# PROSPECTUS

#### Lump Sum Sale

#### GRANTS PASS RESOURCE AREA JOSEPHINE MASTER UNIT

Medford Sale # ORM07-TS-2017.0007 September 14, 2017 (LLS)

#1. Pickett Hog Timber Sale, Josephine County, O&C BID DEPOSIT REQUIRED: \$46,600.00

All timber designated for cutting in NE1/4, E1/2NW1/4, SE1/4 Sec. 7, N1/2NE1/4, SW1/4NE1/4, E1/2NW1/4, NE1/4SW1/4, NW1/4SE1/4 Sec. 29, T.34 S., R 7 W., W1/2NE1/4 Sec. 11, NE1/4SW1/4, S1/2SW1/4, N1/2SE1/4, SW1/4SE1/4 Sec. 20, NE1/4SW1/4, S1/2SW1/4, NW1/4SE1/4 Sec. 22, SW1/4NE1/4, S1/2NW1/4, W1/2SW1/4, Sec. 27, NE1/4SE1/4 Sec. 28, S1/2NE1/4, E1/2NW1/4, N1/2SE1/4, SW1/4SE1/4 Sec. 29, SW1/4NE1/4, SE1/4SW1/4, NW1/4SE1/4 Sec. 30, NW1/4NE1/4, NE1/4NW1/4 Sec. 31, T.35 S., R 7 W., Lot 16 T. 36 S., R. 7W., Willamette Meridian.

Approx. Number Merch. Trees	Est. Volume MBF 32' Log	Species	Est. Volume MBF 16' Log	Appr. Price Per MBF*	Est. Volume Times Appraised Price
17,427	2,767	Douglas-fir	3,441	\$134.10	\$461,438.10
610	92	Ponderosa Pine	118	\$28.90	\$3,410.20
207	13	Sugar Pine	16	\$28.80	\$460.80
128	4	Incense-cedar	5	\$61.10	\$305.50
18,372	2,876	Totals	3,580		\$465,614.60

\*Stumpage values have been determined by market value estimates and analytical appraisal methods were used to compute the appraised price. Additional information concerning the appraised price is available at the Medford District Office.

\*\*The purchase of biomass material is optional. If the Puchaser chooses to purchase biomass/firewood, then it will be modified into the timber sale contract and a fair market price will be established at that time.

#### <u>TIMBER AUCTION LOCATION</u> – The timber auction will be held at the Grants Pass Interagency Office, located at 2164 NE Spalding Avenue Grants Pass, Oregon, at 9 a.m. on Thursday, September 14, 2017.

Bidders will be restricted to bidding on a unit (MBF) rate of the Douglas-fir volume. All other species will be sold at appraised price per unit (MBF). The minimum bid increment will be \$0.10 per MBF.

<u>CRUISE INFORMATION</u> – The Douglas-fir have been cruised using the 3P sampling method to select sample trees. Maps showing the location and description of these sample trees are available at the Grants Pass Interagency Office. The sample trees have been measured, utilizing the VOLT system of measurement, and the volume expanded to a total sale volume. The volume of all other species in this sale has been derived from individual tree measurements taken during a 100% cruise using form class tables for estimating board foot volume of trees in 16-foot logs.

Approximately 0 trees which are considered to be nonmerchantable are designated for cutting. With respect to merchantable trees of all conifer species: the average tree is 15.6 inches DBHOB; the average gross merchantable log contains 62 bd. ft.; the total gross volume is approximately 4,135 M bd. ft; and 87% recovery is expected. (Average DF is 15.8 inches DBHOB; average gross merchantable log DF contains 62 bd. ft.)

<u>LOG EXPORT AND SUBSTITUTION RESTRICTIONS</u> - All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export under the United States in the form of unprocessed timber and is prohibited from use as a substitute for exported private timber.

The BLM has revised the log export restrictions special provision to reduce the log branding and painting requirements. The new requirements include branding of one end of all logs with a scaling diameter of over 10 inches. All loads of 11 logs or more, regardless of the diameter of the logs, will have a minimum of 10 logs branded on one end. All logs will be branded on loads of 10 logs or less. One end of all branded logs will be marked with yellow paint. At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. The Purchaser shall bear any increased costs for log branding and painting.

<u>CUTTING AREA</u> – Twenty one (21) units containing three hundred eighteen (318) acres must be partial cut and eight (8) temporary route rights-of-way must be clear-cut.

<u>CUTTING TIME</u> - Contract duration will be thirty six (36) months for cutting and removal of timber.

<u>ACCESS</u> - Access to the sale area is available via a public road system through the contract area; via existing BLM roads; via Right-of-Way and Road Use Agreement M-2000EA with Perpetua Forest Company; via Right-of-Way and Road Use Agreement M-605 with Weyerhaeuser Company; via Right-of-Way and Road Use Agreement M-1395 with Arthur Lindh. Among other conditions Right-of-Way and Road Use Agreement M-2000EA with Perpetua Forest Company requires, but is not limited to: road maintenance to be completed by the Purchaser and completion of an agreement between the Purchaser and Permitee. The Permitee has indicated they require a rockwear obligation of \$208.88. Among other conditions Right-of-Way and Road Use Agreement M-605 with Weyerhaeuser Company requires, but is not limited to: completion of an agreement between the Purchaser and Permitee. Among other conditions Right-of-Way and Road Use Agreement M-1395 with Arthur Lindh requires, but is not limited to: completion of an agreement between the Purchaser and Permitee. Among other conditions Right-of-Way and Road Use Agreement M-1395 with Arthur Lindh requires, but is not limited to: completion of an agreement between the Purchaser and Permitee.

<u>ROAD MAINTENANCE</u> - The Purchaser will be required to maintain all of the roads which he constructs plus 25.40 miles of existing BLM and private road. The BLM will maintain 8.33 miles of existing BLM roads. The Purchaser will be required to pay a maintenance and rockwear fee of \$14,254.62 for the use of these roads listed in the contract.

<u>ROAD CONSTRUCTION</u> - The contract will require the Purchaser to renovate 1,341.13 stations of existing road, and construct/decommission 137.45 stations of temporary routes. Additional information is available in the timber sale prospectus.

