement on maintenance responsibilities to be performed for the coming year.

800-1.3 - Base Course. Material used to reinforce Subgrade or, as shown on drawings, placed on Subgrade to distribute wheel loads.

800-1.4 - Berm. Curb or dike constructed to prevent Roadway runoff water from discharging onto embankment slope.

800-1.5 - Borrow. Select Material taken from designated borrow sites.

800-1.6 - Crown, Inslope, and Outslope. The cross slope of the Traveled Way to aid in drainage and traffic maneuverability.

800-1.7 - Culverts. A conduit or passageway under a road, trail, or other obstruction. A culvert differs from a bridge in that it is usually entirely below the elevation of the Traveled Way.

800-1.8 - Drainage Dip. A dip in the Traveled Way which intercepts surface runoff and diverts the water off the Traveled Way. A Drainage Dip does not block the movement of traffic.

800-1.9 - Drainage Structures. Manufactured structures which control the runoff of water from the Roadway including Inslope, overside drains, aprons, flumes, downdrains, downpipes, and the like.

800-1.10 - Dust Abatement Plan. A table which lists the road, dust palliative, application rates, and estimated number of subsequent applications.

T-800-1

800-1.11 - Lead-off Ditches. A ditch used to transmit water from a Drainage Structure or Drainage Dip outlet to the natural drainage area.

800-1.12 - Material. Any substances specified for use in the performance of the work.

800-1.13 - Prehaul Maintenance. Road maintenance work which the Purchaser determines must be accomplished to maintain the roads to a satisfactory condition commensurate with the Purchaser's use, provided Purchaser's Operations do not damage improvements under B6.22 or National Forest resources and hauling can be done safely. This work will be shown in the Annual Road Maintenance Plan as provided in C/CT5.4.

Prehaul Maintenance work the Purchaser elects to perform will be in compliance with the Road Maintenance T-Specifications.

800-1.14 - Roadbed. The portion of a road between the intersection of Subgrade and sideslopes, excluding that portion of the ditch below Subgrade.

800-1.15 - Road Maintenance Plan. A table which shows applicable road maintenance specifications to be performed by Purchaser on specific roads.

800-1.16 - Roadside. A general term denoting the area adjoining the outer edge of the Roadway.

800-1.17 - Roadway. The portion of a road within the limits of excavation and embankment.

800-1.18 - Shoulder. That portion of Roadway contiguous with Traveled Way for accommodation of stopped vehicles, for emergency use, and lateral support of base and Surface Course, if any.

800-1.19 - Slide. A concentrated deposit of Materials from above or on backslope extending onto the Traveled Way or Shoulders, whether caused by mass land movements or accumulated ravelling.

800-1.20 - Slough. Material eroded from the backslope which partially or completely blocks the ditch, but does not encroach on the Traveled Way so as to block passage of traffic.

800-1.21 - Slump. A localized portion of the Roadbed which has slipped or otherwise become lower than that of the adjacent Roadbed and constitutes a hazard to traffic.

800-1.22 - Special Project Specifications. Specifications which detail conditions and requirements peculiar to the individual project.

800-1.23 - Subgrade. Top surface of Roadbed upon which Base Course or Surface Course is constructed. For roads without Base Course or Surface Course, that portion of Roadbed prepared as the finished wearing surface.

800-1.24 - Surface Course. The Material placed on Base Course or Subgrade primarily to resist abrasion and the effects of climate. Surface Course may be referred to as surfacing.

T-800-2

800-1.25 - Surface Treatment Plan. A table which lists the roads and surface treatments to be applied.

800-1.26 - Traveled Way. That portion of Roadway, excluding Shoulders, used for the movement of vehicles.

800-1.27 - Turnouts. That portion of the Traveled Way constructed as additional width on single lane roads to allow for safe passing of vehicles.

800-1.28 - Water Source. A place designated on the Road Maintenance Map for acquiring water for road maintenance purposes.

800-1.29 - Waterbar. A dip in the Roadbed which intercepts surface runoff and diverts the water off the Roadway. A Waterbar is not designed to be traversable by logging trucks.

SPECIFICATION T-802 DITCH CLEANING

DESCRIPTION

1.1 Ditch cleaning is removing and disposing of all Slough Material from Roadway ditches to provide a free-draining waterway.

REQUIREMENTS

3.1 Ditch cleaning shall be repeated during the year as often as necessary to facilitate proper drainage.

3.2 All Slough Material or other debris which might obstruct water flow in the Roadway ditch shall be removed. Material removed from the ditch, if suitable, may be blended into existing native road surface or Shoulder or placed in designated Berms in conjunction with Surface Blading T-803 operations.

Material removed from ditches that is not by Agreement blended into existing roads or placed in Berms shall be loaded and hauled to the disposal site shown on Sale Area Map.

3.3 Roadway backslope or Berm shall not be undercut.

SPECIFICATION T-803 SURFACE BLADING

DESCRIPTION

1.1 Surface blading is keeping a native or aggregate Roadbed in a condition to facilitate traffic and provide proper drainage. It includes maintaining the crown, inslope or out slope of the Traveled Way, Turnouts, and Shoulder; repairing Berms; blending approach road intersections; and cleaning bridge decks, Drainage Dips, and Lead-off Ditches.

REQUIREMENTS

3.1 Surface blading shall be performed before, during, and after Purchaser's use as often as necessary to facilitate traffic and proper drainage

3.2 The surface blading shall preserve the existing cross section. Surface irregularities shall be eliminated and the surface left in a free draining state and to a smoothness needed to facilitate traffic. Surface material which has been displaced to the Shoulders or Turnouts shall be returned to the Traveled Way. The blading operation shall be conducted to prevent loss of surface material and to provide for a thorough mixing of the material being worked.

3.3 Water, taken from Water Sources DESIGNATED ON THE SALE AREA MAP, shall be applied during blading if sufficient moisture is not present to cut, mix, or compact the surface material.

3.4 On native surfaced roads, Material generated from backslope sloughing and ditch cleaning may be blended with Surface or Base Course material unless agreed otherwise.

3.5 Roadway backslopes or Berms shall not be undercut nor shall new Berms be established unless agreed otherwise.

Berms shall be repaired by placing Material as needed to restore the Berm to reasonably blend with existing line, grade, and cross section.

3.6 Drainage Dips and Lead-off Ditches shall be cleaned and maintained to reasonably blend with existing line, grade, and cross section.

3.7 Intersecting roads shall be bladed for a distance of 50 feet to assure proper blending of the two riding surfaces.

3.8 Rocks or other material remaining on the Traveled Way after the final pass that are larger than 4 inches in diameter or are larger than the maximum size of imported surfacing shall be removed from the Traveled Way. The oversized material shall be disposed of by sidecasting unless SHOWN OTHERWISE ON THE SALE AREA MAP. Sidecasting into streams, lakes or water courses will not be permitted.

3.9 Material resulting from work under this specification shall not remain on or in structures, such as Culverts, overside drains, cattleguards, ditches, Drainage Dips, and the like.

3.10 Material resulting from work under this specification plus any accumulated debris shall be removed from bridge decks and the deck drains opened.

SPECIFICATION T-806 DUST ABATEMENT

DESCRIPTION

1.1 This work shall consist of preparing Traveled Way and furnishing and applying materials to abate dust.

MATERIALS

2.1 The roads requiring dust abatement, type of dust abatement material to be used, the rates of application, and frequency of applications will be SHOWN ON THE DUST ABATEMENT PLAN (C5.31). The Dust Abatement Plan may be changed by written agreement.

2.2 Water Water sources are covered under C5.36, and the locations are SHOWN ON THE SALE AREA MAP.

2.3 Dust abatement materials shall meet the requirements of the following subsections of Forest Service Standard Specifications for Construction of Roads and Bridges (1985) and attached SPECIAL PROJECT SPECIFICATIONS.

Bituminous Materials

Liquid Asphalts.	702.02
Bituminous Dust Palliatives.	702.04
Application Temperatures	702.05
Blotter Material.	703.14
Lignin Sulfonate.	712.09
Application Temperature.	712.09
Water for diluting	712.01
Magnesium Chloride.	712.11
Application Temperature.	712.11

2.4 Testing of Materials Certification and sampling of bituminous materials, lignin sulfonate, and magnesium chloride shall be in accordance with Subsection 105.04, 712.09, and 712.11, respectively, of Forest Service Standard Specifications for Construction of Roads and Bridges.

REQUIREMENTS

3.1 General Dust abatement materials shall be applied to the road surface as necessary to control road surface loss, provide for road user safety, and minimize damage to adjacent resources.

3.2 Compaction _When the methods listed below specify compaction, the Traveled Way shall be compacted by 8- to 10-ton pneumatic, steel-wheeled or equivalent vibrating roller making 2 passes over the full Traveled Way and Shoulder width, unless compaction is not required on the DUST ABATEMENT PLAN (C5.31).

3.3 Preparation for Dust Abatement Materials Other Than Water. The following applies to all methods of preparation:

Bituminous residue shall be scarified and pulverized to produce loosened material no exceeding 4 inches in greatest dimension.

Traveled Way shall be bladed in accordance with T-803.

Prior to applying DO-6BA, DO-6PA, or DO-8 the top 2 inches of Traveled Way shall contain not less than 80 percent nor more than 120 percent of optimum moisture as determined by AASHTO T-99, Method C. Prior to applying other bituminous material Traveled Way shall have a moisture content between 1 and 3 percent. If surface dusting prevents the bituminous material from penetrating, a light application of water shall be applied just prior to applying the bituminous material.

Lignin Sulfonate and Magnesium Chloride shall be applied when the top 1 inch of Traveled Way contains not less than 3 percent moisture nor more than 120 percent of optimum moisture as determined by AASHTO T-99, Method C.

Moisture content will be determined in accordance with AASHTO T-217 or T-239.

One or more of the following methods shall be used as specified on the DUST ABATEMENT PLAN (C5.31).

Method 1. Compact Traveled Way and apply the dust abatement material.

Method 2. Develop a layer of loose material approximately one inch in depth for the full width of Traveled Way. Apply the dust abatement material to this loose material and compact after penetration. If traffic makes maintenance of the loose material difficult, one inch of the material may be bladed into a windrow along the shoulder. The specified moisture content shall be maintained in the windrow and the top one inch of Traveled Way. The windrow shall be bladed to a uniform depth across Traveled Way just prior to applying the dust abatement material. When the dust abatement material has penetrated, Traveled Way shall be compacted.

Method 3. Blade one inch from Traveled Way into a windrow along the Shoulder. Maintain the specified moisture content in the windrow and the top inch of Traveled Way. Apply half the dust abatement material. When the dust abatement material has penetrated, the windrow shall be bladed to a uniform depth across dust abatement Traveled Way, and the remaining dust abatement material shall be applied. Traveled Way shall be compacted.

Method 4. Develop a layer of loose material approximately 2 inches in depth for the full width of Traveled Way. Apply half the dust abatement material to the loose material. Blade the top 2 inches into a windrow along the Shoulder. Apply the remaining dust abatement material to Traveled Way and the Berm. Spread the Berm evenly across Traveled Way and compact.

3.4 Preparation for Dust Abatement with Water.

Traveled Way shall be prepared in accordance with Specification T-803 Surface Blading when required.

3.5 Application Tolerance.

Dust abatement material other than water shall be applied within 0.05 gallons per square yard of the rate specified.

3.6 Mixing Requirements.

DO-6BA, DO-6PA, and DO-8 shall be thoroughly circulated in the distributor within one hour of application.

3.7 Weather Limitations.

Dust abatement materials shall not be applied when it is raining.

Bituminous material shall be applied when the surface temperature of Traveled Way is 50 degrees Fahrenheit or warmer.

Lignin Sulfonate and Magnesium Chloride shall be applied when the atmospheric temperature is 40 degrees Fahrenheit or higher.

3.8 Blotter Material.

Blotter material shall be spread in a sufficient quantity to prevent tire pickup.

SPECIFICATION T-807 ROADWAY VEGETATION

DESCRIPTION

1.1 This work includes removal of brush and trees from within the Roadway limits.

REQUIREMENTS

3.1 Vegetative matter within the Roadway which impedes vehicular travel or interferes with road maintenance operations, such as surface blading and ditch and culvert cleaning shall be removed. Downed timber meeting utilization standards shall be cut in appropriate lengths and decked along the Roadside in locations where the Traveled Way or sight distances will not be impaired.

3.2 Vegetative matter removed from the Roadway shall be treated by the specified method shown on Sale Area Map and as required by C/CT6.7.

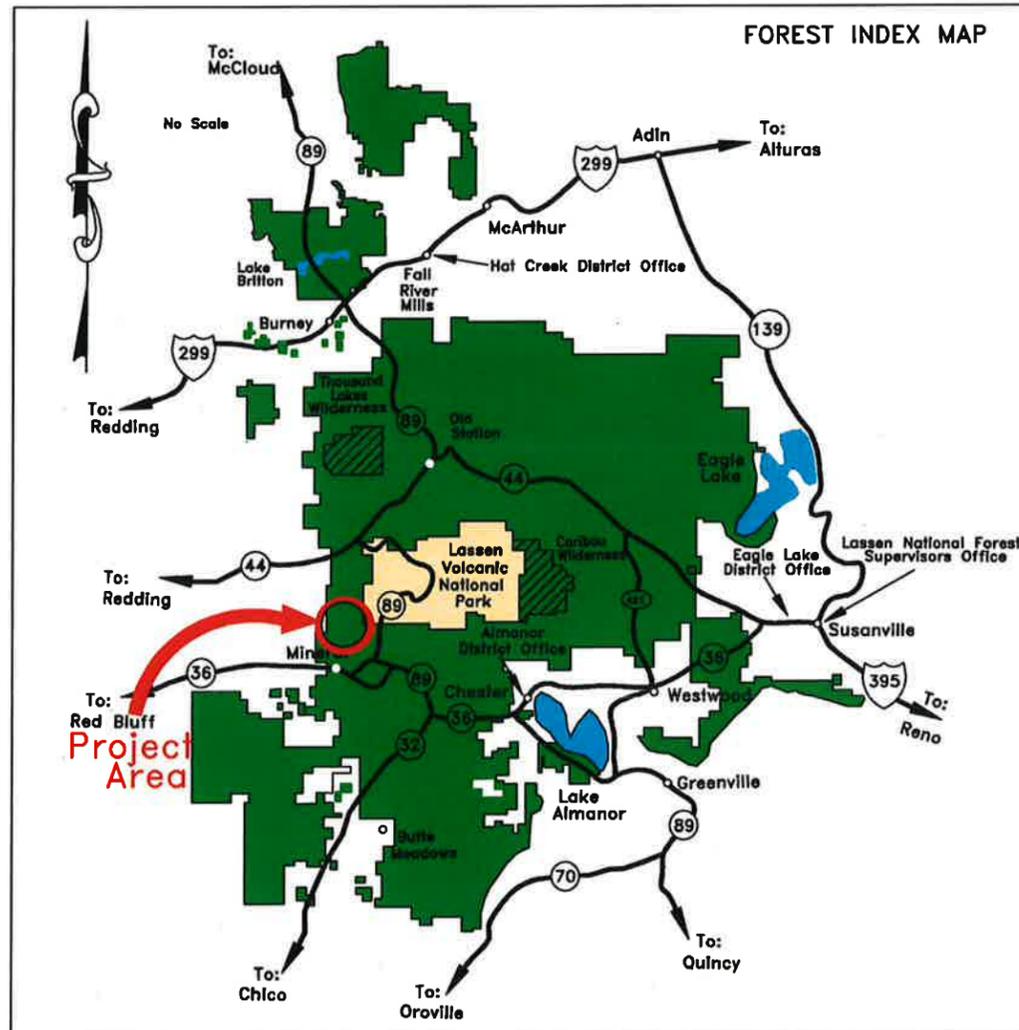
UNITED STATES DEPARTMENT OF AGRICULTURE
 FOREST SERVICE
 REGION FIVE

LASSEN NATIONAL FOREST
 DROUGHT MP THIN

ALMANOR RANGER DISTRICT

INDEX TO SHEETS

- 1. COVER SHEET
- 2. VICINITY MAP
- 3. GENERAL NOTES
- 4-5. ESTIMATE OF QUANTITIES
- 6-7. WORK LISTS
- 8. LINEAR GRADING TYPICAL
- 9. DRAINAGE INSTALLATION TYPICALS
- 10. ROLLING DIP TYPICAL
- 11. GATE INSTALLATION TYPICAL



U.S. DEPARTMENT OF AGRICULTURE
 FOREST SERVICE



R-5

PACIFIC SOUTHWEST REGION

I APPROVE THE ENGINEERING ASPECTS OF THESE DRAWINGS

I RECOMMEND THIS PROJECT AND CERTIFY THAT ADEQUATE FUNDING IS AVAILABLE

THESE DRAWINGS COMPLY WITH LAND AND RESOURCE MANAGEMENT PLANS

APPROVED

Chris Christensen
 Forest Supervisor

3/27/19
 Date

Mike Larman

Design Engineer

suze c. layne

Reviewing Engineer

Shelie Ross

Forest Engineer

Russell Nickerson
 District Ranger

3/4/19

Date

03/06/19

Date

3/27/19

Date

3/27/19

Date

Forest

Lassen National Forest

Project Name

DROUGHT MP THIN

Sheet Title

COVER SHEET

Scale

NONE

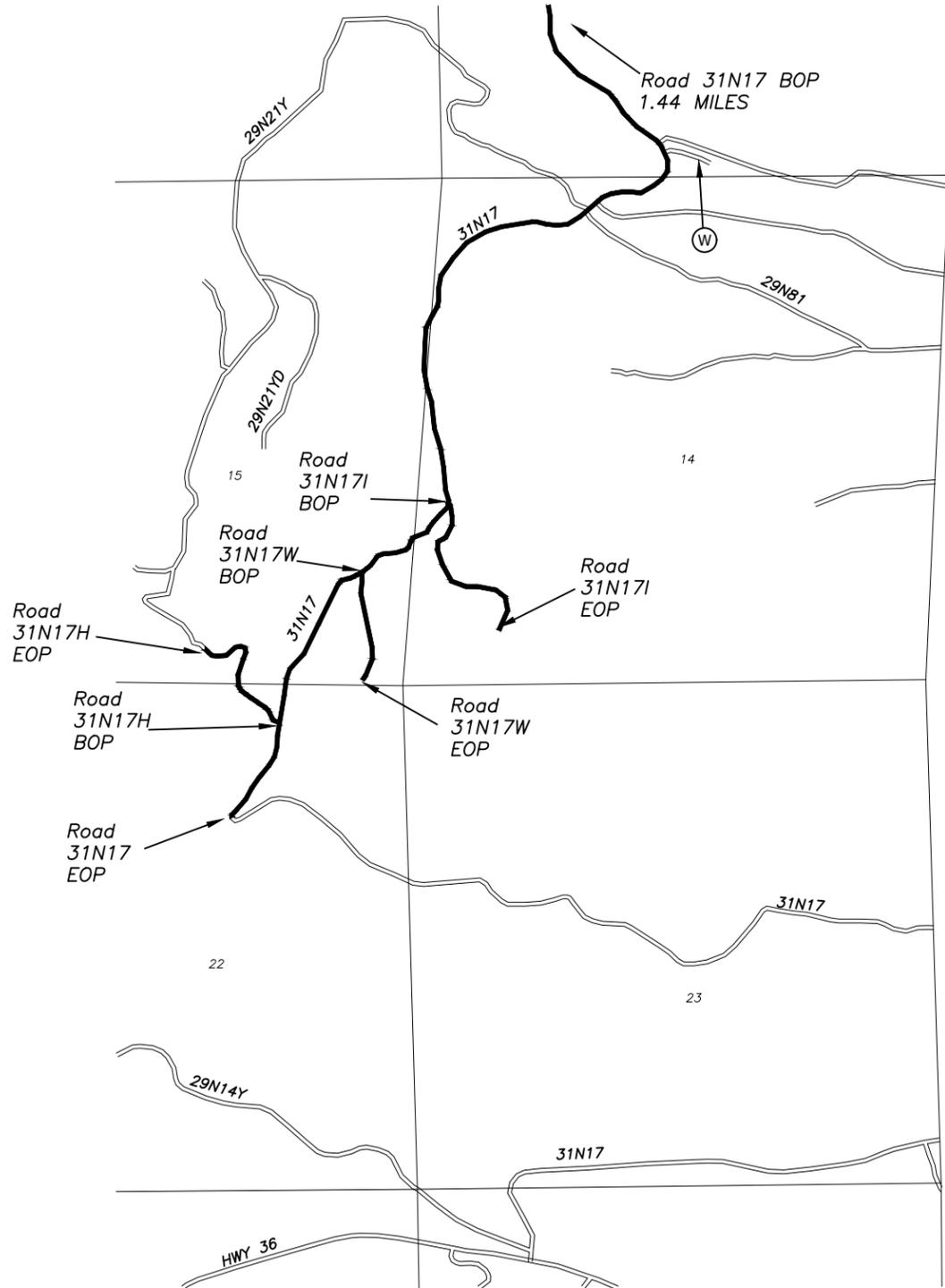
Sheet

1 of 11



R3E

T29N



Scale in miles

LEGEND	
	Reconstruction Segments
	Other Roads
	Water Source

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE



R-5

PACIFIC SOUTHWEST REGION

DESIGNED BY:

M. LARMAN

Forest

Lassen National Forest

Project Name

DROUGHT MP THIN

Sheet Title

VICINITY MAP

Scale

NONE

Sheet

2 OF 11

GENERAL NOTES:

REFER TO APPLICABLE SECTIONS OF "STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS," (FP-14) AND ATTACHED FOREST SERVICE FP-14 SUPPLEMENTAL SPECS (FSSS) FOR CONTRACT SPECIFICATIONS.

AN APPROVED TRAFFIC CONTROL PLAN SHALL BE SUBMITTED PRIOR TO CONSTRUCTION. SEE FSSS 156 FOR DETAILS ABOUT ALLOWED CLOSURE TIME AND DELAYS ALLOWED.

AN APPROVED EROSION CONTROL PLAN SHALL BE SUBMITTED PER FSSS 157.03.

AN APPROVED QUALITY CONTROL PLAN SHALL BE SUBMITTED PER SECTION 153.

WATER FOR DUST CONTROL SHALL BE REQUIRED PER SECTION 158.03(b). DEVELOP WATER SUPPLY AS PER FSSS 170.