<u>SOIL DAMAGE PREVENTION</u> - Pursuant to Section 26 of Form 5450-4, Timber Sale Contract, the Purchaser shall not conduct mechanical ground based harvesting, ground based yarding, skid trail and landing rehabilitation, road construction, temporary route construction, temporary route reconstruction, or temporary route and landing decommissioning in all Harvest Units between October 15 of one calendar year and May 15 of the following calendar year both days inclusive. Purchaser may request in writing, a conditional waiver of this restriction. If soil moisture conditions are dry, as determined by the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and by the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along equipment tracks, the Contracting Officer may approve a conditional waiver. If impacts to soil resulting from said conditional waiver are not

acceptable as determined by the Authorized Officer, the waiver will be revoked.

Pursuant to Section 26 of Form 5450-4, Timber Sale Contract, the Purchaser shall not conduct any haul on natural surface and rocked roads on the Contract Area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a conditional waiver of this restriction. If the Authorized Officer determines that hauling would not result in road damage or the transport of sediment to nearby stream channels based on soil moisture conditions or rain events, Contracting Officer may approve a conditional waiver for hauling. If soil moisture conditions or rain events are anticipated to cause impacts to roads or stream water quality resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.

<u>EQUIPMENT REQUIREMENTS</u> - A yarding tractor not greater than 9 feet wide as measured from the outer edges of standard width shoes and equipped with an integral arch and a winch for lining logs seventy-five (75) feet. A skyline yarder with a medium (42-54 foot) tower; capable of one-end suspension with a minimum lateral yarding capability of seventy-five (75) feet while maintaining a fixed position during inhaul; capable of multi-span; and capable of an external yarding distance of one thousand five hundred fifty (1,550) feet slope distance. A minimum two hundred (200) flywheel horsepower tractor with mounted rippers no more than thirty six (36) inches apart and capable of ripping to a depth of eighteen (18) inches will be required for decommissioning temporary routes and utilized skid roads within Riparian Reserves and regeneration harvest units.

<u>SLASH DISPOSAL</u> - Slash disposal will consist of lop and scatter, selective slashing, handpile and cover, hadpile burn and mop-up, machine pile and cover, machine pile burn and mop up, cover and burn landing decks, and underburning as described in SD-5 of the Special Provisions.

LOP AND SCATTER all slash in units 20-2, 29-1NB, 29-1C, and 29-5A concurrently with normal felling operations. MACHINE PILE AND BURN all slash reachable from designated skidtrails located in Harvest Units 7-1A, 11-5, 20-2, 22-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-5B, 30-2, and 31-4. HAND PILE AND BURN all slash located in units 3-4, 7-1B, 7-1C, 7-2, 11-5, 20-2, 22-2, 27-1SA, 27-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-4, 29-5A, 29-5B, 29-5D, 30-2, and 31-4. Perform BROADCAST BURNING on units 11-5, 27-1SA, and 29-4. Perform SELECTIVE SLASHING in units 3-4, 7-1B, 7-2, 11-5, 22-2, 22-3, 27-1SA, 27-3, 29-4, and 30-2; All trees between one (1) inch and eight (8) inches D.B.H.O.B. shall be felled and spaced following logging. Space live conifers twenty (20) feet by twenty (20) feet, and space live hardwoods and shrubs forty (40) feet by forty (40) feet. A post logging assessment shall be conducted to determine treatment needs in all units. The initial appraisal prescribed one hundred eighty five (185) acres of selective slashing, forty five (45) acres of lop and scatter, two hundred nine (209) acres of hand pile, cover, burn, and mop-up handpiles, sixty three (63) acres of machine pile, cover, burn, and mop-up machine piles, twenty four (24) acres of pile, cover, burn, and mop-up landing decks, eleven thousand five hundred feet (11,500) fire line construction, seventy five (75) acres of fuels pullback, and seventy five (75) acres of broadcast burning.

<u>CONTRACT TERMINATION</u> - A Special Provision has been added to the contract which enables the Contracting Officer to suspend the contract to facilitate protection of certain plant or animal species, and/or to modify or terminate the contract when necessary to comply with the Endangered Species Act, or comply with a court order. This contract provision limits the liability of the Government to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area.

<u>PERFORMANCE BOND</u> - A performance bond in the amount of 20% of the total purchase price will be required.

#### OTHER -

1. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.

- 2. In cable yard and hand felled ground based harvest units shown on Exhibit A, all trees designated for cutting shall be felled and whole tree yarded or yarded with tops attached except when excessive stand damage occurs as determined by the Authorized Officer.
- 4. A harvester, feller-processor, or feller-buncher with purpose built carriers with boommounted felling heads and a boom with a minimum lateral reach of twenty (20) feet may be used in the ground based units. See the Pickett Hog Special Provisions for full ground based harvesting restrictions.
- 5. Cable corridors that are hydrologically connected; or are perpendicular to and within one hundred eighty five (185) feet of streams shown on Exhibit A shall be water-barred and shall have slash placed over them prior to winter rain events to protect water quality.
- 6. No tree felling, yarding, burning, heavy equipment use or muffled blasting within unit 29-1NB shown on Exhibit A shall be conducted between March 1 and June 30 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from Northern Spotted Owl protocol surveys conducted in accordance with accepted standards, as approved by the Contracting Officer, that Northern Spotted Owl nesting and/or fledging activities are not occurring during the time of harvest.
- 7. The License Agreement fees and conditions listed in the Prospectus are pending and are not final. Final fees are dependent on final signed License Agreements.

#### NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA -

To access units 7-1A, 7-1B, 7-1C and 7-2: From Grants Pass, take Interstate 5 northbound. Take exit 71 to Sunny Valley. At off ramp turn right onto I-5 Frontage Rd (Lariat dr.), turn left onto Leland Rd, then right on Lower Grave Creek Rd, once you cross the bridge over Grave creek turn left at the stop sign and stay on Lower Grave Creek Rd. After several miles turn left on Angora Creek Rd. Units are accessible via BLM roads.

To access units 11-5, 29-1C, 29-1D, 29-1NA, 29-1NB : From Grants Pass, take Interstate 5 northbound. Take exit 61 to Merlin. At off ramp turn left onto Merlin Road, Merlin Road will become Galice Road. Travel several miles and turn right onto Hog Creek Road (35-7-11). Units are accessible via BLM roads.