CLEARING AND GRUBBING SLASH DISPOSAL METHOD; SCATTERING

APPLICABLE USDA FOREST SERVICE WATER QUALITY BEST MANAGEMENT PRACTICES (BMPs) (SECTION 12.2: ROAD AND BUILDING SITE CONSTRUCTION) SHALL BE ADHERED TO. BMPs CAN BE FOUND AT THE FOLLOWING URL:

http://www.fs.fed.us/r5/publications/water_resources/waterquality/water-best-mgmt.pdf

CONSTRUCTION TOLERANCE D FOR ALL ROADS

U.S. DEPARTMENT OF AGRICULTURE
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R-5
PACIFIC SOUTHWEST REGION

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Forest

Lassen National Forest

Project Name

DROUGHT MP THIN

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GENERAL NOTES

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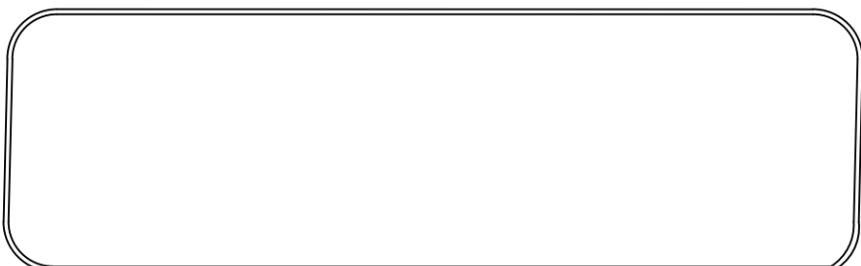
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Sheet

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ITEM NUMBER	DESCRIPTION - All Roads	UNIT	QUANTITIES				REMARKS
			31N17	31N17H	31N17I	31N17W	
	FS ROAD NUMBER		3.30	0.27	0.37	0.19	
	PROJECT ROAD LENGTH	Miles					
15101	Mobilization	Lump Sum					Includes fire protection, temporary traffic control, and equipment cleaning.
20103	Clearing and grubbing, disposal of tops and limbs (f), logs (i), stumps (f)	Mile					
20301	Removal of wooden structure, disposal method (a)	Lump Sum	All				Remove broken wooden structure and dispose off forest service lands.
20302	Removal of corrugated metal pipe, disposal method (a)	Each	2				Includes dewatering, excavation, and removal of any trees required for new installation. Deck trees meeting utilization standards at designated locations as approved by Contracting Officer. Scatter all trees not meeting utilization standards, tops and limbs, and stumps outside of top of cut and road shoulder. Dispose of removed culverts off forest service lands.
20424A	Drainage excavation, type culvert outlet ditch	Foot	50				Includes removal of material inside of culvert.
20424B	Drainage excavation, type rolling dip outlet ditch	Foot	10				
20425A	Drainage excavation, type culvert catchbasin	Each	2				Includes removal of material inside of culvert.
20425B	Drainage excavation, type rolling dip	Each		3	5	3	Includes all material associated with installation. Compaction method (b). Government furnished material located on Road 30N35E. Mineral permit required prior to obtaining material.
20431	Boulder placement, 30-inch minimum	Each					Government furnished material located on Road 30N35E. Generating and sorting required.
21201	Linear Grading	Mile		0.27	0.37	0.19	Unmerchantable timber, disposal method (f). Includes curve widening and daylighting roadway template. See Linear Grading Typical for details.
25104	Keyed riprap, class 4	Cubic Yard*	15				Government furnished material located on Road 30N35E. Generating and sorting required.
30207	Aggregate surface coarse, method (1)	Cubic Yard*	80				Government furnished material located on Road 30N35E. Generating and sorting required. Mineral permit required prior to obtaining material.
30210	Pit run maximum size 4-inch, method (1)	Cubic Yard*			160	50	Government furnished material located on Road 30N35E. Generating and sorting required. Mineral permit required prior to obtaining material.
60201	18-inch pipe culvert, type corrugated steel, 0.064-inch thickness	Foot	40				Commercial Source. Includes bands and necessary hardware. Compaction method (2).
60202	57-inch span x 38-inch rise pipe culvert, type corrugated steel, 0.102-inch thickness	Foot	30				Commercial Source. Includes bands and necessary hardware. Compaction method (2).

* Denotes contract quantity



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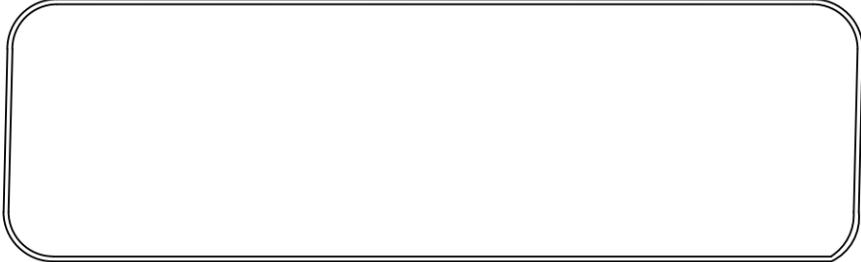
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ESTIMATE OF QUANTITIES
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Sheet 4 OF 11

ITEM NUMBER	DESCRIPTION - All Roads	UNIT	QUANTITIES				REMARKS
			31N17	31N17H	31N17I	31N17W	
	FS ROAD NUMBER		3.30	0.27	0.37	0.19	
	PROJECT ROAD LENGTH	Miles					
60708	Cleaning culverts in place	Each	1				Remove and dispose of all foreign material within the barrel of the culvert by any method that does not damage the culvert.
60710A	Recondition drainage structures, jack open culvert inlet/outlet	Each	3				Jack open inlet/outlet to original shape.
60710B	Recondition drainage structures, saw cut existing culvert	Each	2				Dispose off forest service lands.
61902	Gate, reinforcing steel	Each			1	1	Commercial Source.
62530	Seeding and mulching, dry method	Lump Sum	All				Commercial source, certified weed free. Includes mulching of all disturbed areas and disposal areas for ENTIRE project.

* Denotes contract quantity

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Sheet Title
 ESTIMATE OF QUANTITIES
 Scale NONE Sheet 5 OF 11

ROAD 31N17 RECONSTRUCTION SUMMARY

Mile	ITEM NUMBER	QUANTITY	UNIT	RECONSTRUCTION SUMMARY
0.00				Beginning of project. Intersection with Road 30N16, left.
0.17	20424B	10	Foot	Reconstruct rolling dip outlet ditch.
0.29				Reference: Intersection with Road 29N24, right.
0.51	20301	All	Lump Sum	Remove wooden structure from pullout, left.
0.63	20302	1	Each	Remove existing culvert.
	60202	30	Foot	Install 57-inch span x 38-inch rise CMP at same skew and grade.
	25104	15	Cubic Yard*	Construct headwall.
	30207	20	Cubic Yard*	Place aggregate surfacing.
0.66				Reference: Intersection with Road 31N17E, left.
0.88	60710B	1	Each	Saw cut and remove 4' from inlet.
	60201	4	Foot	Extend existing inlet.
1.34	60710A	1	Each	Jack open inlet (to original shape).
1.42				Reference: Intersection with Road 31N17F, left.
1.44				Reference: Intersection with 31N17F1 (Water Source), left.
1.52	60708	1	Each	Clean entire barrel of existing culvert.
1.56	60710B	1	Each	Saw cut and remove 4' from inlet.
	60201	4	Foot	Extend existing inlet.
1.65				Reference: Intersection with Road 30N17, left.
1.71				Reference: Intersection with Road 29N21Y, right and Road 29N81, left.
1.78	20302	1	Each	Remove existing culvert.
	60201	32	Foot	Install 18-inch CMP at same skew and grade.
	20424A	50	Foot	Construct outlet ditch.
	30207	10	Cubic Yard*	Place aggregate surfacing.

ROAD 31N17 RECONSTRUCTION SUMMARY

Mile	ITEM NUMBER	QUANTITY	UNIT	RECONSTRUCTION SUMMARY
2.42				Reference: Intersection with un-named road, left.
2.75				Reference: Intersection with Road 31N17W, left.
2.82	20425A	1	Each	Reconstruct catchbasin.
3.00	20425A	1	Each	Reconstruct catchbasin.
	60710A	2	Each	Jack open inlet and outlet (to original shape).
3.10				Reference: Intersection with Road 31N17H, right.
3.12				Reference: Intersection with Trail 51008, right.
3.30				Reference: Pullout, right.
	30207	50	Cubic Yard*	Place aggregate surfacing at locations marked by Contracting Officer.
				End of project.

ROAD 31N17H RECONSTRUCTION SUMMARY

Mile	ITEM NUMBER	QUANTITY	UNIT	RECONSTRUCTION SUMMARY
0.00				Beginning of project. Intersection with Road 31N17, right.
	21201	0.27	Mile	Begin linear grading, 3% outslope. See typical for details.
0.10	20425B	1	Each	Construct rolling dip.
0.13	20425B	1	Each	Construct rolling dip.
0.23	20425B	1	Each	Construct rolling dip.
0.27				End all reconstruction.
				End of project.

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WORKLISTS

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NONE

Sheet

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ROAD 31N17I CONSTRUCTION SUMMARY

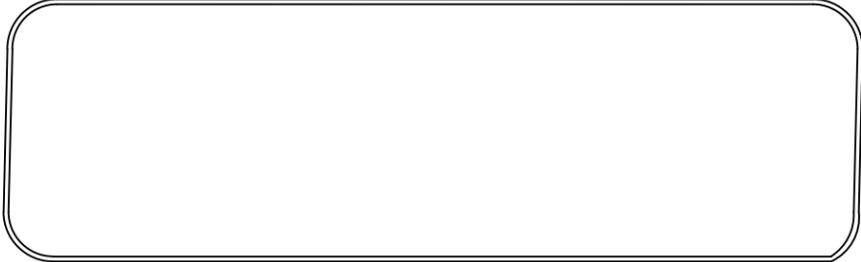
Mile	ITEM NUMBER	QUANTITY	UNIT	CONSTRUCTION SUMMARY
0.00				Beginning of project. Intersection with Road 31N17, left.
	21201	0.37	Mile	Begin linear grading, 3% outslope. See typical for details.
	61902	1	Each	Install gate at location marked by Contracting Officer.
0.02	20425B	1	Each	Construct rolling dip.
0.03	30210	40	Cubic Yard*	Begin placement of 6-inch depth pit run, 12' wide.
0.06				End placement of 6-inch depth pit run, 12' wide.
0.10	20425B	1	Each	Construct rolling dip.
0.14	20425B	1	Each	Construct rolling dip.
0.17	20425B	1	Each	Construct rolling dip.
0.20	30210	120	Cubic Yard*	Begin placement of 6-inch depth pit run, 12' wide.
0.27	20425B	1	Each	Construct rolling dip.
0.30				End placement of 6-inch depth pit run, 12' wide.
0.37				End all construction.
				End of project.

ROAD 31N17W RECONSTRUCTION SUMMARY

Mile	ITEM NUMBER	QUANTITY	UNIT	RECONSTRUCTION SUMMARY
0.00				Beginning of project. Intersection with County Road 31N17, left.
	21201	0.19	Mile	Begin linear grading, 3% outslope. See typical for details.
	61902	1	Each	Install gate at location marked by Contracting Officer.
0.08	20425B	1	Each	Construct rolling dip.
0.11	20425B	1	Each	Construct rolling dip.
0.09	30210	50	Cubic Yard*	Begin placement of 6-inch depth pit run, 12' wide.
0.13				End placement of 6-inch depth pit run 12' wide.
0.15	20425B	1	Each	Construct rolling dip.
0.19				End all reconstruction.
				End of project.

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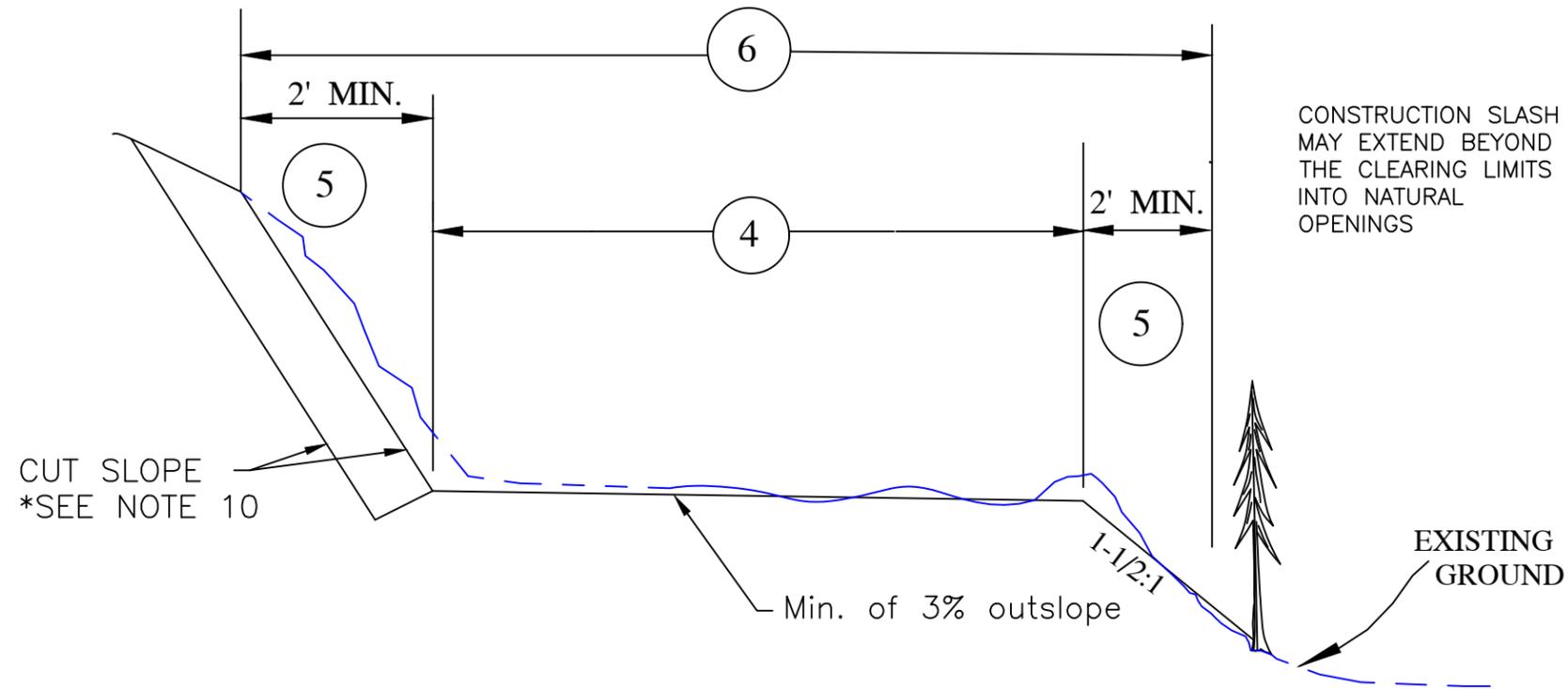
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LINEAR GRADING TYPICAL

ITEM 21201

NO
SCALE

Road 31N17H, 31N17I, 31N17W



LINEAR GRADING NOTES:

1. SPREAD EXCESS OR UNSUITABLE EXCAVATION MATERIAL UNIFORMLY OVER ADJACENT FILL SLOPES, UNLESS OTHERWISE APPROVED.
2. DO NOT SIDECAST EXCESS OR UNSUITABLE MATERIAL INTO OR ON SLOPES ADJACENT TO LIVE OR INTERMITTENT STREAMS.
3. OUT-SLOPE 3% NO DITCH, DAYLIGHTING ROAD TEMPLATE UNLESS OTHERWISE APPROVED BY CONTRACTING OFFICER.
4. SUBGRADE WIDTH SHALL BE A MINIMUM 14' WITHOUT DITCH. BOTH REQUIRE ADDITION FOR CURVE WIDENING + TURNOUTS IF SPECIFIED IN CONTRACT OR MARKED ON THE GROUND. APPLY CURVE WIDENING AS APPROVED BY CONTRACTING OFFICER.

LINEAR GRADING NOTES:

5. CLEARING LIMITS SHALL BE A MINIMUM OF 2' PAST THE FINISHED ROAD SHOULDER.
6. MINIMUM TOTAL CLEARING WIDTH IS 18', UNLESS OTHERWISE APPROVED.
7. CLEARING HEIGHT SHALL BE A MINIMUM OF 14' MEASURED FROM ROAD SURFACE.
8. CUT AND GRUB ALL TREES & STUMPS 2' OR LESS FROM SHOULDER OF ROAD
9. CUT SLOPES SHALL BE 1:1 IN COMMON MATERIAL, AND 3/4:1 IN ROCK.
10. FILL SLOPES SHALL BE 1 1/2 :1.

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LINEAR GRADING TYPICAL

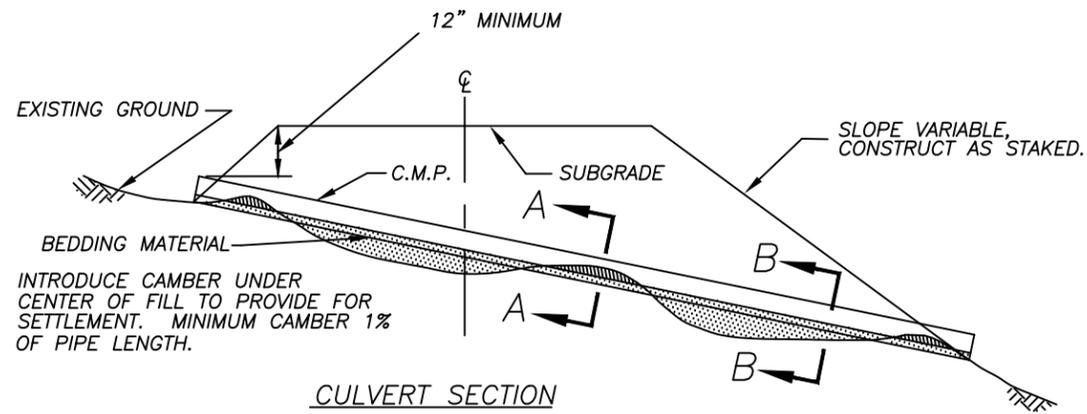
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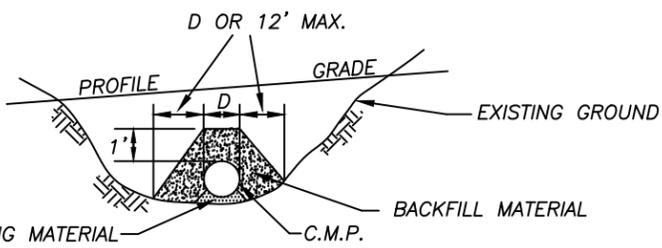
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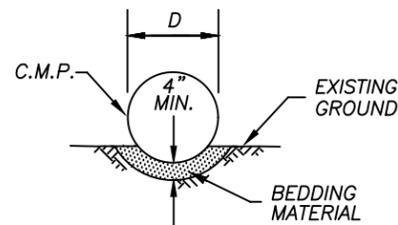
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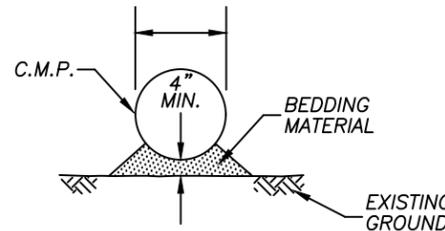
CULVERT SECTION



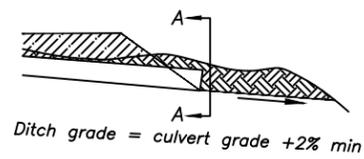
BACKFILLING PIPE



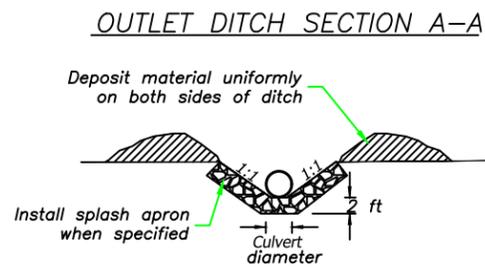
SECTION A-A



SECTION B-B

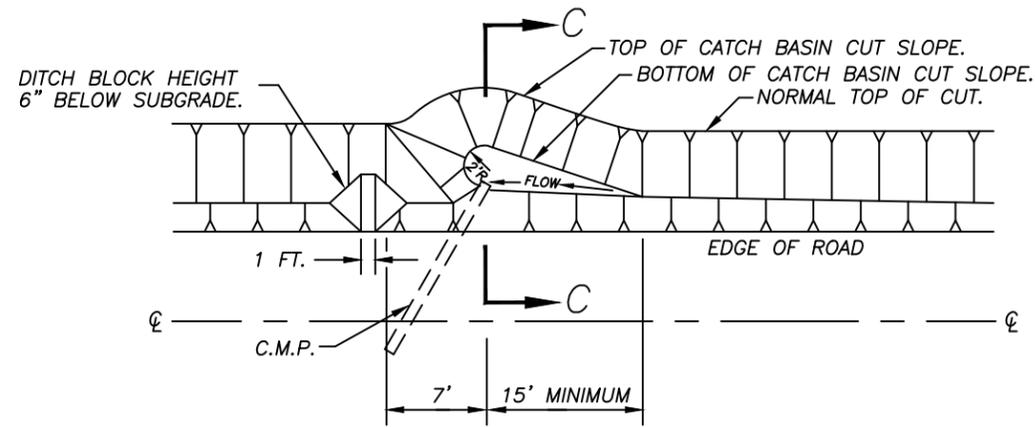


OUTLET DITCH

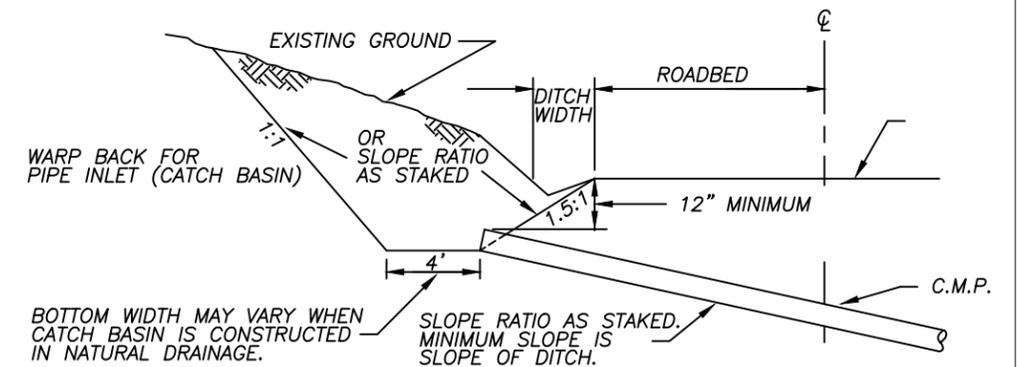
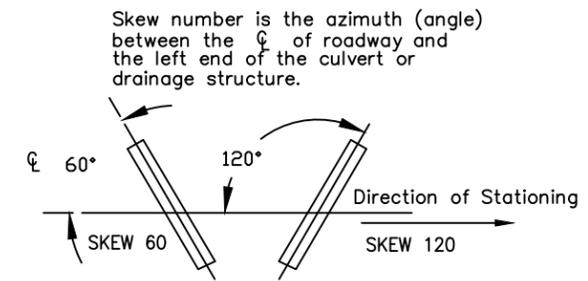


OUTLET DITCH SECTION A-A

EARTH CATCH BASIN DETAILS



PLAN



SECTION C-C

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DRAINAGE INSTALLATION TYPICALS

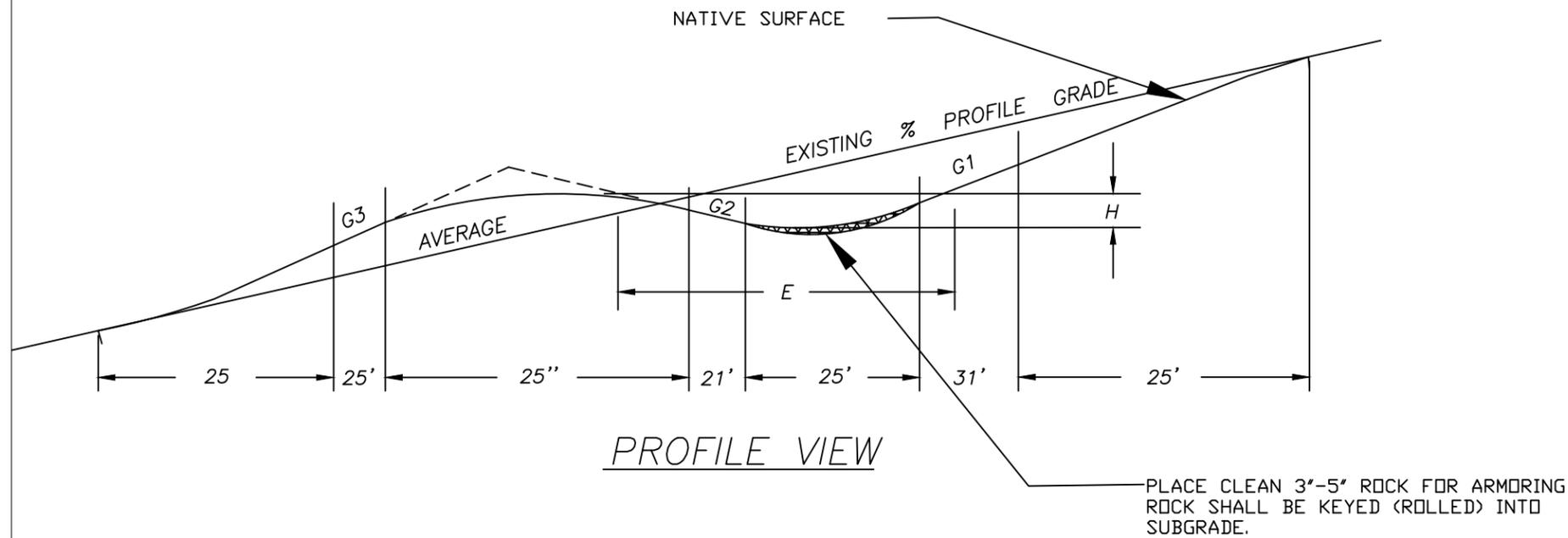
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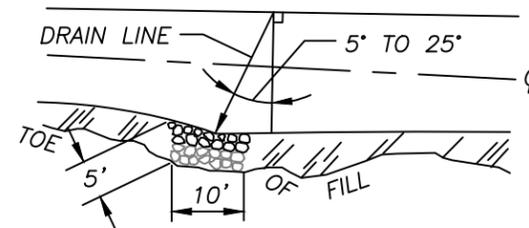
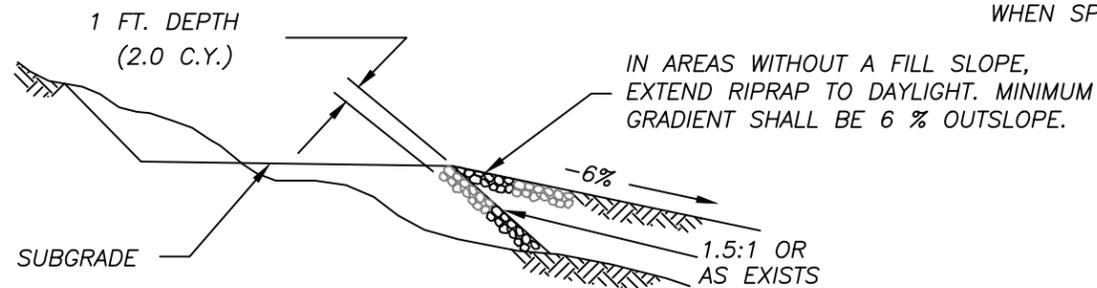
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ROLLING DIP



ROLLING DIP CONSTRUCTION DIMENSIONS						
% PROFILE GRADE	CONST. GRADE			DEPTH		
	G1	G2	G3	(H)		
0 TO 4	-7	2	-6	0.6'		
5 TO 6	-10	2	-9	0.6'		
7 TO 8	-13	2	-12	0.5'		
9 TO 10	-16	2	-15	0.5'		
OVER 10 % NOT RECOMMENDED						

OUTLET RIPRAP
WHEN SPECIFIED



ROLLING DIP CONSTRUCTION NOTES:

1. THE CROSS SLOPE OF THE ROADBED SHALL BE MAINTAINED THROUGH THE DIP.
2. PLACE CLASS II OUTLET RIPRAP (FSSS 705) FOR ALL DIPS. REFER TO OUTLET RIPRAP DETAIL BELOW.
3. CONSTRUCT, SHAPE, AND COMPACT ROLLING DIPS INTO SUBGRADE PRIOR TO SURFACING.

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ROLLING DIP TYPICAL

Scale

NONE

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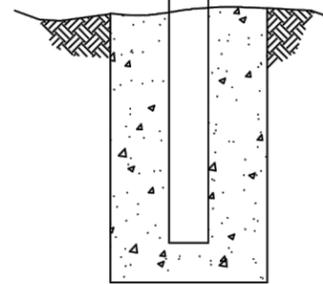
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6" BLACK STEEL PIPE WITH ZINC DUST-ZINC OXIDE PAINT IN ACCORDANCE WITH AASHTO SPECIFICATION M-36 OR 6" GALVANIZED STEEL PIPE, 10 GAGE MINIMUM.

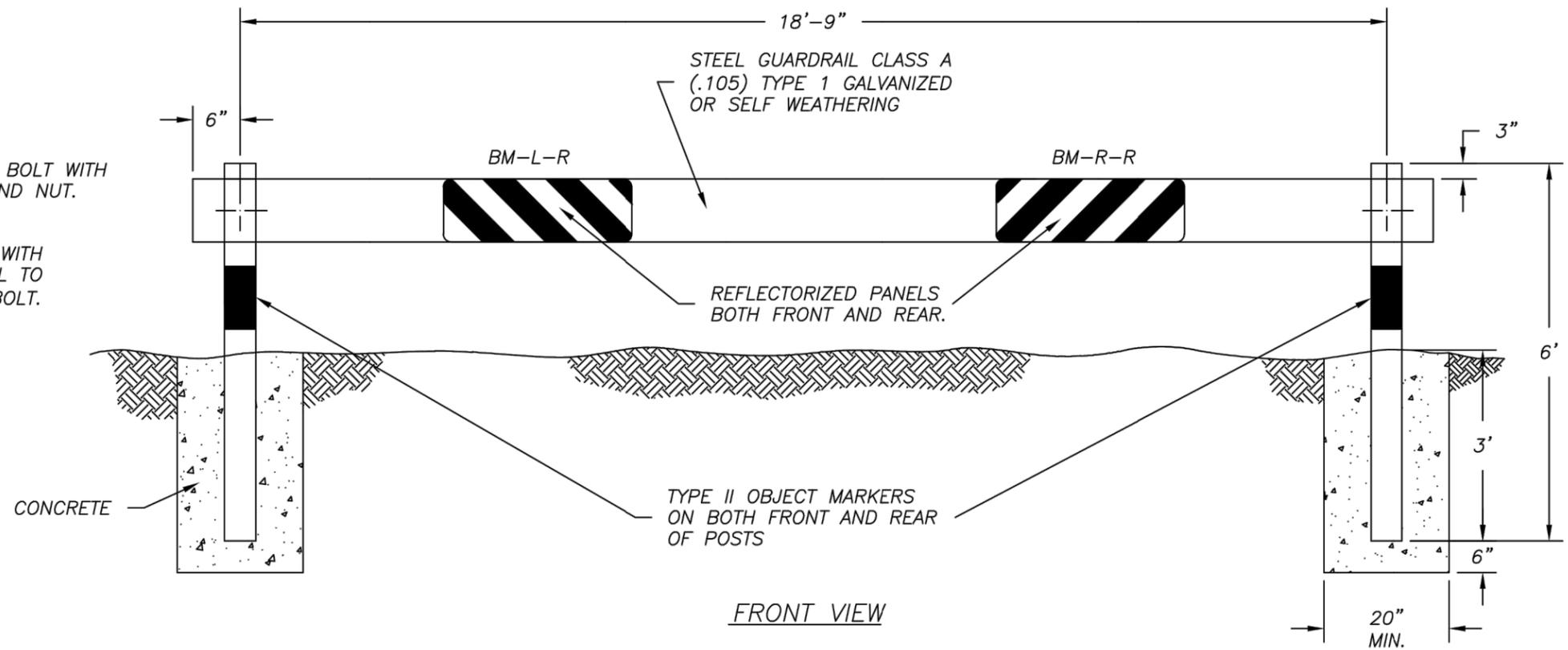
3"
DRILL 5/8" HOLE FOR DRAINAGE

5/8" X 1-1/2" BOLT WITH LOCK WASHER AND NUT.

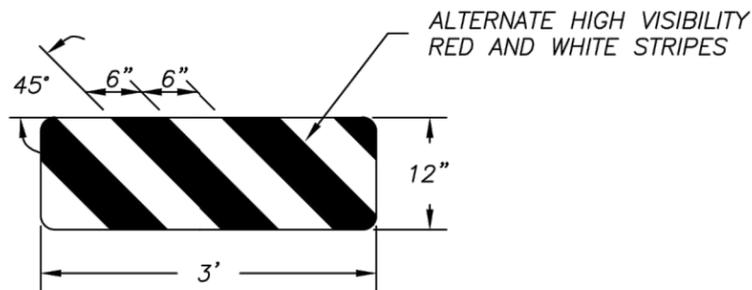
BACKFILL PIPE WITH NATIVE MATERIAL TO WITHIN 3" OF BOLT.



SIDE VIEW



FRONT VIEW



BARRICADE MARKER

BM-L-R & BM-R-R

NOTES:

1. TYPE II OBJECT MARKERS ARE 6"X12" YELLOW REFLECTORS MOUNTED VERTICALLY OR EQUIVALENT SIZE STRIP OF YELLOW REFLECTORIZED MATERIAL.
2. EACH REFLECTORIZED PANEL SHALL BE SECURED WITH FOUR 1/4"X1" BOLTS WITH LOCK WASHERS AND NUTS.
3. SIGN, PANELS AND MARKERS WILL MEET THE STANDARDS IN THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", U.S.D.O.T., F.H.A..

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GATE INSTALLATION TYPICAL

Scale

NONE

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LASSEN NATIONAL FOREST
ALMANOR RANGER DISTRICT
TEHAMA COUNTY
FP-14 - SUPPLEMENTAL SPECIFICATIONS
for
DROUGHT MP THIN

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Delete all but the first paragraph and add the following:

The Forest Service, US Department of Agriculture has adopted FP-14 for construction of National Forest System Roads.

101 - Terms, Format, and Definitions

101.01_National_3_15_2017

Add the following paragraph to Subsection 101.01:

101.01 Meaning of Terms.

Delete all references to the FAR (Federal Acquisition Regulations) in the specifications when incorporating into 2400-6(T) Timber Sale or 2400-13(T) Stewardship contracts.

101.01_National_11_9_2016

Add the following paragraph to Subsection 101.01:

101.01 Meaning of Terms.

Delete all references to the TAR (Transportation Acquisition Regulations) in the specifications.

101.03_National_11_9_2016

Add the following to Subsection 101.03:

101.03 Abbreviations.

(a) Acronyms.

AGAR — Agriculture Acquisition Regulations

AFPA — American Forest and Paper Association

FSAR — Forest Service Acquisition Regulations

MSHA — Mine Safety and Health Administration

NESC — National Electrical Safety Code

WCLIB — West Coast Lumber Inspection Bureau

(f) Miscellaneous unit abbreviations.

MP — milepost location

ppm — parts per million volume

STA — station location

Make the following changes to Subsection 101.04:

101.04 Definitions.

Delete these definitions and replace the following:

Bid Schedule — The Schedule of Items.

Bridge — A structure, including supports, erected over a depression or an obstruction such as water along a road, a trail, or a railway and having a deck for carrying traffic or other loads.

Contractor — The individual or legal entity contracting with the Government for performance of prescribed work. In a timber sale contract, the contractor is the “Purchaser”.

Culvert — Any structure with a bottom, regardless of fill depth, depth of invert burial, or presence of horizontal driving surface, or any bottomless (natural channel) structure with footings that will not have wheel loads in direct contact with the top of the structure.

Drawings — (Public Works Contracts) Design sheets or fabrication, erection, or construction details submitted to the CO by the Contractor according to FAR Clause 52.236-21 Specifications and Drawings for Construction. Also refers to submissions and submittals.

Notice to Proceed — (Public Works Contracts) Written notice to the Contractor to begin the contract work.

Right-of-Way — A general term denoting (1) the privilege to pass over land in some particular line (including easement, lease, permit, or license to occupy, use, or traverse public or private lands), or (2) Real property necessary for the project, including roadway, buffer areas, access, and drainage areas.

Solicitation—(Public Works Contracts) The complete assembly of documents (whether attached or incorporated by reference) furnished to prospective bidders.

Add the following definitions:

Adjustment in Contract Price — “Equitable adjustment,” as used in the Federal Acquisition Regulations, or “construction cost adjustment,” as used in the Timber Sale Contract, as applicable.

Change — “Change” means “change order” as used in the Federal Acquisition Regulations, or “design change” as used in the Timber Sale Contract.

Forest Service — The United States of America, acting through the Forest Service, U.S. Department of Agriculture.

Neat Line — A line defining the proposed or specified limits of an excavation or structure.

Pioneer Road — Temporary construction access built along the route of the project.

Purchaser — The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through agents, employees, or subcontractors.

Protected Streamcourse — A drainage shown on the plans or timber sale area map that requires designated mitigation measures.

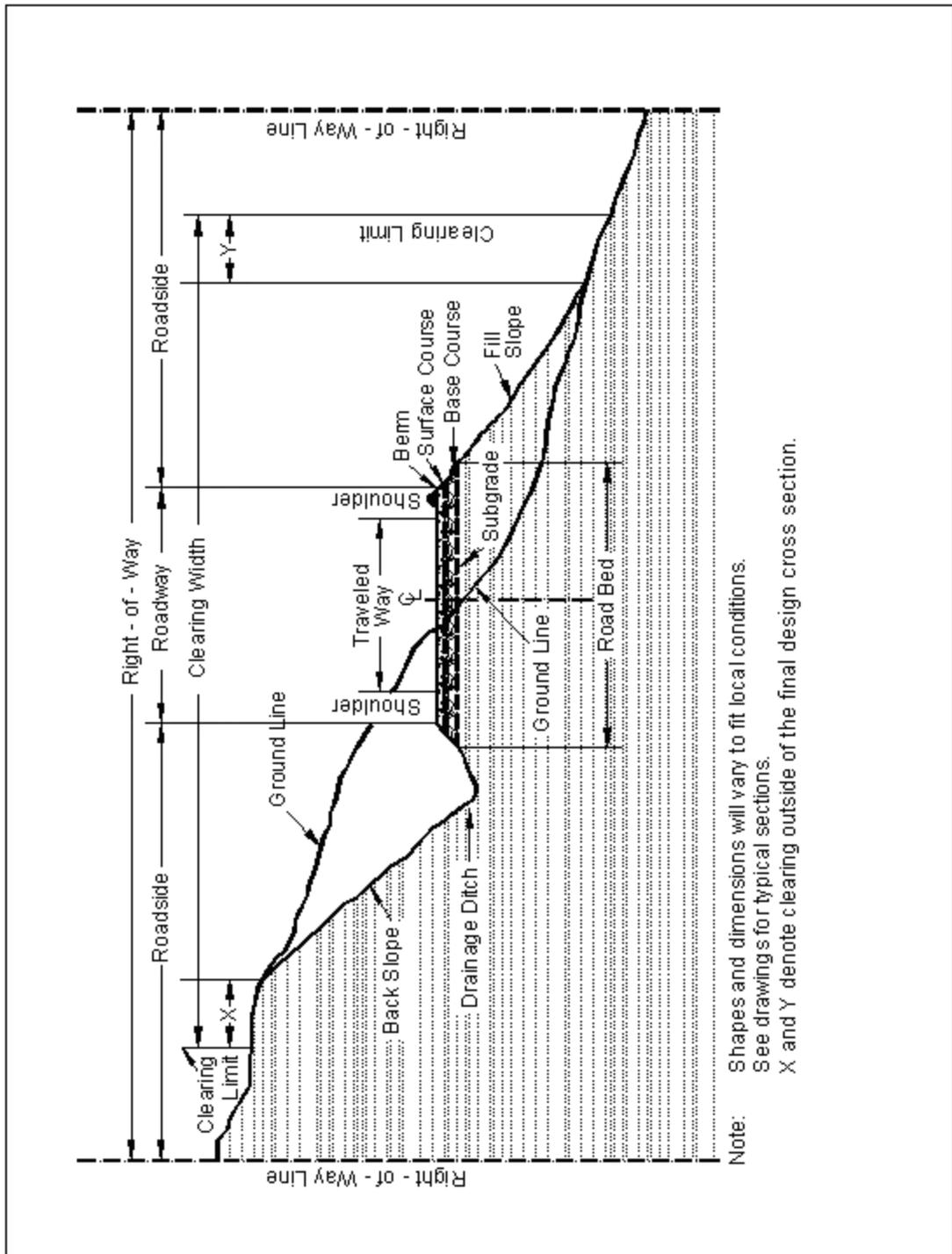
Road Order — An order affecting and controlling traffic on roads under Forest Service jurisdiction. Road Orders are issued by a designated Forest Officer under the authorities of 36 CFR, part 260.

Shop Drawings — (Timber and Stewardship Contracts) Referred to as “Drawings” in FP-14, include drawings, diagrams, layouts, schematics, descriptive literature, illustrations, lists or tables, performance and test data, and similar materials furnished by Purchaser to explain in detail specific portions of the work required by the contract.

Utilization Standards — The minimum size and percent soundness of trees described in the specifications to determine merchantable timber.

Add Figure 101-1—Illustration of road structure terms:

Figure 101-1—Illustration of road structure terms.



Note: Shapes and dimensions will vary to fit local conditions.
 See drawings for typical sections.
 X and Y denote clearing outside of the final design cross section.

102 - Bid, Award, and Execution of Contract

102.00_National_11_9_2016

Delete Section 102 in its entirety.

Delete Section 102.

103 - Scope of Work

103.00_National_11_9_2016

Delete all of Section 103 except Subsection 103.01 Intent of Contract.

Delete Subsections 103.02, 103.03, 103.04, 103.05.

104 - Control of Work

104.00_National_11_9_2016

Delete Subsections 104.01, 104.02, and 104.04.

Delete Subsections 104.01, 104.02, 104.04.

104.03_National_11_4_2016

Delete Subsection 104.03 and replace with the following:

104.03 Specifications and Drawings.

Refer to B(T) 5.211 in the 2400-6(T)) or F(T).2.1.1 in the 2400-13(T) contracts for requirements under this subsection.

104.06_National_11_9_2016

Add the following to Subsection 104.06:

104.06 Use of Roads by Contractor.

The Contractor is authorized to use roads under the jurisdiction of the Forest Service for all activities necessary to complete this contract, subject to the limitations and authorizations designated in the Road Order(s) or described in the contract, when such use will not damage the roads or national forest resources, and when traffic can be accommodated safely.

105 - Control of Material

105.02_National_11_1_2016

Add the following to Subsection 105.02c:

105.02(c) Contractor-located sources.

A Forest Service weed specialist will inspect proposed sources to determine weed-free status. Provide the Contracting Officer written notification of proposed material sources ~~<14>~~ days prior to use. Written approval of the specific source will be provided to the contractor by the CO. If weed species are present in the proposed source, appropriate mitigation measures may allow conditional use of the source as required by the Contracting Officer.

105.02_0505_02_17_2005

Add the following:

105.02 (c) Designated Sources.

There is no material source development or needed production under Section (322) on Road 2102, MP 0.69. The cost for pit run and aggregate surfacing (302) was calculated from stockpiles located on Road 30N35E.

If Purchaser/Contractor elects to use the provided material, a “Timber Purchaser’s Request For Work” (Form FS-2400-16) or a “Specified Road Construction Agreement and/or Notice” (Form FS-7700-42), will be executed and advanced payment will be made to the Forest Service prior to removing material from the stockpile site. The advanced deposit for pit run will be the sum of the contract quantity at the rate of **(\$6)** per loose cubic yard (swell factor of 33%) and the advanced deposit for aggregate surfacing will be the sum of the contract quantity at the rate of **(\$12)** per loose cubic yard (swell factor of 33%), and an administrative charge of **(\$75)**.

Changes that increase or decrease the designated quantity shall require an additional advanced deposit or refund, calculated in the same manner at the original advanced deposit.

106 - Acceptance of Work

106.01_National_7_18_2017

Delete Subsection 106.01 and replace with the following:

106.01 Conformity with Contract Requirements.

Follow the requirements of FAR Clause 52.246-12 Inspection of Construction.

References to standard test methods of AASHTO, ASTM, GSA, and other recognized standard authorities refer to the methods in effect on the date of solicitation for bids.

Perform all work to the lines, grades, cross-sections, dimensions, and processes or material requirements shown on the plans or specified in the contract.

Incorporate manufactured materials into the work according to the manufacturer's recommendations or to these specifications, whichever is more strict.

Plan dimensions and contract specification values are the values to be strived for and complied with as the design values from which any deviations are allowed. Perform work and provide material that is uniform in character and reasonably close to the prescribed value or within the specified tolerance range. The purpose of a tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons.

When standard manufactured items are specified (such as fence, wire, plates, rolled shapes, pipe conduits, etc., that are identified by gauge, unit mass, section dimensions, etc.), the identification will be considered to be nominal masses or dimensions. Unless specific contract tolerances are noted, established manufacturing tolerances will be accepted.

The Government may inspect, sample, or test all work at any time before final acceptance of the project. When the Government tests work, copies of test reports are furnished to the Contractor upon request. Government tests may or may not be performed at the work site. If Contractor testing and inspection is verified by the Government, the Contractor's results may be used by the Government to evaluate work for acceptance. Do not rely on the availability of Government test results for process control.

Acceptable work conforming to the contract will be paid for at the contract unit bid price. Four methods of determining conformity and accepting work are described in Subsections 106.02 to 106.05 inclusive. The primary method of acceptance is specified in each Section of work. However, work may be rejected at any time it is found by any of the methods not to comply with the contract.