To access all other units: From Grants Pass, take Interstate 5 northbound. Take exit 61 to Merlin. At off ramp turn left onto Merlin Road, Merlin Road will become Galice Road, turn left onto Robertson Bridge Road. Go over Robertson Bridge and turn right at the stop sign onto Or-260 (Picket Creek Road), turn left onto West Pickett Creek Road. Units are accessible via BLM roads.

<u>ENVIRONMENTAL ASSESSMENT</u> - An environmental assessment DOI-BLM-OR-M070-2016-0001-EA was prepared for this sale, and a Finding of No Significant Impact has been documented. This document is available for inspection as background for this sale at the Medford District Office.

## PICKETT HOG TIMBER SALE

THIS IS A SALE PROSPECTUS ONLY. THESE ARE THE SPECIAL PROVISIONS AS THEY WILL BE WRITTEN IN THE CONTRACT. ATTACHMENTS MAY NOT INCLUDE ALL EXHIBITS REFERRED TO IN THE CONTRACT PROVISIONS. THE COMPLETE CONTRACT, INCLUDING ALL EXHIBITS, IS AVAILABLE FOR INSPECTION AT THE MEDFORD INTERAGENCY OFFICE.

Sec. 41. TIMBER RESERVED FROM CUTTING - The following timber on the contract area is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of Government.

- (A) <u>AR-1</u> All timber on the Reserve Areas as shown on Exhibit A and all trees marked with a combination of orange paint, orange flagging, and/or posters which are on or mark the boundaries of the Reserve Areas.
- (B) <u>IR-1</u> Approximately six thousand four hundred ninety-one (6,491) Douglas-fir, one thousand twenty-two (1,022) Oregon white oak, one thousand six hundred-ninety (1,690) ponderosa pine, seven hundred seventy-seven (777) sugar pine, three hundred fourteen (314) pacific madrone, one hundred fifty-six (156) incense cedar trees and three hundred twenty-two (322) snags marked with orange paint above and below stump height in the Harvest Area shown on Exhibit A (Trees marked as above may not be cut under Section 42(17) unless specifically approved in advance by the Contracting Officer.).
- (C) <u>IR-2</u> All timber except approximately three hundred-six (306) Douglas-fir and one (1) sugar pine tree marked for cutting heretofore by the Government with blue paint above and below stump height in harvest units 7-1B, 29-5A and 29-5D shown on Exhibit A.
- (D) <u>IR-13</u> All snags and hardwoods in the Harvest Area shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer. All snags felled for safety reasons shall be retained on site. Hardwoods not marked with orange paint above and below stump height, which are found to restrict yarding operations, may be yarded to the landing, as approved by the Authorized Officer. Hardwood logs would be decked separately and left on site.
- (E) <u>IR-14</u> All pre-existing dead and down logs in the Harvest Area shown on Exhibit A.

Section 42

## (A) <u>LOGGING</u>

- (1) <u>L-1</u> Before beginning operations on the contract area for the first time or after a shutdown of seven (7) or more days, the Purchaser shall notify the Authorized Officer in writing of the date they plan to begin operations. The Purchaser shall also notify the Authorized Officer in writing if he intends to cease operations for any period of seven (7) or more days.
- (2) <u>L-2</u> Prior to the commencement of operations the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract, which shall include measures needed to ensure protection of the environment and watershed. A prework conference between the Purchaser's authorized representative and the Authorized Officer must be held at a location designated by the Authorized Officer before the logging plan will be approved. All logging shall be done in accordance with the plan.
- (3) <u>L-4</u> All trees designated for cutting shall be cut so that the resulting stumps shall not be higher than twelve (12) inches measured from the ground on the uphill side of the trees unless otherwise approved by the Authorized Officer.
- (4) <u>L-8</u> In cable yard and hand felled ground based harvest units shown on Exhibit A, all trees designated for cutting shall be felled and whole tree yarded or yarded with tops attached except when excessive stand damage occurs or the resulting continuous slash depth is expected to exceed eighteen (18) inches as determined by the Authorized Officer. If excessive stand damage occurs or continuous slash depth is expected to exceed eighteen (18) inches as determined by the Authorized to exceed eighteen (18) inches, all trees shall be bucked into log lengths not to exceed forty one (41) feet prior to being yarded.
- (5) <u>L-10</u> In the Harvest Area shown on Exhibit A, all trees designated for cutting shall be directionally felled away from streams, unit boundaries and resource buffers. Use of jacks, wedges, and/or tree pulling with cables or lines shall be employed when necessary to meet this requirement.
- (6) <u>L-12</u> In the Harvest Area shown on Exhibit A, Yarding shall be done in accordance with the yarding requirements or limitations for the designated area listed below.

Designated Area	Yarding Requirements or Limitations	
Ground Based Harvest Units	Mechanized harvesting operations are optional. All ground-based harvest units may be manually felled.	
3-4, 7-1A, 7-1B, 7- 1C, 7-2, 11-5, 20-2, 22, 2, 22, 3, 27, 18A	Mechanized felling operations shall be limited to slopes of thirty-five (35) percent or less.	
22-2, 22-3, 27-1SA, 27-3, 29-1NA, 29- 1NB, 29-1C, 29-1D, 29-4, 29-5B, 30-2, and 31-4	Mechanized felling operations are subject to seasonal operating restrictions as described in Section $42(A)(12)$ of this contract.	
	The harvester, feller-processor, or feller-buncher shall be approved by the Authorized Officer prior to the start of mechanized felling operations. Only purpose built carriers with boom-mounted felling heads may be approved. The boom must have a lateral reach of twenty (20) feet or more, and the machine's lateral reach must be utilized as much as possible. The purpose-built carrier may be of the articulated, rubber-tired design, or the zero-clearance tail swing leveling track-mounted design.	
	The harvest equipment shall walk on existing or created slash as directed by the Authorized Officer. If Purchaser is required to create slash to walk on, then Purchaser shall not be required to whole-tree-yard.	
	Yarding tractor width shall not be greater than nine (9) feet track width and shall be equipped with an integral arch.	
	Directional falling to lead and away from streams, unit boundaries, and resource buffers shown on Exhibit A will be required.	
	New skid roads must be located on ground less than thirty-five (35) percent slope. Rehabilitate all utilized skid roads that are within one hundred eighty-five (185) feet of streams.	

Designated Area	Yarding Requirements or Limitations		
Ground Based (Tractor) Yard Units	Existing skid roads shall be used when possible. Skid roads shall not exceed a width of twelve (12) feet on		
<u>Cont.</u>	average per unit and new skid roads shall be placed at		
3-4, 7-1A, 7-1B, 7- 1C, 7-2, 11-5, 20-2,	least one hundred fifty (150) feet apart where topography will allow, unless the Purchaser proposes an alternate logging plan that limits soil compaction to less than		
22-2, 22-3, 27-1SA,	twelve (12) percent, limits soil productivity loss to less		
27-3, 29-1NA, 29- 1NB, 29-1C, 29-1D,	than five (5) percent of the harvest unit, and is approved by the Authorized Officer.		
29-4, 29-5B, 30-2,	by the Automized Officer.		
and 31-4	Landing size shall not exceed one-quarter (¼) acre, shall be located along existing roads, temporary routes, and/or cable-tractor swing routes within unit boundaries, and shall be approved by the Authorized Officer. Design landings with adequate drainage so that they are not hydrologically connected to draws or the ditchline of roads.		
	Landings or skid roads may be needed outside of unit boundaries in unit 22-3. These landings and corridors shall not be located in any of the buffers shown on Exhibit A and shall be approved by the Authorized Officer prior to use.		
	The use of blades while tractor yarding will be limited, equipment shall walk over as much ground litter as possible.		

Designated Area	Yarding Requirements or Limitations			
Cable Yard Units	Yarding will be done with a cable yarding system which			
7-1C, 7-2, 11-5, 20-	will suspend one end of the log clear of the ground during			
2, 22-2, 27-1SA, 29-	inhaul on the yarding corridor. The cable yarding system			
1NA, 29-1NB, 29-	shall be capable of yarding fifteen hundred fifty (1,550)			
1C, 20, 1D, 20, 4, 20	feet slope distance.			
1C, 29-1D, 29-4, 29-	A carriage is required which will maintain a fixed position			
5A, 29-5B, 29-5D,	on the skyline during lateral yarding and has a minimum			
30-2, and 31-4	lateral yarding capability of seventy five (75) feet.			
	Yarding corridors will be perpendicular to the contours and located outside of all buffers shown on Exhibit A.			

<u>Cable Yard Units</u> <u>Cont.</u> 7-1C, 7-2, 11-5, 20-	Prior to falling any timber in the unit, all tail/lift trees and/or intermediate support trees shall be pre-designated by the Purchaser and approved by the Authorized Officer.		
2, 22-2, 27-1SA, 29- 1NA, 29-1NB, 29- 1C, 29-1D, 29-4, 29- 5A, 29-5B, 29-5D, 30-2, and 31-4	Yarding corridor widths shall not exceed six (6) feet either side of the skyline centerline. Existing cable corridors shall be used whenever possible. Yarding corridors shall be approximately one hundred fifty (150) feet apart, measured at the tailholds.		
	Landing size shall not exceed one-quarter (1/4) acre, shall be located along existing roads, temporary routes, and/or cable-tractor swing routes within unit boundaries where possible, and shall be approved by the Authorized Officer. Short purchaser spurs into units may be necessary to achieve one-end log suspension. Design landings with adequate drainage so that they are not hydrologically connected to draws or the ditchline of roads.		
	Construction of short purchaser spurs may be needed in units 7-2, 20-2, 22-2, 27-1SA, 29-1NA, 29-1NB, 29-1C, 29-1D, 30-2 and 31-4 to achieve one-end log suspension. Fully decommission following use.		
	Directional falling to lead and away from streams, unit boundaries, and resource buffers shown on Exhibit A will be required.		
	Cable corridors that are hydrologically connected; or are perpendicular to and within one hundred eighty-five (185) feet of streams shown on Exhibit A shall be water-barred and shall have slash placed over them prior to winter rain events to protect water quality.		
	Skyline equipment shall be capable of yarding in a multispan configuration.		
	In units 20-2, 29-4, 29-5B, 30-2, and 31-4 the Purchaser shall be allowed to walk yarder into the unit utilizing a tractor-swing system as approved by the Authorized Officer.		

- (7) <u>L-14</u> No falling, yarding, or loading is permitted in or through the Reserve Area, unless otherwise approved by the Authorized Officer.
- (8) <u>L-14</u> No falling, yarding or loading is permitted in or through the streams, seeps, wetlands, or resource buffers shown on Exhibit A.
- (9) <u>L-14</u> No falling, or yarding is permitted in or through the mining ditches in unit 22-3 except in locations approved by the Authorized Officer. Logs shall be placed in ditches during logging to protect ditch walls. Crossings shall be cleaned out and reconstructed after harvest as shown on Exhibit A.
- (10) <u>L-15</u> Yarding across the stream which dissects unit 22-3 shall be limited to not more than one (1) crossing and shall be limited to the dry season or dry-condition wet season.
- (11) <u>L-16</u> No newly constructed landings shall be located within three hundred (300) feet of plant site locations shown on Exhibit A. Use of previously constructed landings located within one hundred (100) feet of plant site locations, shown on Exhibit A, shall not be permitted.
- (12)L-19 No mechanical ground based harvesting, ground based yarding, skid trail and landing rehabilitation, machine piling, road and temporary route construction, road and temporary route reconstruction, temporary route decommissioning, or non-emergency road maintenance shall be conducted in the sale area units between October 15 of one calendar year and May 15 of the following calendar year both days inclusive. Winterization of temporary routes greater than 0.25 miles in length shall occur prior to October 15 of the same operating year. Rehabilitation of temporary routes greater than 0.25 miles in length shall not occur until after pile burning is complete, prior to October 15. Rehabilitation of temporary routes less than 0.25 miles in length shall occur prior to October 15 of the same operating year. Purchaser may request in writing, a conditional waiver of this restriction. If soil moisture conditions are dry, as determined by the inability of a soil sample taken at four (4) to six (6) inches to maintain form when compressed and by the inability of soil moisture at the surface to be readily displaced, causing ribbons and ruts along equipment tracks, the Contracting Officer may approve a conditional waiver. If impacts to soil resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.
- (13) <u>L-19</u> No haul shall be conducted in the Contract Area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. Purchaser may request in writing, a conditional waiver of this restriction. If the Authorized Officer determines that hauling would not result in road damage or the transport of sediment to nearby stream channels based on soil moisture conditions

or rain events, Contracting Officer may approve a conditional waiver for hauling. If soil moisture conditions or rain events are anticipated to cause impacts to roads or stream water quality resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.