Remove, repair, or replace work that does not conform to the contract, or to prevailing industry standards where no specific contract requirements are noted. Removing, repairing, or replacing work; providing temporary traffic control; and any other related work to accomplish conformity will be at no cost to the Government.

(a) Disputing Government test results. If the accuracy of Government test results is disputed, promptly inform the CO. If the dispute is unresolved after reasonable steps are taken to resolve the dispute, further evaluation may be obtained by written request. Include a narrative describing the dispute and a proposed resolution protocol that addresses the following:

1. Sampling method;
2. Number of samples;
3. Sample transport;
4. Test procedures;
5. Testing laboratories;
6. Reporting;
7. Estimated time and costs; and
8. Validation process.

If the evaluation requires additional sampling or testing be performed, mutually agree with the Government on witnessing procedures and on sampling and testing by a third party laboratory. Use a third party laboratory accredited by the AASHTO accreditation program. Provide proof of the laboratory's accreditation for the test procedures to be used. Do not use the same laboratory that produced the disputed Government test results or that produced the test results used as a basis for the dispute.

The CO will review the proposed resolution protocol and may modify it before final approval and execution.

The Government will use the approved resolution protocol test results to determine the validity of the disputed testing. If the Government test results are validated, the Contractor will be responsible for all costs associated with developing and performing the resolution protocol. If the Government test results are not validated, the Government will be responsible for all costs associated with developing and performing the resolution protocol. If the validity of the Government test results cannot be determined, the Contractor and Government will equally share all costs associated with developing and carrying out the resolution protocol.

(b) Alternatives to removing and replacing non-conforming work. As an alternative to removal and replacement, the Contractor may submit a written request to:

1. Have the work accepted at a reduced price; or
2. Be given permission to perform corrective measures to bring the work into conformity.

The request must contain supporting rationale and documentation. Include references or data justifying the proposal based on an evaluation of test results, effect on service life, value of material or work, quality, aesthetics, and other tangible engineering basis. The CO will determine disposition of the nonconforming work.

Delete Subsection 106.02 and replace with the following:

106.02 Visual Inspection.

Acceptance is based on visual inspection of the work for compliance with the specific contract requirements. Use prevailing industry standards in the absence of specific contract requirements or tolerances.

Delete Subsection 106.07.

106.07 Partial and Final Acceptance.

107 - Legal Relations and Responsibility to the Public

107.05_National_7_18_2017

Delete Subsection 107.05.

Delete Subsection 107.05.

107.08_National_11_1_2016

Delete Subsection 107.08 and replace with the following:

107.08 Sanitation, Health, and Safety.

Refer to specific provisions under B(T) 6.0 in the 2400-6(T) or G(T).0 in the 2400-13(T) contracts for requirements under this subsection.

108 - Prosecution and Progress

108.00_National_11_9_2016

Delete Section 108 in its entirety.

Delete Section 108.

109 - Measurement and Payment

109.00_National_11_9_2016

Delete Subsections 109.06, 109.07, 109.08, and 109.09:

Delete Subsections 109.06, 109.07, 109.08, 109.09.

109.02_National_11_9_2016

Add the following sentence to Subsection 109.02(b):

109.02 Measurement Terms and Definitions.

(b) Contract quantity.

Contract quantities will be adjusted only when there are errors in the original design of 15% or more.

151 - Mobilization

151.01_0505_us_06_04_2007

151.01 Description

Add the following at the end of the last sentence:

Cleaning of Equipment for Noxious Weeds. To prevent the spread of noxious weeds on National Forest Land, Contractor shall ensure that all equipment moved onto National Forest Land is free of soil, seeds, vegetative matter or other debris that could contain or hold seeds. Contractor shall employ whatever cleaning methods necessary to ensure compliance with the terms of this specification, and shall notify Forest Service prior to moving each piece of equipment onto National Forest land. Notification will include identifying the location of the equipment's most recent operations. Upon request of the Forest Service, arrangements will be made for the Forest Service to inspect each piece of equipment prior to it being placed into service. If the Engineer determines that noxious weeds are present in a project, cleaning may also be required before moving between work areas within the same project.

Contractor shall certify, in writing, compliance with the terms of this specification prior to each start-up of operations. Measures taken to ensure compliance for equipment present at start-up, and planned to be taken for equipment to be moved in later, will be identified in the certification. For the purposes of this specification, "equipment" includes all machinery except for log trucks, chip vans, pickup trucks, cars, or other vehicles used to transport personnel on a daily basis.

Cleaning of Equipment for Port-Orford Cedar. To prevent the spread of Phytophora lateralis root rot in Port-Orford cedar, Contractor shall clean before use in Project Area any vehicles or equipment from the natural range of Port-Orford cedar in Oregon or the Smith River and Bluff Creek drainage in California. Cleaning shall consist of the removal of soil by steam cleaning or use of a high pressure hose. Cleaning shall be inspected and approved by the Forest Service.

155 - Schedules for Construction Contracts

155.00_National_11_9_2016

Delete Section 155 in its entirety.

Delete Section 155.

156 - Public Traffic

Delete Section 156 in its entirety and replace with the following:

Section 156. – PUBLIC TRAFIC

Description

156.01 This work consists of controlling and protecting public traffic adjacent to and within the project.

Material

156.02 Conform to the MUTCD and the following Sections and Subsections:

Permanent Traffic Control	633
Traffic Signing and Marking Material	718
Concrete Barriers and Precast Guardwalls	618
Temporary plastic fence	710.11

Construction Requirements

156.03 General. Accommodate traffic according to MUTCD, approved traffic control plan and this section. Perform work in a manner that ensures safety and convenience of the public. Unless otherwise provided for in Table 156-1, keep existing roads open to all traffic during road improvement work, and maintain them in a condition that will adequately accommodate traffic. Delays may not exceed **<120>** minutes at any one time followed by an open period of no less than **<5>** minutes. Accommodate public traffic on roads adjacent to and within the project until the project is accepted according to Subsection 106.07(b).

Submit traffic control plan at least 30 days prior to intended use. Perform no work that interferes or conflicts with traffic or existing access to the roadway surface until a traffic control plan has been approved.

Post construction signs and traffic control devices in conformance with MUTCD and Forest Service EM 7100-15. All required signs will be in place and approved prior to beginning work on project.

If the Contractor agrees in writing to allow public traffic to use a new road being constructed prior to completion, it will be considered an existing road for traffic control purposes.

156.04 Temporary Traffic Control. Install and maintain temporary traffic control devices adjacent to and within the project as required by the approved traffic control plan and the MUTCD. Install and maintain traffic control devices as follows:

- (a) Furnish and install traffic control devices before the start of construction operations.
- (b) All detours outside of clearing limits will be approved in writing by the Contracting Officer as part of the traffic control plan.
- (c) Install only those traffic control devices needed for each stage or phase.

- (d) Relocate temporary traffic control devices as necessary.
- (e) Remove devices that no longer apply to the existing conditions.
- (f) Immediately replace any device that is lost, stolen, destroyed, or inoperative.
- (g) Keep temporary traffic control devices clean.
- (h) Remove all temporary traffic control devices upon contract completion or when approved.
- (i) When required, use flaggers certified by the American Traffic Safety Services Association, the National Safety Council, the International Municipal Signal Association, a state agency, or other acceptable organization. Perform the work described under MUTCD Part 6. Use type III, VII, VIII, or IX retroreflective sheeting on flagger paddles. Do not use flags. Flaggers must wear high visibility safety apparel as required by MUTCD 6E.02.

156.05 Temporary Closures. Road segments may be closed as shown in Table 156-1. The maximum consecutive days of closure shall be followed by a minimum number of consecutive days open to traffic as shown. Maintain traffic control devices during closure period(s). Appropriate barricades and signs will be erected and maintained as shown in the traffic control plan or as otherwise designated.

Prior to closing roads during construction, give written notice to the Contracting Officer at least 10 days in advance.

**Table 156-1
Temporary Road Closures**

Road Number	From Terminus	To Terminus	Maximum Consecutive Days of Closure	Minimum Consecutive Days Open
31N17	MP 0.60	MP 0.70	2	N/A

156.06 Acceptance. Public traffic work will be evaluated under Subsection 106.02.

Measurement and Payment

156.07 Do not measure Public Traffic for payment. Payment for contract work is provided indirectly. See Subsection 109.05.

157 - Soil Erosion and Sediment Control

157.04_0505_2_24_2005

Delete Subsection 157.04 and replace with the following:

157.04 General.

Prior to the start of construction, submit a written plan that provides permanent and temporary erosion control measures to minimize erosion and sedimentation during and after construction. Do not begin work until the necessary controls for that particular phase of work have been implemented. Do not modify the type, size, or location of any control. An alternate erosion control plan with all necessary permits may be submitted 30 days before intended use.

Incorporate all permanent erosion control features into the project at the earliest practicable time, as outlined in the approved plan.

When erosion control measures are not functioning as intended, immediately take corrective action.

201 - Clearing and Grubbing

201.04_National_11_2_2016

Add the following paragraph to Subsection 201.04:

201.04 Clearing.

(e) Do not cut vegetation less than 3 feet in height and less than 3 inches in diameter that is within the clearing limits but beyond the roadway and not in a decking area and that does not interfere with sight distance along the road unless otherwise designated.

201.04_0603_02_22_2005

201.04 Clearing. (c)

Delete paragraph (c) and replace with the following:

(c) In areas outside the excavation, embankment, and slope rounding limits, cut stumps to within 12 inches or one-third of the stump diameter of the ground, whichever is higher, measured on the side adjacent to the highest ground. For timber sales, stump heights will meet the requirements of the Timber Sale contract.

Replace with the following:

(d) Trim branches of remaining trees or shrubs to give a clear height of 14 feet above the roadbed unless otherwise indicated. Trim tree limbs as near flush with the trunk as practicable.

201.06_National_11_2_2016

Delete the first sentence of this Subsection 201.06 and replace the following:

201.06 Disposal.

Dispose of merchantable timber designated for removal according to the provisions of the timber sale contract.

201.06_National_2_22_2018

Delete the first sentence of Subsection 201.06 and replace the following:

201.06 Disposal.

Merchantable timber is Government property.

203 - Removal of Structures and Obstructions

203.05_National_11_8_2016

Add the following to Subsection 203.05:

203.05 Disposing of Material.

(e) Windrowing Construction Slash. Place construction slash outside the roadway in neat, compacted windrows approximately parallel to and along the toe line of embankment slopes. Do not permit the top of the windrows to extend above subgrade. Use construction equipment to matt down all material in a windrow to form a compact and uniform pile. Construct breaks of at least 15 feet at least every 200 feet in a windrow. Do not place windrows against trees.

(f) Scattering. Scatter construction slash in designated areas without damaging trees. Limb all logs. Place logs and stumps away from trees, positioned so they will not roll, and are not on top of one another. Limb and scatter other construction slash to reduce slash concentrations. When scattering for erosion control, place construction slash as flat as practicable on the completed slope.

(g) Chipping. Use an approved chipping machine to chip slash longer than 3 feet. Deposit chips on embankment slopes or outside the roadway to a loose depth less than 6 inches. Minor amounts of chips or ground woody material may be permitted within the roadway if they are thoroughly mixed with soil and do not form a layer.

(h) Debris Mat. Use tree limbs, tops, cull logs, split stumps, wood chunks, and other debris to form a mat upon which construction equipment is operated. Place stumps upside down and blend stumps into the mat.

(i) Decking. Remove brush from designated log deck areas. Limb and top logs.

Logs not meeting the Utilization Standards described in Subsection 201.04(c) shall be cut to lengths less than <20> feet and decked in designated log deck location.

Merchantable timber not associated with an existing timber sale shall be cut to length meeting the Utilization Standards described in Subsection 201.04(c).

Deck logs so that logs are piled parallel to one another; can be removed by standard log loading equipment; will not damage standing trees; will not interfere with drainage, and will not roll. Keep logs in log decks free of brush and soil.

(j) Removal to designated locations. Remove construction slash to designated locations.

(k) Piling. Pile construction slash in designated areas. Place and construct piles so that if the piles are burned, the burning will not damage remaining trees. Keep piles free of dirt from stumps.

204 - Excavation and Embankment

204.00_National_11_4_2016

Delete Section 204 in its entirety and replace with the following.

Section 204. — EXCAVATION AND EMBANKMENT

Description

204.01 This work consists of excavating material and constructing embankments. This work also includes furnishing, hauling, stockpiling, placing, disposing, sloping, shaping, compacting, and finishing earthen and rocky material.

204.02 Definitions.

(a) Excavation. Excavation consists of the following:

(1) Roadway excavation. Material excavated from within the right-of-way or easement areas, except subexcavation covered in Subsection 204.02(a)(2) and structure excavation covered in Sections 208 and 209. Roadway excavation includes all material encountered regardless of its nature or characteristics.

(2) Subexcavation. Material excavated from below subgrade elevation in cut sections or from below the original ground-line in embankment sections. Subexcavation excludes the work required by Subsection 204.05 or 204.06.

(3) Borrow excavation. Material used for embankment construction that is obtained from outside the roadway prism. Borrow excavation includes unclassified borrow, and topping.

(b) Embankment construction. Embankment construction consists of placing and compacting roadway or borrow excavation. This work includes:

- (1)** Preparing foundation for embankment;
- (2)** Constructing roadway embankments;
- (3)** Benching for side-hill embankments;
- (4)** Constructing dikes, ramps, mounds, and berms; and
- (5)** Backfilling subexcavated areas, holes, pits, and other depressions.

(c) Conserved topsoil. Excavated material conserved from the roadway excavation and embankment foundation areas that is suitable for growth of grass, cover crops, or native vegetation.

(d) Waste. Excess and unsuitable roadway excavation and subexcavation that cannot be used.

Material

204.03 Conform to the following Subsections:

Topping	704.05
Unclassified borrow	704.06
Water	725.01(c)

Construction Requirements

204.04 Preparation for Roadway Excavation and Embankment Construction. Clear the area of vegetation and obstructions according to Sections 201 and 203.

Road pioneering, slash disposal, and grubbing of stumps may proceed concurrently with excavation and embankment. Maintain drainage during pioneering operations.

204.05 Conserved Topsoil. When designated, conserve topsoil from roadway excavation and embankment foundation areas. Stockpile conserved topsoil in low windrows immediately beyond the rounding limits of cut and embankment slopes or in other approved locations. Separate conserved topsoil from other excavated material. When designated, place conserved topsoil on completed slopes according to Section 624.

204.06 Roadway Excavation. Excavate as follows:

(a) Rock cuts. Blast rock according to Section 205. Excavate rock cuts to 6 inches (150 millimeters) below subgrade within the roadbed limits. Backfill to subgrade with topping or other suitable material. Compact the material according to Subsection 204.11.

(b) Earth cuts. Scarify earth cuts to 6 inches (150 millimeters) below subgrade within the roadbed limits. Compact the scarified material according to Subsection 204.11.

(c) Pioneer Roads. Conduct excavation and placement operations so material to be treated under Section 201 will not be incorporated into the roadway unless specified in the slash treatment method. Maintain drainage during pioneering operations.

Remove snow and ice in advance of the work and deposit beyond the roadway limits in a manner that will not waste material or generate sediment. Do not incorporate snow and ice into embankments. Place snow or ice in a manner to prevent resource damage.

(d) Drainage Feature. Drainage feature includes construction of all ditches, minor channel changes, drainage dips, catch basins, surface water deflectors, and other minor drainage structures. Compact the material according to Subsection 204.11. Excavate on a uniform grade between control points.

Do not disturb material and vegetation outside the construction limits. Retrieve material deposited outside the construction limits. Dispose of unsuitable or excess excavation material according to Subsection 204.14. Replace shortage of suitable material caused by premature disposal of roadway excavation.

Shape to drain and compact the work area to a uniform cross-section at the end of each day's operations.

204.07 Subexcavation. Excavate material to the required limits. Dispose of unsuitable material according to Subsection 204.14. Take cross-sections according to Section 152. Backfill subexcavated area with suitable material in horizontal layers not exceeding 12 inches (300 millimeters) in compacted thickness and compact according to Subsection 204.11. Prevent unsuitable material from mixing with suitable backfill material.

204.08 Borrow Excavation. Use suitable roadway excavation in embankment construction. Do not use borrow excavation when it results in excess roadway excavation. Deduct excess borrow excavation from the total borrow excavation quantity.

Obtain borrow source approval according to Subsection 105.02. Develop and restore borrow sources according to Subsections 105.03 and 105.06. Do not excavate beyond the established limits. When applicable, shape the borrow source to permit accurate measurements when excavation is complete.

204.09 Preparing Foundation for Embankment Construction. Prepare foundation for embankment construction as follows:

(a) Embankment over natural ground. Remove topsoil and break up the ground surface to a minimum depth of 6 inches (150 millimeters) by plowing or scarifying. Compact the ground surface according to Subsection 204.11.

(b) Embankments over an existing asphalt, concrete, or gravel road surface. Scarify gravel roads to a minimum depth of 6 inches (150 millimeters). Scarify or pulverize asphalt and concrete roads to 6 inches (150 millimeters) below the pavement. Reduce particles to a maximum size of 6 inches (150 millimeters) and produce a uniform material. Compact the surface according to Subsection 204.11.

(c) Embankment across ground not capable of supporting equipment. Dump successive loads of embankment material in a uniformly distributed layer to construct the lower portion of the embankment. Limit the layer thickness to the minimum depth necessary to support the equipment.

(d) Embankment on an existing slope steeper than 1V:3H. Cut horizontal steps in the existing slope to a sufficient width to accommodate placement and compaction operations and equipment. Step the slope as the embankment is placed and compacted in layers. Begin each step at the intersection of the original ground and the vertical cut of the previous step.

204.10 Embankment Construction. Incorporate only suitable roadway excavation material into the embankment. When the supply of suitable roadway excavation is exhausted, furnish unclassified borrow to complete the embankment. Obtain written approval before beginning construction of embankments over 6 feet (2 meters) high at subgrade centerline. Construct embankments as follows:

(a) General. At the end of each day's operations, shape to drain and compact the embankment surface to a uniform cross-section. Eliminate ruts and low spots that could hold water.

During all stages of construction, route and distribute hauling and leveling equipment over the width and length of each layer of material.

Compact embankment side slopes with a tamping foot roller, by walking with a dozer, or by over-building the fill and then removing excess material to the final slope line. For slopes 1V:1¾H or steeper, compact the slopes as embankment construction progresses.

(b) Embankment within the roadway prism. Place embankment material in horizontal layers not exceeding 12 inches (300 millimeters) in compacted thickness. Incorporate oversize boulders or rock fragments into the 12-inch (300-millimeter) layers by reducing them in size or placing them individually as required below. Compact each layer according to Subsection 204.11 before placing the next layer.

Material composed predominately of boulders or rock fragments too large for 12-inch (300-millimeter) layers may be placed in layers up to 24 inches (600 millimeters) thick. Incorporate oversize boulders or rock fragments into the 24-inch (600-millimeter) layer by reducing them in size or placing individual rock fragments and boulders greater than 24 inches (600 millimeters) in diameter as follows:

(1) Reduce rock to less than 48 inches (1200 millimeters) in the largest dimension;

(2) Distribute rock within the embankment to prevent nesting;

(3) Place layers of embankment material around each rock to a depth not greater than that permitted above. Fill voids between rocks; and

(4) Compact each layer according to Subsection 204.11(a) before placing the next layer.

(c) **Embankment outside of roadway prism.** When placing embankment outside the staked roadway prism, place material in horizontal layers not exceeding 24 inches (600 millimeters) in compacted thickness. Compact each layer according to Subsection 204.11.

204.11 Compaction. Compact the embankment using one of the following methods as specified.

(a) **Placement Method 1.** Use AASHTO T 27 to determine the quantity of material retained on a No. 4 (4.75-millimeter) sieve. Compact as follows:

(1) **More than 80 percent retained on a No. 4 (4.75-millimeter) sieve.** Adjust the moisture content to a level suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Use compression-type rollers at speeds less than 6 feet (1.8 meters) per second and vibratory rollers at speeds less than 3 feet (1 meter) per second. Compact each layer of material full width with one of the following and until there is no visible evidence of further consolidation:

(a) Four roller passes of a vibratory roller having a minimum dynamic force of 40,000 pounds (180 kilonewtons) impact per vibration and a minimum frequency of 1000 vibrations per minute;

(b) Eight roller passes of a 20-ton (20-metric ton) compression-type roller; or

(c) Eight roller passes of a vibratory roller having a minimum dynamic force of 30,000 pounds (130 kilonewtons) impact per vibration and a minimum frequency of 1000 vibrations per minute.

Increase the compactive effort for layers deeper than 12 inches (300 millimeters) as follows:

- For each additional 6 inches (150 millimeters) or fraction thereof, increase the number of roller passes in Subsection 204.11(a)(1)(a), by four passes; or
- For each additional 6 inches (150 millimeters) or fraction thereof, increase the number of roller passes in Subsection 204.11(a)(1)(b) and (c), by eight passes.

(2) **50 to 80 percent retained on a No. 4 (4.75-millimeter) sieve.** Classify the material according to AASHTO M 145. Adjust the moisture content of material classified A-1 through A-5 to a moisture content suitable for compaction. Adjust the moisture content of material classified A-6 and A-7 to within 2 percent of the optimum moisture content. Use AASHTO T 99 to determine the optimum moisture content of the portion of the material passing a No. 4 (4.75-millimeter) sieve. Multiply this number by the percentage of material passing a No. 4 (4.75-millimeter) sieve, and add 2 percent to determine the optimum moisture content of the material.

Use nonvibratory rollers at speeds less than 6 feet (1.8 meters) per second and vibratory rollers at speeds less than 3 feet (1 meter) per second. Compact each layer of material full width according to Subsection 204.11(a)(1).

(3) **Less than 50 percent retained on a No. 4 (4.75-millimeter) sieve.** Classify the material according to AASHTO M 145. For material classified A-1 or A-2-4, determine the maximum density according to AASHTO T 99, Method C.

Adjust the moisture content of material classified A-1 through A-5 to a moisture content suitable for compaction. Adjust the moisture content of material classified A-6 and A-7 to within 2 percent of the optimum moisture content.

Use compression-type or vibratory rollers. Compact each layer of material full width to at least 95 percent of the maximum density. Determine the in-place density and moisture content according to AASHTO T 310 or other approved test procedures. When required, use AASHTO T 224 to correct for coarse particles.

(b) Placement Method 2. Adjust the moisture content of the material to a moisture content suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Operate roller compaction equipment over the full width of each layer until there is no visible evidence of further consolidation or, if when a sheepsfoot roller is used, the roller “walks out” of the layer. Make at least three complete passes. Use compression-type rollers at speeds less than 6 feet (1.8 meters) per second and vibratory rollers at speeds less than 3 feet (1 meter) per second. Ensure rollers meet the following requirements:

- (1)** Steel wheeled rollers, other than vibratory, capable of exerting a force of not less than 250 pounds per inch (4.5 kilogram/millimeter) of width of the compression roll or rolls.
- (2)** Vibratory steel wheeled rollers equipped with amplitude and frequency controls with a minimum dynamic force of 30,000 pounds (130 kilonewtons) impact per vibration, specifically designed to compact the material on which it is used.
- (3)** Pneumatic-tired rollers with smooth tread tires of equal size that will provide a uniform compacting pressure for the full width of the roller and capable of exerting a ground pressure of at least 80 psi (550 Kilopascals).
- (4)** Sheepsfoot, tamping, or grid rollers capable of exerting a force of 250 pounds per inch (4.5 kilogram/millimeter) of width of roller drum.

(c) Placement Method 3. Adjust the moisture content of the material to a moisture content suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Operate hauling and spreading equipment uniformly over the full width of each layer until there is no visible evidence of further consolidation. Make at least three complete passes.

(d) Placement Method 4. Adjust the moisture content of the material to a moisture content suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Operate hauling and spreading equipment uniformly over the full width of each layer.

(e) Placement Method 5. Adjust the moisture content of the material to a moisture content suitable for compaction. Compact the complete surface with a bucket of an excavator larger than 39,000 pounds (18 metric ton) Gross Vehicle Weight using a minimum of three blows. Overlap compaction by ½ width of bucket.

(f) Placement Method 6. Adjust the moisture content of the material to a moisture content suitable for compaction. Compact using an approved mechanical tamper for a minimum of three complete passes.

When compacting with rollers or hauling and spreading equipment is not practical, use approved mechanical tampers for a minimum of three complete passes.

204.12 Drainage Features. Slope, grade, and shape all drainage features. Remove projecting roots, stumps, rock, or similar matter. Maintain all drainage features in an open condition and without sticks, and other debris.

Form furrow ditches by plowing or using other acceptable methods to produce a continuous furrow. Place excavated material on the downhill side so the bottom of the ditch is approximately 18 inches (450 millimeters)

below the crest of the loose material. Clean the ditch using a hand shovel or other suitable method. Shape to provide drainage without overflow.

204.13 Sloping, Shaping, and Finishing. Complete subgrade, slopes, drainage features, culverts, riprap, and other underground minor structures before placing aggregate courses. Slope, shape, and finish to the designated tolerance class as defined in Table 204-2 as follows:

(a) Sloping. Leave earth slopes with uniform roughened surfaces, except as described in Subsection 204.13(b), with no noticeable break as viewed from the road. Except in solid rock, round tops and bottoms of slopes including the slopes of drainage ditches. Round material overlaying solid rock to the extent practical. Scale rock slopes. Slope rounding is not required on tolerance class D through M roads.

If a slide or slipout occurs on a cut or embankment slope, remove or replace the material and repair or restore damage to the work. Bench or key the slope to stabilize the slide. Reshape the cut or embankment slope to an acceptable condition.

(b) Stepped slopes. Where required, construct steps on slopes of 1½V:1H to 1V:2H. Construct the steps approximately 18 inches (450 millimeters) high. Blend the steps into natural ground at the end of the cut. If the slope contains non-rippable rock outcrops, blend steps into the rock. Remove loose material found in transitional area. Except for removing large rocks that may fall, scaling stepped slopes is not required.

(c) Shaping. Shape the subgrade to a smooth surface and to the cross-section required. Shape slopes to gradually transition into slope adjustments without noticeable breaks. At the ends of cuts and at intersections of cuts and embankments, adjust slopes in the horizontal and vertical planes to blend into each other or into the natural ground.

(d) Finishing. Ensure that the subgrade is visibly moist during shaping and dressing; smooth and uniform, and shaped to conform to the typical sections. Remove material larger than 6 inches (150 millimeters) from the top 6 inches (150 millimeters) of the roadbed. Remove unsuitable material from the roadbed, and replace it with suitable material. Scarify to 6 inches (150 millimeters) below the bottom of low sections, holes, cracks, or depressions and bring back to grade with suitable material.

Maintain proper ditch drainage.

204.14 Disposal of Unsuitable or Excess Material. Dispose of unsuitable or excess material at designated sites or according to Subsection 203.05(a)

When there is a pay item for waste, shape and compact the waste material in its final location. Do not mix clearing or other material not subject to payment with the waste material.

204.15 Acceptance. See Table 204-1 for sampling, testing, and acceptance requirements.

Material for embankment and conserved topsoil will be evaluated under Subsections 106.02 and 106.04.

Excavation and embankment construction will be evaluated under Subsections 106.02 and 106.04.

Subexcavation will be evaluated under Subsections 106.02 and 106.04.

Measurement

204.16 Measure the Section 204 pay items listed in the bid schedule according to Subsection 109.02 and the following as applicable:

(a) Roadway excavation. Measure roadway excavation in its original position as follows:

(1) Include the following volumes in roadway excavation:

- (a)* Roadway prism excavation;
- (b)* Rock material excavated and removed from below subgrade in cut sections;
- (c)* Unsuitable material below subgrade and unsuitable material beneath embankment areas when a pay item for subexcavation is not listed in the bid schedule;
- (d)* Ditches, except furrow ditches measured under a separate pay item;
- (e)* Conserved topsoil;
- (f)* Borrow material used in the work when a pay item for borrow is not listed in the bid schedule;
- (g)* Loose scattered rocks removed and placed as required within the roadway;
- (h)* Conserved material taken from pre-existing stockpiles and used in Section 204 work, except topsoil measured under 624; and
- (i)* Slide and slipout material not attributable to the Contractor's method of operation.

(2) Do not include the following in roadway excavation:

- (a)* Overburden and other spoil material from borrow sources;
- (b)* Overbreakage from the backslope in rock excavation;
- (c)* Water or other liquid material;
- (d)* Material used for purposes other than required;
- (e)* Roadbed material scarified in place and not removed;
- (f)* Material excavated when stepping cut slopes;
- (g)* Material excavated when rounding cut slopes;
- (h)* Preparing foundations for embankment construction;
- (i)* Material excavated when benching for embankments;
- (j)* Slide or slipout material attributable to the Contractor's method of operation;
- (k)* Conserved material taken from stockpiles constructed at the option of the Contractor;
- (l)* Material excavated outside the established slope limits; and
- (m)* Road pioneering for the convenience of the Contractor.

(3) When both roadway excavation and embankment construction pay items are listed in the bid schedule, measure roadway excavation only for the following:

- (a)* Unsuitable material below subgrade in cuts and unsuitable material beneath embankment areas when a pay item for subexcavation is not listed in the bid schedule;
- (b)* Slide and slipout material not attributable to the Contractor's method of operations; and
- (c)* Drainage ditches, channel changes, and diversion ditches.

(b) Unclassified borrow, and topping. When measuring by the cubic yard (cubic meter) measure in its original position. If borrow excavation is measured by the cubic yard (cubic meter) in-place, take initial cross-sections of the ground surface after stripping overburden. Upon completion of excavation and after the borrow source waste material is returned to the source, retake cross-sections before replacing the overburden. Do not measure borrow excavation until suitable roadway excavation is depleted.

(c) Embankment construction. Measure embankment construction in its final position. Do not make deductions from the embankment construction quantity for the volume of minor structures.

(1) Include the following volumes in embankment construction:

- (a)* Roadway embankments;
- (b)* Material used to backfill subexcavated areas, holes, pits, and other depressions;
- (c)* Material used to restore obliterated roadbeds to original contours; and
- (d)* Material used for dikes, ramps, mounds, and berms.

(2) Do not include the following in embankment construction:

- (a)* Preparing foundations for embankment construction;
- (b)* Adjustments for subsidence or settlement of the embankment or of the foundation on which the embankment is placed; and
- (c)* Material used to round fill slopes.

(d) Rounding cut slopes. If a pay item for slope rounding is included in the bid schedule measure rounding cut slopes horizontally along the centerline of the roadway. If a pay item is not included for slope rounding is not included in the bid schedule payment will be considered indirect to roadway excavation.

(e) Waste. Measure waste by the cubic yard (cubic meter) in its final position. Take initial cross-sections of the ground surface after stripping over-burden. Upon completion of the waste placement, retake cross-sections before replacing overburden.

(f) Slope scaling. Measure slope scaling by the cubic yard (cubic meter) in the hauling vehicle.

(g) Subexcavation. Measure subexcavation by the cubic yard (cubic meter) in its original position.

(h) Drainage features. Measurement includes all excavation, embankment, shaping, and grading necessary for a completed drainage feature.

Payment

204.17 The accepted quantities will be paid at the contract price per unit of measurement for the Section 204 pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

**Table 204-1
Sampling, Testing, and Acceptance Requirements**

Material or Product (Subsection)	Type of Acceptance (Subsection)	Characteristic	Category	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Source								
Topping (704.05)	Measured and tested for conformance (106.04 & 105)	Classification ⁽¹⁾	–	AASHTO M 145	1 per soil type and source of material	Processed material	Yes	Before using in work
Unclassified borrow (704.06)	"	"	–	"	"	"	"	"
Production								
Topping (704.05) and (204.11(a))	Measured and tested for conformance (106.04)	Moisture-density	–	T 99, Method C ⁽²⁾	1 per soil type, but not less than 1 per each 13,000 yd ³ (10,000 m ³)	Processed material	Yes	Before using in work
		Density	–	AASHTO T 310 or other approved procedures	1 per 3500 yd ² (3000 m ²), but not less than 3 per layer	In-place	No	Before placement of next layer
Unclassified borrow (704.06) and (204.11(a))	"	Moisture-density	–	T 99, Method C ⁽²⁾	1 per soil type, but not less than 1 per each 13,000 yd ³ (10,000 m ³)	Processed material	Yes	Before using in work

**Table 204-1
Sampling, Testing, and Acceptance Requirements**

Material or Product (Subsection)	Type of Acceptance (Subsection)	Characteristic	Category	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
		Density	–	AASHTO T 310 or other approved procedures	1 per 3500 yd ² (3000 m ²), but not less than 3 per layer	In-place	No	Before placement of next layer
Production (continued)								
Earth embankment (204.11(a))	Measured and tested for conformance (106.04)	Classification	–	AASHTO M 145	1 per soil type	Source of material	Yes	Before using in work
		Moisture-density	–	T 99, Method C ⁽²⁾	1 per soil type, but not less than 1 per each 13,000 yd ³ (10,000 m ³)	"	"	"
		Density	–	AASHTO T 310 or other approved procedures	1 per 3500 yd ² (3000 m ²), but not less than 3 per layer	In-place	No	Before placement of next layer
Top of subgrade (204.11(a))	"	Density	–	AASHTO T 310 or other approved procedures	1 per 2500 yd ² (2000 m ²), but not less than 3 per layer	In-place	No	Before placement of next layer
Finished Product								

**Table 204-1
Sampling, Testing, and Acceptance Requirements**

Material or Product (Subsection)	Type of Acceptance (Subsection)	Characteristic	Category	Test Methods Specifications	Sampling Frequency	Point of Sampling	Split Sample	Reporting Time
Roadbed (204.13)	Measured and tested for conformance (106.04)	Final line & grade	-	Field measured	Determined by the CO	Determined by the CO	No	Before placement of next layer

(1) Not required when using Government-provided source.

(2) Minimum 5 points per proctor.

**Table 204-2
Construction Tolerances**

Location Description	Tolerance Class (a)												
	A	B	C	D	E	F	G	H	I	J	K	L	M
Roadbed width (ft)	+0.5	+0.5	+1.0	+1.0	+1.0	+1.0	+1.5	+1.0	+2.0	+2.0	+2.0	+2.0	+2.0
Subgrade elevation (ft)	±0.1	±0.2	±0.2	±0.5	±0.5	±1.0	±1.0	±1.5	±2.0	±3.0	±2.0	±3.0	(c)
Centerline alignment (ft)	±0.2	±0.2	±0.5	±0.5	±1.0	±1.0	±1.5	±1.5	±2.0	±3.0	±3.0	±5.0	(c)
Slopes, excavation, and embankment (% slope ^(b))	±3	±5	±5	±5	±5	±5	±10	±10	±10	±10	±20	±20	±20

(a) Maximum allowable deviation from construction stakes and drawings.

(b) Maximum allowable deviation from staked slope measured from slope stakes or hinge points.

(c) Unless otherwise shown the centerline alignment and subgrade elevation, as built, have no horizontal curves with a radius of less than 80 feet, and no vertical curves with a curve length of less than 80 feet when the algebraic difference in the grade change is less than 10 percent, or a curve length of less than 100 feet when the algebraic difference of the grade change is greater than or equal to 10 percent. The centerline grade is not to exceed 20 percent in 100 feet of length.

209 - Structure Excavation and Backfill

209.09_National_7_18_2017

Make the following Changes to Subsection 209.09:

209.09 Backfill.

Add the following to Subsection 209.09(a):

(a) General.

Backfill without damaging or displacing the culvert or structural plate structure. Replace any pipe that is distorted by more than 5 percent of nominal dimensions, or that is ruptured or broken.

Add the following to Subsection 209.09(b)

(b) Pipe culverts.

Do not place or backfill pipe that meets any of the following conditions until the excavation and foundation have been approved in writing by the CO:

- Embankment height greater than 6 feet at subgrade centerline.
- Installation in a protected stream course.
- Round pipe with a diameter of 48 inches or greater.
- Pipe arches with a span of 50 inches or greater.
- Any box culvert or structure other than pipe culverts.

Delete Subsection 209.10 and replace with the following:

209.10 Compacting.

Compact the embankment using one of the following methods as specified.

(a) Compaction Method 1. Use AASHTO T 27 to determine the quantity of material retained on a No. 4 (4.75-millimeter) sieve. Compact as follows:

(1) More than 80 percent retained on a No. 4 (4.75-millimeter) sieve. Adjust the moisture content to a level suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Use compression-type rollers at speeds less than 6 feet (1.8 meters) per second and vibratory rollers at speeds less than 3 feet (1 meter) per second. Compact each layer of material full width with one of the following and until there is no visible evidence of further consolidation:

(a) Four roller passes of a vibratory roller having a minimum dynamic force of 40,000 pounds (180 kilonewtons) impact per vibration and a minimum frequency of 1000 vibrations per minute;

(b) Eight roller passes of a 20-ton (20-metric ton) compression-type roller; or

(c) Eight roller passes of a vibratory roller having a minimum dynamic force of 30,000 pounds (130 kilonewtons) impact per vibration and a minimum frequency of 1000 vibrations per minute.

Increase the compactive effort for layers deeper than 12 inches (300 millimeters) as follows:

- For each additional 6 inches (150 millimeters) or fraction thereof, increase the number of roller passes in Subsection 209.10(a)(1)(a), by four passes; or
- For each additional 6 inches (150 millimeters) or fraction thereof, increase the number of roller passes in Subsection 209.10(a)(1)(b) and (c), by eight passes.

(2) 50 to 80 percent retained on a No. 4 (4.75-millimeter) sieve. Classify the material according to AASHTO M 145. Adjust the moisture content of material classified A-1 through A-5 to a moisture content suitable for compaction. Adjust the moisture content of material classified A-6 and A-7 to within 2 percent of the optimum moisture content. Use AASHTO T 99 to determine the optimum moisture content of the portion of the material passing a No. 4 (4.75-millimeter) sieve. Multiply this number by the percentage of material passing a No. 4 (4.75-millimeter) sieve, and add 2 percent to determine the optimum moisture content of the material.

Use nonvibratory rollers at speeds less than 6 feet (1.8 meters) per second and vibratory rollers at speeds less than 3 feet (1 meter) per second. Compact each layer of material full width according to Subsection 209.10(a)(1).

(3) Less than 50 percent retained on a No. 4 (4.75-millimeter) sieve. Classify the material according to AASHTO M 145. For material classified A-1 or A-2-4, determine the maximum density according to AASHTO T 99, Method C..

Adjust the moisture content of material classified A-1 through A-5 to a moisture content suitable for compaction. Adjust the moisture content of material classified A-6 and A-7 to within 2 percent of the optimum moisture content.

Use compression-type or vibratory rollers. Compact each layer of material full width to at least 95 percent of the maximum density. Determine the in-place density and moisture content according to AASHTO T 310 or other approved test procedures. When required, use AASHTO T 224 to correct for coarse particles.

(b) Compaction Method 2. Adjust the moisture content of the material to a moisture content suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Operate roller compaction equipment over the full width of each layer until there is no visible evidence of further consolidation or, if when a sheepsfoot roller is used, the roller “walks out” of the layer. Make at least three complete passes. Use compression-type rollers at speeds less than 6 feet (1.8 meters) per second and vibratory rollers at speeds less than 3 feet (1 meter) per second. Ensure rollers meet the following requirements:

(1) Steel wheeled rollers, other than vibratory, capable of exerting a force of not less than 250 pounds per inch (4.5 kilogram/millimeter) of width of the compression roll or rolls.

(2) Vibratory steel wheeled rollers equipped with amplitude and frequency controls with a minimum dynamic force of 30,000 pounds (130 kilonewtons) impact per vibration, specifically designed to compact the material on which it is used.

(3) Pneumatic-tired rollers with smooth tread tires of equal size that will provide a uniform compacting pressure for the full width of the roller and capable of exerting a ground pressure of at least 80 psi (550 Kilopascals).

(4) Sheepsfoot, tamping, or grid rollers capable of exerting a force of 250 pounds per inch (4.5 kilogram/millimeter) of width of roller drum.

(c) Compaction Method 3. Adjust the moisture content of the material to a moisture content suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Operate hauling and spreading equipment uniformly over the full width of each layer until there is no visible evidence of further consolidation. Make at least three complete passes.

(d) Compaction Method 4. Adjust the moisture content of the material to a moisture content suitable for compaction. Fill the interstices around rock with earth or other fine material as practical. Operate hauling and spreading equipment uniformly over the full width of each layer.

(e) Compaction Method 5. Adjust the moisture content of the material to a moisture content suitable for compaction. Compact the complete surface with a bucket of an excavator larger than 39,000 pounds (18 metric ton) Gross Vehicle Weight using a minimum of three blows. Overlap compaction by $\frac{1}{2}$ width of bucket.

(f) Compaction Method 6. Adjust the moisture content of the material to a moisture content suitable for compaction. Compact using an approved mechanical tamper for a minimum of three complete passes.

When compacting with rollers or hauling and spreading equipment is not practical, use approved mechanical tampers for a minimum of three complete passes.

212 - Linear Grading

212.00_nat_us_05_19_2005

Delete the entire specification and replace it with the following:

Description

212.01 This work consists of clearing and grubbing, excavation and embankment, and erosion control to construct roadways and associated features.

Construction Requirements

212.02 Clearing & Disposal. Protect construction stakes and construction control markers. Remove or treat all trees, snags, downed timber, brush, and stumps within the clearing limits.

Immediately remove slash deposited in stream courses.

Fell all dead trees that are outside the clearing limits and that lean toward the road and are tall enough to reach the roadbed.

Leave stump heights less than 12 inches or one-third of the stump diameter; whichever is greater, measured on the side adjacent to the highest ground. Leave felled trees outside the clearing limits in place, and treat them no further unless otherwise designated.

Utilization standards for merchantable timber are listed below. Fall and buck merchantable material into lengths not to exceed 40 feet. Pieces (logs) will be considered as meeting utilization standards when such pieces would have met Utilization Standards if bucking lengths were varied to include such material.

Minimum Utilization Standards

See section A(t)

Do not cut vegetation less than 3 feet in height and less than 3 inches in diameter that is within the clearing limits but beyond the roadway and not in a decking area and that does not interfere with sight distance along the road.

Merchantable Timber

Method (i) Decking Firewood Material. Remove brush from decks. Limb and deck logs that do not meet Utilization Standards according to Subsection 201.01 as directed by the CO. Cut logs to lengths less than 40 feet. Ensure that logs stacks are stable and free from brush and soil.

Unmerchantable Timber and Large Construction Slash

Method (f) Scattering. Scatter construction slash outside the clearing limits without damaging trees. Limb all logs. Place logs and stumps away from trees, positioned so they will not roll, and are not on top of one another. Limb and scatter other construction slash to reduce slash concentrations.

Method (I) Placing Slash on Embankment Slopes. Place construction slash on completed embankment slopes to reduce soil erosion. Place construction slash as flat as practicable on the completed slope. Do not place slash closer than 2 feet below subgrade. Priority for use of available slash is for: (1) through fills; (2) insides of curves; and (3) ditch relief outlets.

212.03 Pioneering. Do not undercut the final back slope during pioneering operations. Deposit material inside the roadbed limits. Do not restrict drainage.

212.04 Grubbing. Within the clearing limits remove stumps with less than 6 inches of cover.

212.05 Excavation & Embankment. Construct the roadway to the required template. Protect backslopes from being undercut. Embankment may be placed by side casting and end dumping.

Locate and use borrow material, and remove and treat unsuitable or excess material.

Place rocks that are too large to be incorporated in the embankment outside the traveled way on the downhill side so that they will not roll, obstruct drainage, or hinder roadbed use and maintenance.

Leave slopes that are to be seeded in a roughened condition.

Use a crawler tractor with a dozer blade to shape and finish the roadbed. Provide for drainage of surface water, unless otherwise designated. Do not permit individual rocks in the roadbed to protrude more than 4 inches above the subgrade. A motor grader finish is not required.

Do not encroach on stream channels, wetlands, or extend beyond right-of-way or easement limits. Do not make alignment or profile grade adjustments that adversely affect drainage. Construct the roadbed within the following grading tolerances:

(a) Alignment (centerline). Alignment may be shifted a maximum of 10 feet left or right of the planned centerline. Curve radii may be reduced by up to 50 percent. Do not construct curves with radii less than 100 feet. Compound curves are permitted. Traveled way tolerance is (+) 2 feet unless otherwise designated.

(b) Profile grade. Profile grade may be shifted a maximum of 5 feet up or down from the plan elevation provided the new grade tangent does not vary more than 2 percent from the plan grade tangent. Connect revised forward and back grade tangents with a uniform vertical curve consistent with the design.

212.06 Drainage. Install culverts and other drainage structures according to Section 602 and Section 209.

212.07 Erosion Control. Install erosion control measures and seeding according to the drawings and Section 625.

212.08 Acceptance. Linear grading will be evaluated under Subsections 106.02 and 106.04.

Clearing and slash and timber treatment will be evaluated under Sections 201 and 203.

Excavation of embankment will be evaluated under Section 204.

Measurement

212.09 Measure the Section 212 items listed in the bid schedule according to Subsection 109.02 and the following.

Do not measure changes in the clearing and grubbing quantity caused by alignment adjustments under Subsection 212.04.

Payment

212.10 The accepted quantities, measured as provided in Subsection 109.02 and above, will be paid at the contract price per unit of measurement for the Section 212 pay item listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section. See Subsection 109.05.

301 - Untreated Aggregate Courses

301.03_National_7_17_2017

Add the following to Subsection 301.03:

301.03 General.

Written approval of the roadbed is required before placing aggregate.