- (14) <u>L-20</u> No tree felling, yarding, burning, heavy equipment use or muffled blasting within unit 29-1NB shown on Exhibit A shall be conducted between March 1 and June 30 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from Northern Spotted Owl protocol surveys conducted in accordance with accepted standards, as approved by the Contracting Officer, that Northern Spotted Owl nesting and/or fledging activities are not occurring during the time of harvest.
- (15) <u>L-22</u> During logging operations, the Purchaser shall keep the 35-7-27.0 and 35-7-27.2 road, where it passes through the contract area, clear of trees, rock, dirt, and other debris so far as is practicable. The road shall not be blocked by such operations for more than 10 minutes.
- (16) <u>L-23</u> The Purchaser shall provide two (2) flaggers to control traffic on Riverbanks Road (Hwy 260) where the proposed temporary route accesses unit 3-4 whenever log trucks are entering the highway or when tree felling creates a hazard to traffic.
- (17) <u>L-24</u> Before cutting and removing any trees necessary to facilitate logging in the Harvest Area shown on Exhibit A, the Purchaser shall identify the location of the skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the Logging Plan. Said Purchaser identification of trees to be cut and removed does not constitute authority to proceed with cutting and removal. In addition, before proceeding with cutting the following conditions must be met:
  - (a) All skid roads and/or cable yarding roads upon which timber is identified by the Purchaser to be cut and removed in accordance with this special provision must be necessary for the safe and expeditious removal of timber sold under this contact and shall be limited to the minimum width necessary for yarding of logs with a minimum of damage to reserve trees, however, unless otherwise approved in writing by the Contracting Officer, the width of each skid road, and/or cable yarding road shall be limited to twelve (12) feet.
  - (b) The Purchaser may immediately cut and remove additional timber to clear skid roads and cable yarding roads; and provide tailhold, tieback, guyline, lift and intermediate support trees; and clear danger trees when the trees have been marked with pink paint above and below stump height by the

Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. The volume of the timber to be sold will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures. No timber may be cut or removed under terms of this provision unless sufficient installment payments have been made in accordance with Section 3.(b). of the contract or sufficient bonding has been provided in accordance with Section 3.(e). of the contract.

- (c) The Purchaser agrees that sale of this additional timber shall be accomplished by a unilateral modification of the contract executed by the Contracting Officer and that such timber shall be sold at the unit prices shown in Exhibit B of this contract unless: the value of the timber must be reappraised subject to the terms for contract extension set forth in Section 9 of the contract; or, the Authorized Officer determines that the species of trees are not listed in Exhibit B of this contract at current fair market value in accordance with Section 8 of the contract.
- (d) This authorization for the Purchaser to cut and remove additional timber prior to the execution of a modification may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser has cut and removed any tree not previously marked and approved for cutting by the Authorized Officer, which under Section 10 of the contract constitutes a violation of the contract and under Section 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.
- (e) If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one (1) working day prior to the need for cutting and removing any additional timber, and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown in Exhibit B of the contract or in accordance with Section 8 or Section 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all contract work for the period of time deemed necessary and appropriate for the Government to safely measure and mark additional timber.
- (f) The Government may reserve trees previously designated for cutting and removal by blacking out blue paint, and/or applying orange paint as replacements for additional trees cut and removed for skid roads and/or

cable yarding roads when the Authorized Officer determines such reservation is necessary to maintain stand densities consistent with objectives set forth in the management prescriptions. This may include the replacement of trees damaged by storm events, or insects or disease. The volume of this timber to be reserved will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures and the value shall be based on the unit prices shown in Exhibit B of the contract. The Purchaser agrees that the Total Purchase Price shall be reduced accordingly through a unilateral modification to the contract executed by the Contracting Officer.

(18) <u>L-33</u> Purchaser's operations shall facilitate BLM's safe and practical inspection of Purchaser's operations and BLM's conduct of other official duties in the Contract Area. Purchaser has all responsibility for compliance with safety requirements for Purchaser's employees, contractors and subcontractors.

In the event that the Authorized 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 may be modified. If the cost of such contract modification is of a substantial nature (\$2,000.00 or more), the Purchaser may request, in writing, an adjustment in the Total Purchase Price specified in Section 2 of the timber sale contract, as amended, to compensate for the changed conditions.

Unless otherwise specified in writing, when operations are in progress adjacent to or on roads and/or trails in the harvest unit area, Purchaser shall furnish, install, and maintain all temporary traffic controls that provide the road or trail user with adequate warning of and protection from hazardous or potentially hazardous conditions associated with its operations. Purchaser shall prepare a Traffic Control Plan, which the Purchaser has determined is compliant with state and local OSHA and Transportation standards no later than the pre-work meeting and prior to commencing operations. Traffic control devices shall be appropriate to current operating and/or weather conditions and shall be covered or removed when not needed., Flagmen and devices shall be as specified in state OSHA and Transportation standards for logging roads or the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) published by the U.S. Department of Transportation - Federal Highway Administration. Included in the Traffic Control Plan, Purchaser shall note traffic control device locations on a Purchaser produced copy of the contract Exhibit "A" Map.

#### (B) <u>ROAD CONSTRUCTION, MAINTENANCE, AND USE</u>

(1) <u>R-1</u>: The Purchaser shall construct, improve, renovate, and/or decommission all roads, structures, and temporary routes listed for use under this contract in

accordance with the plans and specifications shown on Exhibits C and D, which is attached hereto and made a part hereof.