For pit run or grid-rolled material, furnish material smaller than the maximum size, no gradation will be required otherwise. After processing on the road, remove all oversize material from the road and dispose as directed by the CO.

Provide additives or binder, if required, at the proportions specified.

Develop and use Government furnished sources according to Section 105.

If the aggregate is produced and stockpiled before placement, handle and stockpile according to Section 314.

301.04_Regional_5_31_2018

Delete the first paragraph of Subsection 301.04 and replace with the following:

301.04 Mixing and Spreading. Obtain moisture content in accordance with the compaction method specified. If moisture content is not specified by the compaction method adjust the moisture content to a level suitable for compaction. Mix the aggregate and adjust the moisture content to obtain a uniform mixture. Spread and shape the mixture on the prepared surface in a uniform layer.

Delete Subsection 301.05 and replace with the following:

301.05 Compacting. Compact each layer full width. Roll from the sides to the center, parallel to the centerline of the road. Along curbs, headers, walls, and all places not accessible to the roller, compact the material with approved tampers or compactors.
Compact the aggregate using according to 204.11

For all compaction methods, blade the surface of each layer during the compaction operations to remove irregularities and produce a smooth, even surface. When a density requirement is specified, determine the in place density and moisture content according to AASHTO T 310 or other approved test procedures.

Delete Subsection 301.06 and replace with the following:

301.06 Surface Tolerance. Remove irregularities and shape to a uniform surface.

602 - Culverts and Drains

602.03_0603_09_06_2005

602.03 General.

Add the following to Subsection 602.03

Ensure that the final installed alignment of all pipe allows no reverse grades, and does not permit horizontal and vertical alignments to vary from a straight line drawn from center of inlet to center of outlet by more than 2 percent of pipe center length or 1.0 feet, whichever is less.

602.03_0603_03_17_2010

602.03 General

Add the following to Subsection 602.03

Clean and paint damaged coating caused by welding, field cutting, or handling in accordance with AASHTO M 36M and ASTM A 849.

625 - Turf Establishment

625.08_0603_01_29_2009

625.06 Mulching. (a) Dry method.

Delete the paragraph and replace with the following:

Apply certified weed free straw mulch as shown on the plans.

703 - Aggregate

703.05_National_6_7_2018

Delete 703.05 and replace with the following:

703.05 Subbase, Base, Surface Course, and Screened Aggregate.

(a) Subbase or base aggregate. Furnish hard, durable particles or fragments of crushed stone, crushed slag, or crushed gravel conforming the following:

(1) Gradation	Table 703-2
(2) Liquid limit, AASHTO T 89	25 max.
(3) Plastic limit, AASHTO T 90	Nonplastic
(4) Los Angeles abrasion, AASHTO T 96	40% max.
(5) Sodium sulfate soundness loss (5 cycles), AASHTO T 104	12% max.
(6) Durability index (coarse), AASHTO T 210	35 min.
(7) Durability index (fine), AASHTO T 210	35 min.
(8) Fractured faces, ASTM D 5821	50% min.
(9) Free from organic matter and lumps or balls of clay	

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the No. 4 sieve, shall consist of natural or crushed sand and fine mineral particles.

(b) Surface course aggregate. Furnish hard, durable particles or fragments of crushed stone, crushed slag, or crushed gravel conforming the following:

(1) Gradation	Table 703-3
(2) Liquid limit, AASHTO T 89	35 max.
(3) Plastic Index, AASHTO T 90	
a) If the percent passing the No. 200 sieve is less than 12%	2 to 9
b) If the percent passing the No. 200 sieve is greater than 12%	Less than 2
(4) Los Angeles abrasion, AASHTO T 96	40% max.
(5) Sodium sulfate soundness loss (5 cycles), AASHTO T 104	12% max.
(6) Durability index (coarse), AASHTO T 210	35 min.
(7) Durability index (fine), AASHTO T 210	35 min.
(8) Fractured faces, ASTM D 5821	75% min.
(9) Free from organic matter and lumps or balls of clay	

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Do not furnish material that contains asbestos fibers.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary. Fine aggregate, material passing the No. 4 sieve, shall consist of natural or crushed sand and fine mineral particles.

(c) **Screened aggregate** – Furnish hard, durable particles or fragments of stone, slag, or gravel conforming the following:

- | | |
|--|--------------|
| (1) Gradation | Table 703-16 |
| (2) Plastic Index, AASHTO T 90 | Less than 9 |
| (3) Los Angeles abrasion, AASHTO T 96 | 55% max. |
| (4) Free from organic matter and lumps or balls of clay. | |

Do not use material that breaks up when alternately frozen and thawed or wetted and dried.

Obtain the aggregate gradation by crushing, screening, and blending processes as necessary.

Delete Table 703-2 and replace with the following:

Table 703-2
Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)

Sieve Size	Grading Destination				
	A (Subbase)	B (Subbase)	C (Base)	D (Base)	E (Base)
2½ inch	100				
2 inch	97 – 100	100	100		
1½ inch		97 – 100			
1 inch	65 – 79 (6)		80 – 100 (6)	100	
¾ inch			64 – 94 (6)	86 – 100 (6)	100
½ inch	45 – 59 (7)				
3/8 inch			40 – 69 (6)	51 – 82 (6)	62 – 90 (6)
No. 4	28 – 42 (6)	40 – 60 (8)	31 – 54 (6)	36 – 64 (6)	36 – 74 (6)
No. 40	9 – 17 (4)			12 – 26 (4)	12 – 26 (4)
No. 200	4.0 – 8.0 (3)	4.0 – 12.0 (4)	4.0 – 7.0 (3)	4.0 – 7.0 (3)	4.0 – 7.0 (3)

() The value in the parentheses is the allowable deviation (±) from the target values..

Delete Table 703-3 and replace with the following:

Table 703-3

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)							
	Grading Designation							
	F	G	H	S	T	U		
1 1/2 inch	100			100				
1 inch	97-100	100		72 - 92 (6)	100			
3/4 inch	76-89 (6)	97 - 100	97 - 100				100	
1/2 inch					71 - 91 (6)			
3/8 inch	56-68 (6)	70 - 80 (6)	80 - 92 (6)	51 - 71 (6)			71 - 90 (6)	
No. 4	43-53 (7)	51 - 63 (7)	58 - 70 (7)	36 - 53 (7)	43 - 60 (7)		50 - 68 (7)	
No. 8				26 - 40 (6)	30 - 46 (6)		34 - 51 (6)	
No. 16	23-32 (6)	28 - 39 (6)	28 - 40 (6)					
No. 40	15-23 (5)	19 - 27 (5)	16 - 26 (5)	14 - 25 (5)	16 - 28 (5)		19 - 30 (5)	
No. 200	10.0-16.0 (4)	10.0 - 16.0 (4)	9.0 - 14.0 (4)	8.0 - 15.0 (4)	8.0 - 15.0 (4)		8.0 - 15.0 (4)	

() The value in the parentheses is the allowable deviation (\pm) from the target values.
 If the plasticity index (PI) is greater than 0, the TV range for the No. 200 sieve size is 8-12 (4).

Add Table 703-13:

**Table 703-13
Gradation Requirements for Screened Aggregate**

Sieve Size	Percent by Mass Passing Designated Sieve (AASHTO T 27 and T 11)						
	Grading Designation						
	L	M	N	O	P	Q	R
6 inch	100	100					
4 inch			100	100			
3 inch					100	100	
2 inch							100
No. 4		15-45		15-45		15-45	

CRUISE REPORT HEADER & CERTIFICATION

CRUISE#: 10172 SALE#: 10172
SALENAME: Drought MP Thin
RUN DATE & TIME: 12/19/2019 2:30:37 PM

Year: 0 Region: 05 Forest: 06 District: 51

Remarks:

FILENAME: C:\Small_Sales\Projects\DroughtMPThin\Cruise\Final Cruise\10172 Drought Timber Sale Final Cruise.cruise
REPORTS: A01 R401 R402 R501 ST1 ST3 TC10 TC12 TC56 TC58 TC59 TC60 TC62 TC65 UC1 UC5 VPA1 VPA3 VSM1 VSM3
WT1 WT4

***** CRUISE CERTIFICATION *****

I certify that the timber for the Drought MP Thin timber sale
has been designated and cruised by the procedures and standards in
FSH 2409.12, Timber Cruising Handbook. Records of checks are on file
at the District Ranger Office,

Almanor
RANGER DISTRICT

Russell Nickerson
DISTRICT RANGER

Chester, CA
(name of headquarters town)

07/28/2020
DATE

Developed and Maintained By:
USDA FOREST SERVICE
WASHINGTON OFFICE TIMBER MANAGEMENT
FORT COLLINS, COLORADO (970)295-5776

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019
NATIONAL CRUISE PROCESSING PROGRAM

VOLUME EQUATION TABLE

CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
 VOLUME LIBRARY VERSION: 09.25.2019

SPECIES	PROD	VOLUME EQUATION	STUMP HEIGHT	TOTAL CUBIC VOLUME	PRIMARY ***** PRODUCT *****				SECONDARY ***** PRODUCT *****				
					MIN TOP DIB	BDFT	CUFT	CORDS	MIN TOP DIB	BDFT	CUFT	CORDS	BIOMASS
IC	01	500WO2W081	1.0	NO	6.0	YES	YES	NO	1.0	YES	YES	NO	YES
RF	01	500WO2W020	1.0	NO	6.0	YES	YES	NO	1.0	YES	YES	NO	YES
SP	01	500WO2W117	1.0	NO	6.0	YES	YES	NO	1.0	YES	YES	NO	YES
WF	01	500WO2W015	1.0	NO	6.0	YES	YES	NO	1.0	YES	YES	NO	YES
IC	20	500WO2W081	1.0	NO	1.0	NO	YES	NO	0.0	NO	NO	NO	YES
RF	20	500WO2W020	1.0	NO	1.0	NO	YES	NO	0.0	NO	NO	NO	YES
SP	20	500WO2W117	1.0	NO	1.0	NO	YES	NO	0.0	NO	NO	NO	YES
WF	20	500WO2W015	1.0	NO	1.0	NO	YES	NO	0.0	NO	NO	NO	YES

BIOMASS EQUATION TABLE

CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
 VOLUME LIBRARY VERSION: 09.25.2019

SPECIES	PROD	COMPONENT	EQU	% MOIST	% REMV	L/D	FIA	WEIGHT FACTOR		METDATA
							CODE	PRIM	SECD	
IC	01	Total Tree		136.7	95.0	L	81	0.0	0.0	Heath et al 2009
		Live Branches		136.7	95.0	L	81	0.0	0.0	Heath et al 2009
		Dead Branches		136.7	95.0	L	81	0.0	0.0	
		Foliage		136.7	95.0	L	81	0.0	0.0	Heath et al 2009
		Mainstem Primary		136.7	95.0	L	81	58.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		136.7	95.0	L	81	0.0	86.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		136.7	95.0	L	81	0.0	0.0	
IC	20	Total Tree		136.7	95.0	L	81	0.0	0.0	Heath et al 2009
		Live Branches		136.7	95.0	L	81	0.0	0.0	Heath et al 2009
		Dead Branches		136.7	95.0	L	81	0.0	0.0	
		Foliage		136.7	95.0	L	81	0.0	0.0	Heath et al 2009
		Mainstem Primary		136.7	95.0	L	81	86.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		136.7	95.0	L	81	0.0	86.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		136.7	95.0	L	81	0.0	0.0	
RF	01	Total Tree		171.7	95.0	L	20	0.0	0.0	Heath et al 2009
		Live Branches		171.7	95.0	L	20	0.0	0.0	Heath et al 2009
		Dead Branches		171.7	95.0	L	20	0.0	0.0	
		Foliage		171.7	95.0	L	20	0.0	0.0	Heath et al 2009
		Mainstem Primary		171.7	95.0	L	20	69.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		171.7	95.0	L	20	0.0	86.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		171.7	95.0	L	20	0.0	0.0	
RF	20	Total Tree		171.7	95.0	L	20	0.0	0.0	Heath et al 2009
		Live Branches		171.7	95.0	L	20	0.0	0.0	Heath et al 2009
		Dead Branches		171.7	95.0	L	20	0.0	0.0	
		Foliage		171.7	95.0	L	20	0.0	0.0	Heath et al 2009
		Mainstem Primary		171.7	95.0	L	20	86.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		171.7	95.0	L	20	0.0	86.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		171.7	95.0	L	20	0.0	0.0	
SP	01	Total Tree		157.5	95.0	L	117	0.0	0.0	Heath et al 2009
		Live Branches		157.5	95.0	L	117	0.0	0.0	Heath et al 2009
		Dead Branches		157.5	95.0	L	117	0.0	0.0	
		Foliage		157.5	95.0	L	117	0.0	0.0	Heath et al 2009
		Mainstem Primary		157.5	95.0	L	117	69.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		157.5	95.0	L	117	0.0	80.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		157.5	95.0	L	117	0.0	0.0	
SP	20	Total Tree		157.5	95.0	L	117	0.0	0.0	Heath et al 2009
		Live Branches		157.5	95.0	L	117	0.0	0.0	Heath et al 2009
		Dead Branches		157.5	95.0	L	117	0.0	0.0	
		Foliage		157.5	95.0	L	117	0.0	0.0	Heath et al 2009

BIOMASS EQUATION TABLE

PAGE 4

CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
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VERSION: 10.01.2019
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SPECIES	PROD	COMPONENT	EQU	% MOIST	% REMV	L/D	FIA CODE	WEIGHT PRIM	FACTOR SECD	METDATA
		Mainstem Primary		157.5	95.0	L	117	80.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		157.5	95.0	L	117	0.0	80.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		157.5	95.0	L	117	0.0	0.0	
WF	01	Total Tree		152.7	95.0	L	15	0.0	0.0	Heath et al 2009
		Live Branches		152.7	95.0	L	15	0.0	0.0	Heath et al 2009
		Dead Branches		152.7	95.0	L	15	0.0	0.0	
		Foliage		152.7	95.0	L	15	0.0	0.0	Heath et al 2009
		Mainstem Primary		152.7	95.0	L	15	69.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		152.7	95.0	L	15	0.0	86.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		152.7	95.0	L	15	0.0	0.0	
WF	20	Total Tree		152.7	95.0	L	15	0.0	0.0	Heath et al 2009
		Live Branches		152.7	95.0	L	15	0.0	0.0	Heath et al 2009
		Dead Branches		152.7	95.0	L	15	0.0	0.0	
		Foliage		152.7	95.0	L	15	0.0	0.0	Heath et al 2009
		Mainstem Primary		152.7	95.0	L	15	86.0	0.0	USE REGIONAL DEFAULT WEIGHT FACTOR (PRIM
		Mainstem Secondary		152.7	95.0	L	15	0.0	86.0	USE REGIONAL DEFAULT WEIGHT FACTOR (SECO
		Stem Tip		152.7	95.0	L	15	0.0	0.0	

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
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CRUISE NO.	STRATA NO.	CRUISE METHOD	STRATA ACRES	BAF	PLOT SIZE	NO. OF PLOTS	STRATA DESCRIPTION	DATE MMYYYY
10172	1	3P	21.23	0.00	0	0	Group Saw Log	10 0
10172	2	PCM	188.55	15.00	0	25	PCM Saw	11 0
10172	3	PCM	209.78	5.00	0	55	Biomass	11 0

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

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CRUISE NO.	CUTTING UNIT NO.	CUTTING UNIT ACRES	CUTTING UNIT DESCRIPTION	LOG METHOD	PAYMENT UNIT NO.
10172	100	21.23	Group Selections	491	
10172	159	87.89	ITM Unit	491	
10172	801	52.50	ITM Unit	491	
10172	811	48.16	ITM Unit	491	
TOTAL SALE ACRES:		209.78			

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

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CRUISE NO.	CUTTING UNIT	STRATUM	PAYMENT UNIT
10172	100	1	
10172	100	3	
10172	159	2	
10172	159	3	
10172	801	2	
10172	801	3	
10172	811	2	
10172	811	3	

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

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STRATUM	SAMPLE GROUP	FREQ	KZ	BIG BAF	SMALL FPS	DESCRIPTION
1	TF	0	6688	0		True Fir
1	DF	0	1	0		Doug Fir
1	WP	0	1	0		White Pine
1	PP	0	1	0		Ponderosa Pine
1	LP	0	1	0		Lodgepole Pine
1	IC	0	1	0		Incense Cedar
2	TF	0	0	90		
2	DF	0	0	16		
2	PP	0	0	16		
2	WP	0	0	16		
2	LP	0	0	16		
2	IC	0	0	16		
3	BI	0	0	16		

-- BOARD FOOT --

FOR CUT TREES ONLY -- PRIMARY PRODUCT ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

S	P					GROSS	NET		QUAD		NET	16'LOGS/	NET LOG
P	R					BF/	BF/	TREES/	MEAN	MEAN	BF/	GROSS	SCALE
E	O				ESTIM	ACRE	ACRE	ACRE	DBH	HT1	TREE	MBF	VALUE/
C	D		TOTAL	NET	TREES								MBF
I	U		DEF%	BF									
E	C	GROSS											
S	T	BF											
IC	01	30	0.0	30	1	0	0	0.0	13.8	35.0	30	33.3	
IC	20	0	0.0	0	799	0	0	3.8	5.9	19.8	0	0.0	
RF	01	431392	3.5	416143	3758	2056	1984	17.9	13.4	59.7	111	24.5	
RF	20	0	0.0	0	1990	0	0	9.5	7.2	42.1	0	0.0	
SP	01	7134	3.7	6872	194	34	33	0.9	12.1	31.1	35	35.4	
SP	20	0	0.0	0	155	0	0	0.7	7.8	20.0	0	0.0	
WF	01	2414597	4.0	2318046	8338	11510	11050	39.7	18.4	84.8	278	12.5	
WF	20	0	0.0	0	17456	0	0	83.2	6.0	28.7	0	0.0	
TOTALS/AVE		2853153	3.9	2741090	32692	13601	13066	155.8	11.5	47.1	84	27.6	N/A

-- CUBIC FOOT --

FOR CUT TREES ONLY -- PRIMARY PRODUCT ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

S	P					GROSS	NET		QUAD		NET	16'LOGS/	NET LOG
P	R					CF/	CF/	TREES/	MEAN	MEAN	CF/	GROSS	SCALE
E	O				ESTIM	ACRE	ACRE	ACRE	DBH	HT1	TREE	CCF	VALUE/
C	D	GROSS	TOTAL	NET	TREES								CCF
I	U	CF	DEF%	CF									
E	C												
S	T												
IC	01	7	0.0	7	1	0	0	0.0	13.8	35.0	7	13.5	
IC	20	763	0.0	763	799	4	4	3.8	5.9	19.8	1	121.5	
RF	01	83481	2.9	81043	3758	398	386	17.9	13.4	59.7	22	12.6	
RF	20	8966	0.0	8966	1990	43	43	9.5	7.2	42.1	5	58.6	
SP	01	1571	3.2	1521	194	7	7	0.9	12.1	31.1	8	16.1	
SP	20	248	0.0	248	155	1	1	0.7	7.8	20.0	2	62.5	
WF	01	419356	3.8	403226	8338	1999	1922	39.7	18.4	84.8	48	7.2	
WF	20	37648	0.0	37648	17456	179	179	83.2	6.0	28.7	2	83.7	
TOTALS/AVE		552041	3.4	533423	32692	2632	2543	155.8	11.5	47.1	16	14.3	N/A

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
FOR CUT TREES ONLY
CRUISE#: 10172 SALE#: 10172
SALENAME: Drought MP Thin
RUN DATE & TIME: 12/19/2019 2:30:37 PM

TABLE 1 - REPORT FOR SPECIES: IC
PRODUCT: 01

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
7	1.0	30.0	30.0	7.4	7.4
TOTALS	1.0	30.0	30.0	7.4	7.4

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

TABLE 2 - REPORT FOR SPECIES: IC
 PRODUCT: 20

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
1	799.3	0.0	0.0	456.9	456.9
5	127.3	0.0	0.0	305.6	305.6
TOTALS	926.6	0.0	0.0	762.6	762.6

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

TABLE 3 - REPORT FOR SPECIES: RF
 PRODUCT: 01

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
6	2488.5	24884.8	24884.8	7039.2	7039.2
7	1602.3	16023.0	16023.0	5370.4	5370.4
8	1511.8	34038.9	34038.9	8918.6	8897.2
9	1844.8	63550.0	63279.6	13009.7	12890.2
10	1191.8	65095.0	64497.3	11205.3	11145.6
12	868.1	67967.0	66614.6	12406.8	12176.5
14	288.0	31674.9	30950.7	5783.9	5639.1
15	196.3	27479.3	26694.2	4396.7	4259.3
16	213.8	34210.5	33569.1	5409.5	5302.6
17	270.4	48675.3	38538.6	7346.2	5831.8
19	74.1	17793.1	17051.7	2594.8	2491.0
TOTALS	10549.9	431391.9	416142.6	83481.1	81042.8

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
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TABLE 4 - REPORT FOR SPECIES: RF
 PRODUCT: 20

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
1	1990.4	0.0	0.0	1066.6	1066.6
3	479.1	0.0	0.0	357.2	357.2
4	1533.1	0.0	0.0	2829.4	2829.4
5	409.5	0.0	0.0	1216.9	1216.9
6	511.9	0.0	0.0	1893.9	1893.9
7	327.0	0.0	0.0	1602.5	1602.5
TOTALS	5251.0	0.0	0.0	8966.5	8966.5

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

TABLE 5 - REPORT FOR SPECIES: SP
 PRODUCT: 01

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
6	173.4	1733.9	1733.9	555.0	555.0
7	5.0	100.0	96.0	22.7	22.1
8	15.0	320.0	304.0	87.4	83.4
9	8.0	260.0	253.0	57.9	56.1
10	8.0	290.0	275.0	67.7	63.9
11	11.0	670.0	644.0	132.6	127.6
12	8.0	600.0	579.0	114.3	110.0
13	5.0	500.0	456.0	91.2	83.6
14	8.0	880.0	821.0	157.8	146.8
15	4.0	560.0	536.0	94.4	90.5
16	5.0	800.0	770.0	125.0	120.0
18	2.0	420.0	404.0	65.0	62.4
TOTALS	252.4	7133.9	6871.9	1571.0	1521.4

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
FOR CUT TREES ONLY
CRUISE#: 10172 SALE#: 10172
SALENAME: Drought MP Thin
RUN DATE & TIME: 12/19/2019 2:30:37 PM

TABLE 6 - REPORT FOR SPECIES: SP
PRODUCT: 20

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
1	154.8	0.0	0.0	247.7	247.7
TOTALS	154.8	0.0	0.0	247.7	247.7