- (2) <u>R-1a</u>: Any required renovation of roads and structures shall be completed and accepted, in accordance with Section 18, prior to the removal of any timber, except right-of-way timber, over that road.
- (3) <u>R-1b</u>: The Purchaser shall construct, reconstruct, use, and decommission temporary routes by October  $15^{\text{th}}$  of the same respective operating season.
- (4) <u>R-1c</u>: The Purchaser shall not commence work on road renovation and reconstruction until receipt of written notice to do so from the Authorized Officer. Work shall commence no later than 5 days after such notice, and shall be completed within 1 year after such notice.
- (5) <u>R-2</u>: The Purchaser is authorized to use the roads listed below and shown on Exhibits C and D for the removal of Government timber sold under the terms of this contract, provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 42(B)(6) and Section 42(B)(9). Any road listed on Exhibit C and D and requiring construction, improvement, or renovation in Exhibit C of this contract, shall be maintained by the Purchaser until receiving written acceptance of the construction, improvement, or renovation from the Contracting Officer. The Purchaser shall pay current Bureau of Land Management maintenance and rockwear fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length in Miles	Road Control	Surface Type	Maintenance Responsibility
34-7-2.0(A)	0.58	BLM	ASC	Purchaser
34-7-3.0(A1-A2)	2.07	BLM	ASC	Purchaser
34-7-3.1(A-F)	6.21	BLM	ASC	Purchaser
34-7-7.1	0.84	BLM	GRR	Purchaser
35-7-11.0(A-C1)	6.53	BLM	BST	BLM
35-7-11.0(C2)	0.30	BLM	ASC	BLM
34-7-22.0(A-B)	0.27	BLM	ASC	Purchaser
34-7-21.6(A)	1.03	Perpetua	ASC	Purchaser
34-7-21.6(B-C)	1.83	BLM	ASC	Purchaser
35-7-11.1(A)	1.66	BLM	ASC	Purchaser
35-7-1.0(A)	0.46	BLM	NAT	Purchaser
35-7-1.6	0.36	BLM	NAT	Purchaser

35-7-27.0(A-B)	1.50	BLM	BST	BLM
35-7-27.0(C-F)	4.05	BLM	ASC <sup>1/</sup>	Purchaser
35-7-27.3(A-B)	1.52	BLM	GRR/NAT	Purchaser
35-7-22.0	0.03	BLM	NAT	Purchaser
35-7-27.2(A)	0.40	BLM	PRR	Purchaser
35-7-27.7(A)	0.66	BLM	GRR	Purchaser
35-7-29.0(A)	0.95	BLM	ASC <sup>1/</sup>	Purchaser
35-7-28.0(A-B)	1.60	BLM	ASC	Purchaser
35-7-29.6	0.09	BLM	NAT	Purchaser
35-7-29.1	0.25	BLM	PRR	Purchaser
35-7-20.0	0.54	BLM	GRR	Purchaser
Total	33.73 miles			

<sup>1/</sup> Portions of ASC road were chipsealed in the past. Chipseal is highly damaged. All fees and useage of the road are reflective of the ASC surface.

- (6) <u>R-2b</u>: The Purchaser shall pay the Government a road maintenance and rockwear fee of fourteen thousand two hundred fifty four and 62/100 dollars (\$14,254.62) for the transportation of timber included in this contract price over said roads. The above maintenance amount is for the use of 33.73 miles of road or less. The total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), therefore the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.
- (7) <u>R-2e</u>: The Contracting Officer may at any time, by written notice, terminate the Purchaser's operator road maintenance obligations and require instead payment of current Bureau of Land Management road maintenance and rockwear fees for the particular surface type of the roads involved. These fees will be applied to the remaining contract volume on the sale area, as determined by the Authorized Officer, to be transported over the roads listed in Section 42(B)(5). If the total road maintenance and rockwear fee does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance and rockwear fee Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.
- (8) <u>R-2f</u>: The Purchaser shall perform any required road repair and maintenance work on roads used by them, under the terms of Exhibit D, Road Maintenance Specifications, of this contract, which is attached hereto and made a part hereof.

(9) <u>R-3</u>: In the use of Road No. 34-7-26.1(A), the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000EA dated August 14<sup>th</sup>, 1959, between the United States of America and **Perpetua Forest Company**. This document is available for inspection at the Medford District Office.

These conditions include:

- Payment of a road rockwear obligation of two hundred eight and 88/100 dollars (\$208.88) to Perpetua Forest Company, payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (10) <u>R-3</u>: In the use of Temp Route 11-5, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-605 dated March 1<sup>st</sup>, 1961, between the United States of America and Weyerhaeuser Company. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Prior to the construction of said temp route, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (b) Prior to cutting or removing any timber from the road right-of-way between Stations 0+00 and 13+30 on Temp Route 11-5, the Purchaser shall pay to Weyerhaeuser Company, the owner of the right-of- way timber, the total agreed upon purchase price listed in the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.

(11) <u>R-3</u>: In the use of Temporary Tractor Swing 22-3, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-1395 dated July 22<sup>nd</sup>, 1983, between the United States of America and Arthur Lindh. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Prior to the construction of said temp route, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (b) Prior to cutting or removing any timber from the road right-of-way between Stations 3+48 and 9+69 on Temporary Tractor Swing 22-3, the Purchaser shall pay to Arthur Lindh, the owner of the right-of- way timber, the total agreed upon purchase price listed in the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (12) <u>R-3c</u>: The Purchaser agrees that if they elect to use any other private road(s), which is the subject of a right-of-way agreement with the Government for the removal of Government timber sold under the terms of this contract, the Purchaser shall request and agree to the modification of this contract to provide for such use and for allowances for amortization of the Government's share of the capital investment of any such road.
- (13) <u>R-4</u>: The Purchaser shall be required to secure written approval to use vehicles or haul forest products and equipment over Government owned or controlled roads when such vehicles or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit or if vehicles meet allowable non-permitted State vehicle weights, but the haul route crosses a structure or segment of road that is posted for reduced weights. The Purchaser agrees to abide by any special requirements included in said written approval.

Details of such equipment shall be furnished to the Authorized Officer for evaluation of load characteristics at least fifteen 15 days prior to proposed move in.