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

TABLE 7 - REPORT FOR SPECIES: WF
 PRODUCT: 01

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
6	1295.5	18994.5	18994.5	5708.1	5708.1
7	3947.7	80423.2	79566.5	20052.8	19585.5
8	1929.0	38579.9	38579.9	11648.3	11524.6
9	4389.8	143285.4	140884.3	34003.1	33231.8
10	2908.1	148937.3	140825.7	27916.2	26439.3
11	3499.8	210921.9	203145.9	39155.5	37929.4
12	3199.0	239948.5	230730.6	44000.9	42374.0
13	1473.7	137516.1	133759.2	25142.3	24441.7
14	1507.4	158980.9	154261.7	28595.7	27650.9
15	625.7	87603.6	84493.0	14325.2	13809.9
16	1521.2	243399.7	235482.4	38564.7	37271.0
17	869.8	156569.0	150483.5	24395.1	23418.6
18	1207.3	253535.3	240627.9	37329.5	35366.8
19	728.3	174796.3	166388.4	25202.9	24020.7
20	214.9	60164.4	57468.8	8306.4	7928.8
21	476.4	142905.4	130999.8	19402.1	17797.5
22	104.1	34346.3	32264.7	4818.9	4527.5
23	110.7	42058.0	39955.1	5334.7	5069.1
24	104.1	41631.8	39133.9	5453.8	5131.1
TOTALS	30112.4	2414597.5	2318045.8	419356.4	403226.1

R501: LOG STOCK TABLE BY SPECIES AND PRODUCT
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

TABLE 8 - REPORT FOR SPECIES: WF
 PRODUCT: 20

LOG DIB CLASS	# OF LOGS	GROSS BDFT	NET BDFT	GROSS CUFT	NET CUFT
1	17456.2	0.0	0.0	8330.0	8330.0
2	104.5	0.0	0.0	52.2	52.2
3	4828.9	0.0	0.0	4882.8	4882.8
4	3974.7	0.0	0.0	6430.5	6430.5
5	3025.9	0.0	0.0	8800.2	8800.2
6	1297.7	0.0	0.0	5181.8	5181.8
7	810.4	0.0	0.0	3970.9	3970.9
TOTALS	31498.3	0.0	0.0	37648.4	37648.4

ST1: NET VOLUME STATISTICS FOR SAMPLE GROUP (DP1)
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

*****PRIMARY PRODUCT NET VOLUME*****																	
S T G																	
P S A																	
S R U M																	
T O A																	
R D O S NO																	
A U F G S M SAM BIG SMALL t MEAN																	
T C R T																	
A T M P M 1/2 TREES N N* VALUE X																	
										SUM		SUM		COEFF		COMBINED	
										OF	OF	STANDARD	OF	STANDARD	SAMPLING	SAMPLING	
										X	(X * X)	DEVIATION	VARIATION	ERROR	ERROR	ERROR	
1	01	03	TF	N	1	18	2851	18	2.110	1.1	20.69	26.03	0.3633	31.6073	0.086	15.7193	15.719
1	01	03	WP	Y	1	23	23	0	0.000	0.0	0.74	0.55	0.0000	0.0000	0.000	0.0000	0.000
1	01	03	IC	Y	1	1	1	0	0.000	0.0	0.32	0.10	0.0000	0.0000	0.000	0.0000	0.000
2	01	03	TF	N	1	117	0	25	2.064	4.7	117.00	661.00	2.1741	46.4549	0.435	19.1766	22.186
2	01	03	TF	N	2	27	25	27	2.056	24.5	662.37	17493.68	6.9172	28.1962	1.331	11.1566	22.186
2	01	03	WP	N	1	1	0	25	2.064	0.0	1.00	1.00	0.2000	500.0000	0.040	206.4000	206.400
2	01	03	WP	N	2	1	25	1	0.000	4.8	4.85	23.51	0.0000	0.0000	0.000	0.0000	206.400
3	20	03	BI	N	1	221	0	55	2.000	4.0	221.00	2467.00	5.4074	134.5743	0.729	36.2920	37.711
3	20	03	BI	N	2	82	55	82	2.000	11.3	926.64	12698.32	5.2433	46.3986	0.579	10.2477	37.711

* CANNOT CALCULATE SAMPLING ERROR IF SMALL N EQUALS 1.

PRIMARY PRODUCT VOLUME

FOR CUT TREES ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
 VOLUME LIBRARY VERSION: 09.25.2019

			***** PRIMARY PRODUCT GROSS VOLUME *****				***** PRIMARY PRODUCT NET VOLUME *****			
S T R A T A	R U D O F C M	U O O F M	***** 95% CONFIDENCE *****		***** 95% CONFIDENCE *****		***** 95% CONFIDENCE *****		***** 95% CONFIDENCE *****	
			VOLUME*	ERROR	FROM	TO	VOLUME*	ERROR	FROM	TO
1	01	03	167029.5	14.99	141985	192075	160518.3	15.62	135440	185597
2	01	03	337386.3	22.37	261907	412865	325279.4	22.15	253226	397333
3	20	03	47625.1	37.71	29665	65585	47625.1	37.71	29665	65585
----- AGGREGATED BY PRODUCT -----										
	01	03	504415.8	15.77	424890	583942	485797.7	15.70	409505	562091
	20	03	47625.1	37.71	29665	65585	47625.1	37.71	29665	65585
----- AGGREGATED BY UNIT OF MEASURE -----										
		03	552040.9	14.77	470512	633569	533422.8	14.69	455044	611801
----- AGGREGATED BY STRATA -----										
1		03	167029.5	14.99	141985	192075	160518.3	15.62	135440	185597
2		03	337386.3	22.37	261907	412865	325279.4	22.15	253226	397333
3		03	47625.1	37.71	29665	65585	47625.1	37.71	29665	65585

* UOM DETERMINES VALUES USED IN CALCULATION UNDER VOLUME

SECONDARY PRODUCT VOLUME

FOR CUT TREES ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

			***** SECONDARY PRODUCT GROSS VOLUME *****				***** SECONDARY PRODUCT NET VOLUME *****			
S T R A T A	R D U T C M	U O O F	***** 95% CONFIDENCE *****		***** 95% CONFIDENCE *****		***** 95% CONFIDENCE *****		***** 95% CONFIDENCE *****	
			VOLUME*	ERROR	FROM	TO	VOLUME*	ERROR	FROM	TO
1	20	03	11827.3	27.20	8610	15045	11827.3	27.20	8610	15045
2	20	03	27542.4	20.62	21863	33221	27456.7	20.65	21786	33127
	20	03	39369.7	16.58	32843	45897	39284.0	16.60	32764	45804
			----- AGGREGATED BY PRODUCT -----							
			----- AGGREGATED BY UNIT OF MEASURE -----							
			----- AGGREGATED BY STRATA -----							
1		03	11827.3	27.20	8610	15045	11827.3	27.20	8610	15045
2		03	27542.4	20.62	21863	33221	27456.7	20.65	21786	33127

* UOM DETERMINES VALUES USED IN CALCULATION UNDER VOLUME

TOTAL VOLUME

FOR CUT TREES ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
 VOLUME LIBRARY VERSION: 09.25.2019

P		***** TOTAL GROSS VOLUME *****					***** TOTAL NET VOLUME *****				
S R U		***** 95% CONFIDENCE *****					***** 95% CONFIDENCE *****				
T O		INTERVAL					INTERVAL				
R D O											
A U F											
T C											
A T M		VOLUME*	ERROR	FROM	TO	VOLUME*	ERROR	FROM	TO		
----- AGGREGATED BY PRODUCT -----											
01	03	504415.8	15.77	424890	583942	485797.7	15.70	409505	562091		
20	03	86994.8	21.97	67886	106104	86909.1	21.98	67802	106016		
----- AGGREGATED BY UNIT OF MEASURE -----											
	03	591410.6	13.83	509621	673200	572706.8	13.73	494058	651356		
----- AGGREGATED BY STRATA -----											
1	03	178856.8	14.12	153606	204108	172345.6	14.67	147061	197630		
2	03	364928.7	20.74	289236	440621	352736.1	20.49	280460	425012		
3	03	47625.1	37.71	29665	65585	47625.1	37.71	29665	65585		

* UOM DETERMINES VALUES USED IN CALCULATION UNDER VOLUME

TC10: STAND TABLE FOR SALE 10172 -- NET CUFT VOLUME

FOR PRIMARY PRODUCT ONLY - BY 2" DIAMETER CLASS

(12-inch class = 11.0 - 12.9 inches; 14-inch class = 13.0 - 14.9 inches, and so on.)

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

SPEC	IC	IC	RF	RF	SP	SP	WF	WF	TOTALS
PROD	01	20	01	20	01	20	01	20	
U OF M	03	03	03	03	03	03	03	03	
1-4	0	171	0	0	0	0	0	3319	3490
6	0	172	0	1993	0	0	0	8900	11065
8	0	420	0	3623	0	248	0	13536	17827
10	0	0	0	3351	0	0	0	11894	15244
12	0	0	33191	0	573	0	14836	0	48600
14	7	0	0	0	72	0	52584	0	52663
16	0	0	12822	0	62	0	51315	0	64199
18	0	0	0	0	247	0	37677	0	37924
20	0	0	14689	0	361	0	21065	0	36115
22	0	0	12994	0	133	0	87140	0	100268
24	0	0	7347	0	73	0	48465	0	55884
26	0	0	0	0	0	0	57417	0	57417
28	0	0	0	0	0	0	15074	0	15074
30	0	0	0	0	0	0	17652	0	17652
TOTALS	7	763	81043	8966	1521	248	403226	37648	533423

BY 2" DIAMETER CLASS

(12-inch class = 11.0 - 12.9 inches; 14-inch class = 13.0 - 14.9 inches, and so on.)

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

SPEC	IC	IC	RF	RF	SP	SP	WF	WF	TOTALS
PROD	01	20	01	20	01	20	01	20	
U OF M	03	03	03	03	03	03	03	03	
1-4	0	427	0	0	0	0	0	7230	7657
6	0	245	0	1069	0	0	0	5163	6477
8	0	127	0	594	0	155	0	3493	4370
10	0	0	0	327	0	0	0	1570	1897
12	0	0	2488	0	173	0	1296	0	3957
14	1	0	0	0	3	0	2016	0	2020
16	0	0	384	0	2	0	1725	0	2111
18	0	0	0	0	6	0	786	0	792
20	0	0	214	0	7	0	333	0	554
22	0	0	196	0	2	0	1050	0	1248
24	0	0	476	0	1	0	476	0	953
26	0	0	0	0	0	0	441	0	441
28	0	0	0	0	0	0	111	0	111
30	0	0	0	0	0	0	104	0	104
TOTALS	1	799	3758	1990	194	155	8338	17456	32692

BY 1" DIAMETER CLASS

(5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
 VOLUME LIBRARY VERSION: 09.25.2019

SPEC	IC	RF	SP	WF	TOTALS
PROD	01	01	01	01	
U OF M	03	03	03	03	
1-3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	1	0	1
12	0	0	0	0	0
13	0	0	1	0	1
14	1	0	2	763	766
15	0	0	1	0	1
16	0	0	1	237	238
17	0	0	2	0	2
18	0	0	4	368	372
19	0	0	2	110	112
20	0	0	4	0	4
21	0	0	3	97	100
22	0	0	0	152	152
23	0	0	1	323	324
24	0	0	1	69	70
25	0	476	0	132	608
26	0	0	0	124	124
TOTALS	1	476	23	2375	2875

BY 1" DIAMETER CLASS

(5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

SPEC	RF	SP	WF	TOTALS
PROD	01	01	01	
U OF M	03	03	03	
1-3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11	704	171	692	1567
12	1218	0	604	1822
13	566	0	0	566
14	0	0	427	427
15	384	0	1599	1983
16	0	0	716	716
17	0	0	307	307
18	0	0	0	0
19	0	0	236	236
20	214	0	0	214
21	196	0	200	396
22	0	0	355	355
23	0	0	340	340
24	0	0	0	0
25	0	0	140	140
26	0	0	131	131
27	0	0	0	0
28	0	0	111	111
29	0	0	104	104
TOTALS	3282	171	5963	9417

BY 1" DIAMETER CLASS

(5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
 VOLUME LIBRARY VERSION: 09.25.2019

SPEC	IC	RF	SP	WF	TOTALS
PROD	20	20	20	20	
U OF M	03	03	03	03	
1-3	0	0	0	3315	3315
4	0	0	0	3470	3470
5	427	348	0	3111	3886
6	245	721	0	1885	2851
7	0	187	0	1631	1818
8	0	407	155	2355	2917
9	127	327	0	994	1448
10	0	0	0	695	695
TOTALS	799	1990	155	17456	20401

TC58: STAND TABLE FOR SALE 10172 -- NET BDFT VOLUME
 FOR PRIMARY PRODUCT ONLY - BY 1" DIAMETER CLASS
 (5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

SPEC	IC	IC	RF	RF	SP	SP	WF	WF	TOTALS
PROD	01	20	01	20	01	20	01	20	
U OF M	03	03	03	03	03	03	03	03	
1-3	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0
11	0	0	21116	0	1741	0	20748	0	43605
12	0	0	102811	0	0	0	36236	0	139046
13	0	0	22649	0	70	0	0	0	22719
14	30	0	0	0	252	0	176996	0	177278
15	0	0	68332	0	116	0	225571	0	294019
16	0	0	0	0	175	0	140836	0	141011
17	0	0	0	0	367	0	51325	0	51692
18	0	0	0	0	829	0	104306	0	105135
19	0	0	0	0	394	0	117020	0	117414
20	0	0	81678	0	1219	0	0	0	82897
21	0	0	75372	0	854	0	111670	0	187896
22	0	0	0	0	0	0	261958	0	261958
23	0	0	0	0	432	0	352879	0	353311
24	0	0	0	0	423	0	54884	0	55307
25	0	0	44186	0	0	0	229712	0	273898
26	0	0	0	0	0	0	212583	0	212583
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	102046	0	102046
29	0	0	0	0	0	0	119275	0	119275
TOTALS	30	0	416143	0	6872	0	2318046	0	2741090

TC59: STAND TABLE FOR SALE 10172 -- GROSS CUFT VOLUME
 FOR PRIMARY PRODUCT ONLY - BY 1" DIAMETER CLASS
 (5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

SPEC	IC	IC	RF	RF	SP	SP	WF	WF	TOTALS
PROD	01	20	01	20	01	20	01	20	
U OF M	03	03	03	03	03	03	03	03	
1-3	0	0	0	0	0	0	0	1066	1066
4	0	0	0	0	0	0	0	1985	1985
5	0	171	0	244	0	0	0	4071	4485
6	0	172	0	1749	0	0	0	3396	5317
7	0	0	0	972	0	0	0	4679	5651
8	0	0	0	2651	0	248	0	9891	12789
9	0	420	0	3351	0	0	0	7487	11258
10	0	0	0	0	0	0	0	5073	5073
11	0	0	6546	0	559	0	6985	0	14090
12	0	0	21493	0	0	0	7851	0	29344
13	0	0	5153	0	16	0	0	0	5168
14	7	0	0	0	51	0	34192	0	34250
15	0	0	12937	0	24	0	44026	0	56987
16	0	0	0	0	35	0	29174	0	29209
17	0	0	0	0	76	0	10572	0	10648
18	0	0	0	0	175	0	20501	0	20676
19	0	0	0	0	84	0	21669	0	21753
20	0	0	14988	0	237	0	0	0	15226
21	0	0	14721	0	164	0	20468	0	35353
22	0	0	0	0	0	0	44952	0	44952
23	0	0	0	0	77	0	62502	0	62579
24	0	0	0	0	76	0	9103	0	9179
25	0	0	7644	0	0	0	37397	0	45041
26	0	0	0	0	0	0	35326	0	35326
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	15860	0	15860
29	0	0	0	0	0	0	18776	0	18776
TOTALS	7	763	83481	8966	1571	248	419356	37648	552041

TC60: STAND TABLE FOR SALE 10172 -- NET CUFT VOLUME
 FOR PRIMARY PRODUCT ONLY - BY 1" DIAMETER CLASS
 (5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

SPEC	IC	IC	RF	RF	SP	SP	WF	WF	TOTALS
PROD	01	20	01	20	01	20	01	20	
U OF M	03	03	03	03	03	03	03	03	
1-3	0	0	0	0	0	0	0	1066	1066
4	0	0	0	0	0	0	0	1985	1985
5	0	171	0	244	0	0	0	4071	4485
6	0	172	0	1749	0	0	0	3396	5317
7	0	0	0	972	0	0	0	4679	5651
8	0	0	0	2651	0	248	0	9891	12789
9	0	420	0	3351	0	0	0	7487	11258
10	0	0	0	0	0	0	0	5073	5073
11	0	0	6546	0	558	0	6985	0	14089
12	0	0	21493	0	0	0	7851	0	29344
13	0	0	5153	0	15	0	0	0	5168
14	7	0	0	0	49	0	33880	0	33937
15	0	0	12822	0	23	0	42506	0	55351
16	0	0	0	0	34	0	27513	0	27546
17	0	0	0	0	73	0	10388	0	10461
18	0	0	0	0	163	0	20057	0	20220
19	0	0	0	0	80	0	21253	0	21333
20	0	0	14689	0	223	0	0	0	14912
21	0	0	12994	0	157	0	19948	0	33099
22	0	0	0	0	0	0	43580	0	43580
23	0	0	0	0	74	0	59213	0	59287
24	0	0	0	0	73	0	8738	0	8811
25	0	0	7347	0	0	0	35643	0	42990
26	0	0	0	0	0	0	32944	0	32944
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	15074	0	15074
29	0	0	0	0	0	0	17652	0	17652
TOTALS	7	763	81043	8966	1521	248	403226	37648	533423

BY 1" DIAMETER CLASS

(5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

SPEC	IC	IC	RF	RF	SP	SP	WF	WF	TOTALS
PROD	01	20	01	20	01	20	01	20	
U OF M	03	03	03	03	03	03	03	03	
1-3	0	0	0	0	0	0	0	3315	3315
4	0	0	0	0	0	0	0	3470	3470
5	0	427	0	348	0	0	0	3111	3886
6	0	245	0	721	0	0	0	1885	2851
7	0	0	0	187	0	0	0	1631	1818
8	0	0	0	407	0	155	0	2355	2917
9	0	127	0	327	0	0	0	994	1448
10	0	0	0	0	0	0	0	695	695
11	0	0	704	0	172	0	692	0	1568
12	0	0	1218	0	0	0	604	0	1822
13	0	0	566	0	1	0	0	0	567
14	1	0	0	0	2	0	1190	0	1193
15	0	0	384	0	1	0	1599	0	1984
16	0	0	0	0	1	0	952	0	953
17	0	0	0	0	2	0	307	0	309
18	0	0	0	0	4	0	368	0	372
19	0	0	0	0	2	0	347	0	349
20	0	0	214	0	4	0	0	0	218
21	0	0	196	0	3	0	297	0	496
22	0	0	0	0	0	0	507	0	507
23	0	0	0	0	1	0	663	0	664
24	0	0	0	0	1	0	69	0	70
25	0	0	476	0	0	0	273	0	749
26	0	0	0	0	0	0	255	0	255
27	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	111	0	111
29	0	0	0	0	0	0	104	0	104
TOTALS	1	799	3758	1990	194	155	8338	17456	32692

TC65: STAND TABLE FOR STRATA 1 - GROSS CUFT VOLUME
 PRIMARY AND SECONDARY PRODUCTS - BY 1" DIAMETER CLASS
 (5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

SPEC	IC	RF	SP	WF	TOTALS
PROD	ALL	ALL	ALL	ALL	
U OF M	ALL	ALL	ALL	ALL	
1-3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	12	0	12
12	0	0	0	0	0
13	0	0	17	0	17
14	10	0	58	25204	25271
15	0	0	27	0	27
16	0	0	38	7939	7977
17	0	0	84	0	84
18	0	0	192	22410	22602
19	0	0	91	7936	8027
20	0	0	255	0	255
21	0	0	176	7547	7722
22	0	0	0	14200	14200
23	0	0	83	37136	37219
24	0	0	80	9518	9598
25	0	8014	0	18799	26813
26	0	0	0	19032	19032
TOTALS	10	8014	1113	169720	178857

TC65: STAND TABLE FOR STRATA 2 - GROSS CUFT VOLUME
 PRIMARY AND SECONDARY PRODUCTS - BY 1" DIAMETER CLASS
 (5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

SPEC	RF	SP	WF	TOTALS
PROD	ALL	ALL	ALL	
U OF M	ALL	ALL	ALL	
1-3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
7	0	0	0	0
8	0	0	0	0
9	0	0	0	0
10	0	0	0	0
11	7813	720	7953	16486
12	24223	0	8938	33161
13	5832	0	0	5832
14	0	0	13165	13165
15	14204	0	48137	62340
16	0	0	23509	23509
17	0	0	11679	11679
18	0	0	0	0
19	0	0	15203	15203
20	15758	0	0	15758
21	15683	0	14284	29966
22	0	0	33658	33658
23	0	0	28837	28837
24	0	0	0	0
25	0	0	20424	20424
26	0	0	18568	18568
27	0	0	0	0
28	0	0	16679	16679
29	0	0	19661	19661
TOTALS	83513	720	280696	364929

TC65: STAND TABLE FOR STRATA 3 - GROSS CUFT VOLUME
 PRIMARY AND SECONDARY PRODUCTS - BY 1" DIAMETER CLASS
 (5-inch class = 4.6 - 5.5 inches; 9-inch class = 8.6 - 9.5 inches, and so on.)
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

SPEC	IC	RF	SP	WF	TOTALS
PROD	ALL	ALL	ALL	ALL	
U OF M	ALL	ALL	ALL	ALL	
1-3	0	0	0	1066	1066
4	0	0	0	1985	1985
5	171	244	0	4071	4485
6	172	1749	0	3396	5317
7	0	972	0	4679	5651
8	0	2651	248	9891	12789
9	420	3351	0	7487	11258
10	0	0	0	5073	5073
TOTALS	763	8966	248	37648	47625

UC1: VOLUME BY SPECIES WITHIN CUTTING UNIT FOR EACH STRATUM-SAWTIMBER
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