Details shall include:

- A. Axle weights when fully loaded.
- B. Axle spacing.
- C. Transverse wheel spacing.
- D. Tire size.
- E. Outside width of vehicle.
- F. Operating speed.
- G. Frequency of use.
- H. Special features (e.g., running tracks, overhang loads, etc.).

The Purchaser shall be responsible for repair of any damage to roads or structures caused by the use of overweight or over-dimension vehicles or equipment: (1) without written approval; (2) in violation of the conditions of a written approval; or, (3) in a negligent manner.

The amount of actual damage shall be determined by the Authorized Officer following a technical inspection and evaluation.

(14) <u>R-5:</u> Tracked type equipment shall not be allowed to cross over concrete bridge decks, other concrete surfaced structures, or asphalt surfaced roads without the proper protection of that surface. Prior approval shall be obtained from the Authorized Officer when crossing with protective devices.

The Purchaser shall be responsible for the repair of any damage to roads or structures caused by the use tracked vehicles or equipment: (1) without written approval; (2) in violation of the conditions of a written approval; or, (3) in a negligent manner. The amount of actual damage shall be determined by the Authorized Officer following a technical inspection and evaluation.

#### (C) <u>ENVIRONMENTAL PROTECTION</u>

- (1)  $\underline{\text{E-1}}$  In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall implement the following noxious weed control measures:
  - (a) In order to prevent the potential spread of noxious weeds into the Medford District BLM, the operator would be required to clean all logging, construction, chipping, grinding, shredding, rock crushing, and transportation equipment prior to entry on BLM lands.
  - (b) Cleaning shall be defined as removal of dirt, grease, plant parts, and material that may carry noxious weed seeds into BLM lands. Cleaning prior to entry onto BLM lands may be accomplished by using a pressure hose.

- (c) Only equipment inspected by the BLM would be allowed to operate within the Analysis Area. All subsequent move-ins of equipment as described above shall be treated the same as the initial move-in.
- (d) Prior to initial move-in of any equipment, and all subsequent move-ins, the operator shall make the equipment available for BLM inspection at an agreed upon location off Federal lands.
- (e) Equipment would be visually inspected by the Authorized Officer to verify that the equipment has been reasonably cleaned.
- (2)  $\underline{\text{E-1}}$  In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall only use certified weed-free hay and native grass seed species approved by the Authorized Officer for rehabilitation activities. All seeding shall be contingent upon seed availability.
- (3) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall prepare a Spill Prevention, Control, and Countermeasure Plan for all hazardous substances to be used in the contract area, as directed by the Authorized Officer. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. Such plans must comply with the State of Oregon DEQ OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements.
- (4) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not refuel equipment, store, or cause to have stored, any fuel or other petroleum products within one hundred fifty (150) feet of all riparian management or wet areas. All Petroleum products shall be stored in durable containers and located so that any accidental releases will be contained and not drain into any stream system. Hydraulic fluid and fuel lines on heavy mechanized equipment would be in proper working condition in order to minimize potential for leakage into streams. Absorbent materials shall be onsite to allow for immediate containment of any accidental spills. Spilled fuel and oil shall be cleaned up and disposed of at an approved disposal site.
- (5) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall not locate new landings in areas that contribute eroded fines to streams, wet areas, dry draws and swales. If these landing locations cannot be avoided, ensure that properly installed sediment control measures are placed and maintained, as needed, to keep eroded material onsite.
- (6)  $\underline{\text{E-1}}$  In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall ensure that silt fencing or other sediment control measures are properly placed and maintained during use and periods of non-use when utilizing

landings, skid tails, cable-tractor swing routes or temp routes that have the potential to release eroded fines into a stream or wet area, directly or via draws or ditchlines. Any project-related activity would be suspended if conditions develop that cause a potential for sediment laden runoff to enter a wetland, floodplain or waters of the state. Operations can resume when sediment control devices are in place and conditions allow turbidity standards to be met.

- (7) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall, prior to October 15 of the same operating season, winterize temporary routes, landings, hydrologically connected corridors, skid trails and other areas of exposed soils by properly installing and/or using water bars, berms, sediment basins, gravel pads, hay bales, small dense woody debris, seeding and/or mulching, to reduce sediment runoff and divert runoff water away from stream channels, headwalls, slide areas, high landslide hazard locations or steep erodible fill slopes as directed by the Authorized Officer.
- (8) <u>E-1</u> In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall as directed by the Authorized Officer rehabilitate all ground based skid trails utilized within one hundred eighty five (185) feet of streams, all temporary routes, cable-tractor swing routes, and all landings outside of the road prism by one of the following methods:
  - (a) If the Authorized Officer deems ripping will not cause unacceptable damage to the root systems of residual trees the Purchaser shall discontinuously subsoil with winged ripper teeth, simultaneously water bar, seed, mulch, and barricade.
    - 1. Use a minimum 200 flywheel horsepower tractor with mounted rippers having shanks and teeth consistent with drawings and specifications shown on Exhibit R of this contract, which, is attached hereto and made a part hereof.
    - Rip to a depth of twelve (12) inches, and no further than thirty six (36) inches apart.
    - 3. Ripping will occur prior to the end of the operating season.
    - 4. Any step landings shall be re-contoured following use, prior to the end of the operating season.
  - (b) If the Authorized Officer deems ripping will cause an unacceptable amount of damage to the root systems of residual trees the Purchaser shall scarify to a depth of up to six (6) inches and simultaneously water bar, seed, mulch, and barricade.

Rehabilitation of temporary routes less than 0.25 miles in length shall occur prior to October 15 of the same operating year.

Rehabilitation of temporary routes greater than 0.25 miles in length shall not occur until after pile burning is complete, prior to October 15.