***** PRIMARY PRODUCT *****

S		U		AVGDEF		GROSS	NET	***** STRATA LEVEL *****					
S	P			%	%	BDFT	BDFT	EST.					
R	U	C	P	B	C	CUFT	CUFT	NO OF	** GROSS VOLUME **	** NET VOLUME **			
A	N	I	R	D	U			TREES	BDFT	CUFT	BDFT	CUFT	CORDS
T	I	E	O	F	F								
A	T	S	D	T	T	RATIO	RATIO						
1	100	RF	01 03	3	3	6.0136	6.0141	476	45966	7644	44186	7347	
1	100	WF	01 03	3	3	5.7390	5.7359	2375	908805	158356	872954	152191	
1	100	SP	01 03	4	4	5.3007	5.3017	23	5420	1022	5158	973	
1	100	IC	01 03	0	0	4.0541	4.0541	1	30	7	30	7	
UNIT 100		TOTAL		3	3	5.7488	5.7459	2875	960221	167030	922328	160518	0.00
STRATA 1		TOTAL		3	3	5.7488	5.7459	2875	960221	167030	922328	160518	0.00
2	159	RF	01 03	3	2	5.0823	5.0472	1530	179661	35351	173382	34352	
2	159	WF	01 03	4	3	5.7693	5.7565	2780	701904	121662	673610	117017	
2	159	SP	01 03	0	0	3.1250	3.1250	80	799	256	799	256	
UNIT 159		TOTAL		3	3	5.6106	5.5914	4389	882365	157268	847791	151625	0.00
2	801	RF	01 03	3	2	5.0823	5.0472	914	107318	21116	103568	20520	
2	801	WF	01 03	4	3	5.7693	5.7565	1660	419274	72673	402373	69898	
2	801	SP	01 03	0	0	3.1250	3.1250	48	477	153	477	153	
UNIT 801		TOTAL		3	3	5.6106	5.5914	2622	527070	93942	506418	90571	0.00
2	811	RF	01 03	3	2	5.0823	5.0472	838	98447	19371	95006	18824	
2	811	WF	01 03	4	3	5.7693	5.7565	1523	384614	66665	369110	64120	
2	811	SP	01 03	0	0	3.1250	3.1250	44	438	140	438	140	
UNIT 811		TOTAL		3	3	5.6106	5.5914	2405	483498	86176	464554	83084	0.00
STRATA 2		TOTAL		3	3	5.6106	5.5914	9417	1892933	337386	1818762	325279	0.00
3	100	IC	20 03	0	0	0.0000	0.0000	81	0	77	0	77	

UC1: VOLUME BY SPECIES WITHIN CUTTING UNIT FOR EACH STRATUM-SAWTIMBER
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

***** PRIMARY PRODUCT *****

S		U		AVGDEF		GROSS	NET	***** STRATA LEVEL *****						
S	P			%	%	BDFT	BDFT	EST.						
R	U	C	P	O	B	C	CUFT	CUFT	NO OF	** GROSS VOLUME **	** NET VOLUME **			
A	N	I	R	F	D	U			TREES	BDFT	CUFT	BDFT	CUFT	CORDS
T	I	E	O	F	F	F								
A	T	S	D	M	T	T	RATIO	RATIO						
3	100	RF	20	03	0	0	0.0000	0.0000	201	0	907	0	907	
3	100	SP	20	03	0	0	0.0000	0.0000	16	0	25	0	25	
3	100	WF	20	03	0	0	0.0000	0.0000	1767	0	3810	0	3810	
UNIT 100			TOTAL	0	0	0.0000	0.0000	2065	0	4820	0	4820	0.00	
3	159	IC	20	03	0	0	0.0000	0.0000	335	0	319	0	319	
3	159	RF	20	03	0	0	0.0000	0.0000	834	0	3757	0	3757	
3	159	SP	20	03	0	0	0.0000	0.0000	65	0	104	0	104	
3	159	WF	20	03	0	0	0.0000	0.0000	7314	0	15773	0	15773	
UNIT 159			TOTAL	0	0	0.0000	0.0000	8547	0	19953	0	19953	0.00	
3	801	IC	20	03	0	0	0.0000	0.0000	200	0	191	0	191	
3	801	RF	20	03	0	0	0.0000	0.0000	498	0	2244	0	2244	
3	801	SP	20	03	0	0	0.0000	0.0000	39	0	62	0	62	
3	801	WF	20	03	0	0	0.0000	0.0000	4369	0	9422	0	9422	
UNIT 801			TOTAL	0	0	0.0000	0.0000	5106	0	11919	0	11919	0.00	
3	811	IC	20	03	0	0	0.0000	0.0000	183	0	175	0	175	
3	811	RF	20	03	0	0	0.0000	0.0000	457	0	2058	0	2058	
3	811	SP	20	03	0	0	0.0000	0.0000	36	0	57	0	57	
3	811	WF	20	03	0	0	0.0000	0.0000	4007	0	8643	0	8643	
UNIT 811			TOTAL	0	0	0.0000	0.0000	4683	0	10933	0	10933	0.00	
STRATA 3			TOTAL	0	0	0.0000	0.0000	20401	0	47625	0	47625	0.00	

TOTALS -----	EST. NO OF TREES	***** GROSS VOLUME ***** BDFT	***** CUFT	***** NET VOLUME ***** BDFT	***** CUFT	CORDS
	32692	2853153	552041	2741090	533423	0.00

FOR CUT TREES ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
 VOLUME LIBRARY VERSION: 09.25.2019

***** PRIMARY PRODUCT *****

S		U		AVGDEF		GROSS	NET	***** STRATA LEVEL *****					
S	P			%	%	BDFT	BDFT	EST.					
R	U	C	P	O	B	C			** GROSS VOLUME **		** NET VOLUME **		
A	N	I	R	F	D	U	CUFT	CUFT	NO OF				
T	I	E	O		F	F			TREES	BDFT	CUFT	BDFT	CUFT
A	T	S	D	M	T	T	RATIO	RATIO					CORDS

* FOR TREE-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON THE # OF TREES TALLIED OR THE SUM OF KPIS THAT FALL WITHIN THE CUTTING UNIT. FOR AREA-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON AN AVERAGE VOLUME PER ACRE AT THE STRATA LEVEL TIMES THE NUMBER OF ACRES IN THE CUTTING UNIT.

*R = RECOVERED VOLUME ADDED TO NET SECONDARY VOLUME.

*FOR CRUISE METHOD 3P ONLY, THE COLUMN Est. # of Trees for sawtimber WILL SHOW ZERO INSTEAD OF ACTUAL TALLY.

FOR CUT TREES ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

S P E C I E S	TOTAL	***** SAWTIMBER *****						***** NON-SAWTIMBER *****				
	EST.	(PROD = 01 UM = 01, 03)						(PROD NOT = 01 UM = 01, 02, 03)				
	EST.	(AND ALL SECONDARY & RECOVERED PRODUCT VOLUMES)										
	# OF TREES	# OF TREES	** GROSS VOLUME **	** NET VOLUME **	** GROSS	** NET	** GROSS	** NET	** GROSS	** NET	CORDS	
		BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	CORDS
100 SP	39	0	5420	1022	5158	973	270	116	270	116	0.00	
100 WF	4142	0	908805	158356	872954	152191	29476	15174	29476	15174	0.00	
100 RF	677	0	45966	7644	44186	7347	741	1278	741	1278	0.00	
100 IC	82	0	30	7	30	7	0	79	0	79	0.00	
UNIT 100 TOTAL	4940	0	960221	167030	922328	160518	30488	16647	30488	16647	0.00	
159 SP	145	80	799	256	799	256	0	184	0	144	0.00	
159 WF	10093	2780	701904	121662	673610	117017	27759	24954	27759	24954	0.00	
159 RF	2364	1530	179661	35351	173382	34352	12661	7334	12661	7334	0.00	
159 IC	335	0	0	0	0	0	0	319	0	319	0.00	
UNIT 159 TOTAL	12937	4389	882365	157268	847791	151625	40421	32792	40421	32752	0.00	
801 SP	86	48	477	153	477	153	0	110	0	86	0.00	
801 WF	6029	1660	419274	72673	402373	69898	16582	14906	16582	14906	0.00	
801 RF	1412	914	107318	21116	103568	20520	7563	4381	7563	4381	0.00	
801 IC	200	0	0	0	0	0	0	191	0	191	0.00	
UNIT 801 TOTAL	7728	2622	527070	93942	506418	90571	24145	19588	24145	19564	0.00	
811 SP	79	44	438	140	438	140	0	101	0	79	0.00	
811 WF	5531	1523	384614	66665	369110	64120	15211	13674	15211	13674	0.00	
811 RF	1295	838	98447	19371	95006	18824	6938	4019	6938	4019	0.00	
811 IC	183	0	0	0	0	0	0	175	0	175	0.00	
UNIT 811 TOTAL	7089	2405	483498	86176	464554	83084	22149	17968	22149	17947	0.00	
<hr/>												
S U B T O T A L S ***** SAWTIMBER ***** ***** NON-SAWTIMBER *****												
	TOT EST	EST	** GROSS VOLUME **		** NET VOLUME **		GROSS	GROSS	NET	NET	CORDS	
	# OF	# OF	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT		
SPECIES	TREES	TREES	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	BDFT	CUFT	CORDS	
SP	349	171	7134	1571	6872	1521	270	510	270	424	0.00	
WF	25794	5963	2414597	419356	2318046	403226	89028	68707	89028	68707	0.00	
RF	5749	3282	431392	83481	416143	81043	27904	17013	27904	17013	0.00	
IC	800	0	30	7	30	7	0	765	0	765	0.00	

FOR CUT TREES ONLY

CRUISE#: 10172 SALE#: 10172

SALENAME: Drought MP Thin

RUN DATE & TIME: 12/19/2019 2:30:37 PM

VERSION: 10.01.2019
VOLUME LIBRARY VERSION: 09.25.2019

S P E C I E S	TOTAL	***** SAWTIMBER *****				***** NON-SAWTIMBER *****				
	EST.	EST.	(PROD = 01 UM = 01, 03)		(PROD NOT = 01 UM = 01, 02, 03) (AND ALL SECONDARY & RECOVERED PRODUCT VOLUMES)					
	# OF TREES	# OF TREES	** GROSS VOLUME **	** NET VOLUME **	*** GROSS	***	*** NET	***	***	CORDS
			BDFT CUFT	BDFT CUFT	BDFT CUFT	CUFT	BDFT CUFT	CUFT	BDFT CUFT	
OVERALL TOTALS--	32692	9417	2853153 504416	2741090 485798	117202	86995	117202	86909		0.00

* FOR TREE-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON THE # OF TREES TALLIED OR THE SUM OF KPIS THAT FALL WITHIN THE CUTTING UNIT. FOR AREA-BASED SAMPLES, THE CUTTING UNIT VOLUME IS BASED ON AN AVERAGE VOLUME PER ACRE AT THE STRATA LEVEL TIMES THE NUMBER OF ACRES IN THE CUTTING UNIT.
*R = RECOVERED VOLUME ADDED TO NET SECONDARY VOLUME.
*FOR CRUISE METHOD 3P ONLY, THE COLUMN Est. # of Trees for sawtimber WILL SHOW ZERO INSTEAD OF ACTUAL TALLY.

VPA1: LOW LEVEL VOLUME PER ACRE SUMMARY (B2)
 FOR CUT AND LEAVE TREES
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

										*****PER ACRE*****									
										EST.									
										NO. OF									
										*****GROSS*****					*****NET*****				
										TREES	BDFT	CUFT	BDFT	CUFT	CORDS				
1	RF	01	P	03	L	C	CL	TF	N	1	22	2165	360	2081	346	0.0			
1	RF	20	S	03	L	C	CL	TF	N	1		35	17	35	17	0.0			
1	WF	01	P	03	L	C	CL	TF	N	1	112	42808	7459	41119	7169	0.0			
1	WF	20	S	03	L	C	CL	TF	N	1		1388	535	1388	535	0.0			
1	SP	01	P	03	L	C	CL	WP	Y	1	1	255	48	243	46	0.0			
1	SP	20	S	03	L	C	CL	WP	Y	1		13	4	13	4	0.0			
1	IC	01	P	03	L	C	CL	IC	Y	1	<1	1	0	1	0	0.0			
1	IC	20	S	03	L	C	CL	IC	Y	1		0	0	0	0	0.0			
<hr/>																			
2	RF	01	P	03	L	C	CL	TF	N	1	17	2044	402	1973	391	0.0			
2	RF	20	S	03	L	C	CL	TF	N	1		144	41	144	41	0.0			
2	WF	01	P	03	L	C	CL	TF	N	1	32	7986	1384	7664	1331	0.0			
2	WF	20	S	03	L	C	CL	TF	N	1		316	104	316	104	0.0			
2	SP	01	P	03	L	C	CL	WP	N	1	<1	9	3	9	3	0.0			
2	SP	20	S	03	L	C	CL	WP	N	1		0	1	0	0	0.0			
<hr/>																			
3	IC	20	P	03	L	C	CL	BI	N	1	4	0	4	0	4	0.0			
3	RF	20	P	03	L	C	CL	BI	N	1	9	0	43	0	43	0.0			
3	SP	20	P	03	L	C	CL	BI	N	1	<1	0	1	0	1	0.0			
3	WF	20	P	03	L	C	CL	BI	N	1	83	0	179	0	179	0.0			

PRODUCT SOURCE KEY:

P = PRIMARY PRODUCT
 S = SECONDARY PRODUCT
 R = RECOVERABLE PRODUCT

The following items are not reported and/or calculated for secondary or recovered products but are shown here as blank so the associated volumes can be reported:
 Number of measured trees, Quad mean DBH, Mean DBH, Mean height(s), Average defect, any Ratio, Estimated number of trees.

VPA3: VOLUME PER ACRE SUMMARY BY STRATA (CS2)
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

				*****PER ACRE*****						
				EST.						
				NO. OF	*****GROSS*****		*****NET*****			
				TREES	BDFT	CUFT	BDFT	CUFT	CORDS	
1	01	P	03	135	45229	7868	43445	7561	0.0	
1	20	S	03		1436	557	1436	557	0.0	
2	01	P	03	50	10039	1789	9646	1725	0.0	
2	20	S	03		460	146	460	146	0.0	
3	20	P	03	97	0	227	0	227	0.0	

PRODUCT SOURCE KEY:

P = PRIMARY PRODUCT
 S = SECONDARY PRODUCT
 R = RECOVERABLE PRODUCT

The following items are not reported and/or calculated for secondary or recovered products but are shown here as blank so the associated volumes can be reported:
 Number of measured trees, Quad mean DBH, Mean DBH, Mean height(s), Average defect, any Ratio, Estimated number of trees.

VSM1: LOW LEVEL VOLUME SUMMARY (B1)
 FOR CUT AND LEAVE TREES
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

										M E A N		AVG DEFT		GROSS NET		***** STRATA LEVEL *****									
										# OF	QUAD	N	T	%	%	BDFT	BDFT	EST.	***** VOLUME *****						
										MEAS	MEAN	D	H	B	C	D	U	CUFT	CUFT	# OF	*** GROSS ***	*** NET ***	CORDS		
A	S	T	E	M	E	E	P	P	M	D	C	TREES	DBH	H	T	T	T	RATIO	RATIO	TREES	BDFT	CUFT	BDFT	CUFT	CORDS
1	RF	01	P	03	L	C	CL	TF	N	1	1	24.7	24.7	102.0	3	3	6.014	6.014	476	45966	7644	44186	7347	0.0	
1	RF	20	S	03	L	C	CL	TF	N	1										741	371	741	371	0.0	
1	WF	01	P	03	L	C	CL	TF	N	1	17	19.0	18.6	86.0	3	3	5.739	5.736	2375	908805	158356	872954	152191	0.0	
1	WF	20	S	03	L	C	CL	TF	N	1										29476	11364	29476	11364	0.0	
1	SP	01	P	03	L	C	CL	WP	Y	1	23	18.4	18.2	83.7	4	4	5.301	5.302	23	5420	1023	5158	973	0.0	
1	SP	20	S	03	L	C	CL	WP	Y	1										270	91	270	91	0.0	
1	IC	01	P	03	L	C	CL	IC	Y	1	1	13.8	13.8	35.0	0	0	4.054	4.054	1	30	7	30	7	0.0	
1	IC	20	S	03	L	C	CL	IC	Y	1										0	2	0	2	0.0	
2	RF	01	P	03	L	C	CL	TF	N	1	7	13.8	13.5	66.1	3	2	5.082	5.047	3282	385426	75838	371956	73696	0.0	
2	RF	20	S	03	L	C	CL	TF	N	1										27163	7676	27163	7676	0.0	
2	WF	01	P	03	L	C	CL	TF	N	1	20	17.4	16.8	77.2	4	3	5.769	5.757	5963	1505792	261000	1445092	251035	0.0	
2	WF	20	S	03	L	C	CL	TF	N	1										59552	19695	59552	19695	0.0	
2	SP	01	P	03	L	C	CL	WP	N	1	1	11.0	11.0	24.0	0	0	3.125	3.125	171	1714	548	1714	548	0.0	
2	SP	20	S	03	L	C	CL	WP	N	1										0	171	0	86	0.0	
3	IC	20	P	03	L	C	CL	BI	N	1	3	5.9	5.8	19.8	0	0	0.000	0.000	799	0	763	0	763	0.0	
3	RF	20	P	03	L	C	CL	BI	N	1	11	7.2	7.1	42.1	0	0	0.000	0.000	1990	0	8966	0	8966	0.0	
3	SP	20	P	03	L	C	CL	BI	N	1	1	7.8	7.8	20.0	0	0	0.000	0.000	155	0	248	0	248	0.0	
3	WF	20	P	03	L	C	CL	BI	N	1	67	6.0	5.7	28.7	0	0	0.000	0.000	17456	0	37648	0	37648	0.0	
TOTALS ---											*** GROSS VOLUME ***		*** NET VOLUME ***												
											BDFT	CUFT	BDFT	CUFT	CORDS										
PRODUCT SOURCE											2853153	504416	2741090	485798	0.0										
01 P											12292														
20 S											117202	39370	117202	39284	0.0										
20 P											20401	0	0	47625	0.0										
											32692	2970355	591411	2858292	0.0										

VSM3: VOLUME SUMMARY FOR STRATA (CS1)
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

										M E A N										
										A V G										
										D E F T										
										G R O S S										
										N E T										
										E S T.										
										V O L U M E										
										G R O S S										
										N E T										
										C O R D S										
P	R	O	D	# OF TREES	M	M	M	M	M	A	A	A	A	A	A	A	A	A	A	A
S	T	R	D	A	E	A	U	Q	A	B	C	D	U	B	C	D	U	B	C	D
T	O	O	U	S	L	QUAD	N	T	%	%	B	C	D	U	B	C	D	U	B	C
R	D	U	O	U	L	MEAN	D	H	D	U	C	U	C	U	C	U	C	U	C	U
A	U	R	F	R	I	DBH	H	T	F	F	T	T	R	A	T	R	A	T	R	A
T	C	C	M	E	E	DBH	H	T	T	T	R	T	R	A	T	R	A	T	R	A
A	T	E	M	D	D	DBH	H	T	T	T	R	T	R	A	T	R	A	T	R	A
1	01	P	03	42	2875	19.2	18.7	86.4	3	3	5.749	5.746	2875	960221	167030	922328	160518	0.0		
1	20	S	03											30488	11827	30488	11827	0.0		
2	01	P	03	28	118	16.1	15.5	72.3	3	3	5.611	5.591	9417	1892933	337386	1818763	325279	0.0		
2	20	S	03											86714	27542	86714	27457	0.0		
3	20	P	03	82	221	6.2	5.8	29.6	0	0	0.000	0.000	20401	0	47625	0	47625	0.0		
TOTALS -----																				
PRODUCT	PRODUCT SOURCE	QUAD MEAN DBH	MEAN DBH	MEAN TOT HGT	GROSS BF/CF RATIO	NET BF/CF RATIO	EST. # OF TREES	***** VOLUME *****		***** GROSS *****		***** NET *****		***** CORDS *****						
01	P	16.9	16.3	75.7	5.6564	5.6425	12292	2853153	504416	2741090	485798	0.0								
20	S							117202	39370	117202	39284	0.0								
20	P	6.2	5.8	29.6	0.0000	0.0000	20401	0	47625	0	47625	0.0								
		11.5	9.8	47.0	5.0225	4.9908	32692	2970355	591411	2858292	572707	0.0								

PRODUCT SOURCE KEY:

P = PRIMARY PRODUCT
 S = SECONDARY PRODUCT
 R = RECOVERABLE PRODUCT

The following items are not reported and/or calculated for secondary or recovered products but are shown here as blank so the associated volumes can be reported:
 Number of measured trees, Quad mean DBH, Mean DBH, Mean height(s), Average defect, any Ratio, Estimated number of trees.

WT1: WEIGHT BY SPECIES ACROSS STRATA
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

CRUISE SPECIES	CONTRACT SPECIES	PRODUCT	GROSS CUFT	(1) WEIGHT FACTOR	(2) POUNDS STANDING	(3) PERCENT REMOVED	(4) POUNDS REMOVED	(5) TONS REMOVED
IC		01 P	7	58.00	406	95.00	386	0.19
IC		20 S	2	86.00	172	95.00	163	0.08
IC		20 P	763	86.00	65618	95.00	62337	31.17
RF		01 P	83481	69.00	5760189	95.00	5472180	2736.09
RF		20 S	8046	86.00	691956	95.00	657358	328.68
RF		20 P	8966	86.00	771076	95.00	732522	366.26
SP		01 P	1571	69.00	108399	95.00	102979	51.49
SP		20 S	262	80.00	20960	95.00	19912	9.96
SP		20 P	248	80.00	19840	95.00	18848	9.42
WF		01 P	419356	69.00	28935564	95.00	27488786	13744.39
WF		20 S	31059	86.00	2671074	95.00	2537520	1268.76
WF		20 P	37648	86.00	3237728	95.00	3075842	1537.92

SUMMARY		
CONTRACT SPECIES	PRODUCT	TONS REMOVED
	01 P	16532.17
	20 P	1944.77
	20 S	1607.48
TOTAL TONS REMOVED		20084.42

- (1) WEIGHT FACTOR = POUNDS PER GROSS CUFT
- (2) POUNDS STANDING = GROSS CUFT x WEIGHT FACTOR
- (3) PERCENT REMOVED = % MATERIAL HAULED OUT ON TRUCKS
- (4) POUNDS REMOVED = POUNDS STANDING x (PERCENT REMOVED/100)
- (5) TONS REMOVED = POUNDS REMOVED / 2,000

WT4:
 BY CUTTING UNIT FOR THE SALE
 FOR CUT TREES ONLY
 CRUISE#: 10172 SALE#: 10172
 SALENAME: Drought MP Thin
 RUN DATE & TIME: 12/19/2019 2:30:37 PM

CUTTING UNIT	ACRES	SPECIES	SAWTIMBER PRIM PROD = 01 GREEN TONS	NON-SAWTIMBER OTHER PRIM PROD GREEN TONS	NON-SAWTIMBER SECOND PROD ONLY GREEN TONS
100	21.2	IC	33.72	3.15	0.07
		RF	250.52	37.07	15.14
		SP	33.72	0.95	0.07
		WF	5190.12	155.64	464.20
SUBTOTAL			5508.07	196.81	479.49
159	87.9	IC	0.00	13.05	0.00
		RF	1158.62	153.46	146.16
		SP	8.38	3.94	3.04
		WF	3987.46	644.34	375.03
SUBTOTAL			5154.46	814.79	524.23
801	52.5	IC	0.00	7.80	0.00
		RF	692.09	91.67	87.30
		SP	5.01	2.36	1.81
		WF	2381.86	384.89	224.02
SUBTOTAL			3078.95	486.70	313.14
811	48.2	IC	0.00	7.15	0.00
		RF	634.87	84.09	80.09
		SP	4.59	2.16	1.66
		WF	2184.96	353.07	205.50
SUBTOTAL			2824.43	446.47	287.25
GRAND TOTAL			16565.91	1944.78	1604.11