- (9)  $\underline{\text{E-1}}$  In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall place material removed during excavation in locations where it cannot enter streams or other water bodies.
- (10) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall, upon completion of skidding, pull vegetation over and block skid trails if unauthorized off-highway vehicles (OHV) are identified utilizing the skid trails.
- (11) <u>E-2</u> The water bars to be constructed as required by Sec. 26(c) shall be constructed in accordance with the specifications shown on Exhibit C6-1 which is attached hereto and made a part hereof.
- (12) <u>E-3</u> The Purchaser shall immediately discontinue specified construction or harvesting operations upon written notice from the Contracting Officer that:
  - (a) threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, may be affected by the operation, and a determination is made that consultation or reinitiation of consultation is required concerning the species prior to continuing operation, or;
  - (b) when, in order to comply with the Endangered Species Act, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
  - (c) federal proposed, federal candidate, Bureau sensitive or State listed species protected under BLM Manual 6840 Special Status Species Management have been identified, and a determination is made that continued operations would affect the species or its habitat, or;
  - (d) other active raptor nests have been discovered, and a determination is made that continued operations under this contract would adversely affect the present use of the discovered nesting area by the raptor, or;

- (e) when, in order to comply with a court order, which enjoins operations on the sale or otherwise requires the Bureau of Land Management to suspend operations, or;
- (f) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
  - 1. species have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, and the Contracting Officer determines that continued operations would affect the species or its habitat, or;
  - 2. when, in order to protect species which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

Those operations necessary for a safe removal of personnel and equipment from the contract area and those directed by the Contracting Officer, which are required in order to leave the contract area in an acceptable condition will be permitted. Discontinued operations may be resumed upon receipt of written instructions and authorization by the Contracting Officer.

During any period of suspension, the Purchaser may withdraw performance and payment bond coverage aside from that deemed necessary by the Authorized Officer to secure cut and/or removed timber for which the Bureau of Land Management has not received payment, and/or unfulfilled contract requirements associated with harvest operations that have already occurred and associated postharvest requirements.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the First Installment held on deposit may be temporarily reduced upon the written request of the Purchaser. For the period of suspension extending beyond 30 days, the First Installment on deposit may be reduced to five (5) percent of the First Installment amount listed in Section 3.b. of the contract. Any First Installment amount temporarily reduced may be refunded or transferred to another BLM contract at the request of the Purchaser. However, if the Purchaser has outstanding debt owing the United States, the Contracting Officer must first apply the amount of First Installment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3710, et seq.). Upon Purchaser's receipt of a bill for collection and written notice from the Contracting Officer lifting the suspension, the Purchaser shall

restore the First Installment to the full amount shown in Section 3.b. of the contract within 15 days after the bill for collection is issued, subject to Section 3.j. of the contract. The Purchaser shall not resume contract operations until the First Installment amount is fully restored.

In the event of a suspension period or a combination of suspension periods that exceed a total of 30 days, the unamortized Out-of-Pocket Expenses for road or other construction required pursuant to Exhibit C of the contract shall be refunded or transferred to another BLM contract at the request of the Purchaser. Upon written notice from the Contracting Officer lifting the suspension, the Purchaser shall reimburse the Government the amounts refunded or transferred. The Purchaser may choose to pay this reimbursement at once or in installments payable at the same time as payments are due for the timber under the contract and in amounts approximately equal to the expenses associated with the timber for which payment is due.

In the event that operating time is lost as a result of the incorporation of additional contract requirements, or delays due to Endangered Species Act consultation with the U.S. Fish and Wildlife Service or U.S. National Marine Fisheries Service, or court-ordered injunctions, the Purchaser agrees that an extension of time, without reappraisal, will constitute a full and complete remedy for any claim that delays due to the suspension hindered performance of the contract or resulted in damages of any kind to the Purchaser.

The Contracting Officer may determine that it is necessary to terminate the cutting and removal rights under the contract in order to comply with the Endangered Species Act, protect species that have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or comply with a court order. Following the issuance of a written notice that cutting and removal rights will be terminated, the Purchaser will be permitted to remove timber cut under the contract, if allowed by the Endangered Species Act, survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, or court order requirements necessitating the modification or termination.

In the event cutting and removal rights are terminated under this subsection, the Purchaser agrees that the liability of the United States shall be limited to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area. This calculation of liability shall utilize actual Purchaser costs and Government estimates of timber volumes. At the Authorized Officer's request, the Purchaser agrees to provide documentation of the actual costs incurred in the performance of the contract. In addition, the Purchaser shall

be released from the obligation to pay the contract price for any timber which is not authorized to be removed from the contract area.

The Purchaser specifically and expressly waives any right to claim damages, other than those described in the preceding paragraphs, based on an alleged breach of any duty to the Purchaser, whether express or implied, in regard to the manner in which the Government defended the litigation which resulted in the court order affecting the operation of the contract. This waiver also extends to any claims based on effects on the operation of the contract that arise from litigation against another agency. Furthermore, the Purchaser specifically acknowledges and agrees that a court ruling that the Government violated the Administrative Procedures Act cannot be interpreted, in itself, to mean that the Government had not acted reasonably in regard to its duties to the Purchaser under this contract.

(13) <u>E-5</u> The Purchaser shall notify the Authorized Officer in writing by February 1 of each calendar year in which operations are expected to take place on the contract area between March 1 and September 30, both days inclusive. If notification is not received by the Authorized Officer by February 1, felling, bucking, yarding, road construction, or any other activity with the potential to disturb nesting northern spotted owls (owls) may not be allowed during this time period.

Upon receipt of a notice that the Purchaser expects to perform such operations during this time period, the Government will conduct surveys to determine whether owls are nesting within 0.25 miles of Unit 29-1NB. If it is determined owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations (in writing). Without this approval, such operations are prohibited from March 1 through June 30 of each year.

- (14) <u>E-6</u> In Harvest Unit 29-1NB shown on Exhibit A, no tree felling, yarding, burning, heavy equipment use or muffled blasting shall be conducted from March 1 to June 30 of the same calendar year, both days inclusive.
  - (a) This is a seasonal restriction to protect northern spotted owls. The Purchaser may, at their own expense and risk, conduct surveys in order to potentially waive or modify this restriction.
  - (b) If the Purchaser elects to conduct surveys, the Purchaser must notify the Authorized Officer by February 15 of any calendar year that the Purchaser desires to conduct such surveys. Surveys must be completed to strict protocols and procedures that will be provided by the Authorized Officer. Survey plans and results must be approved by the Authorized Officer prior to issuance of any modification or reduction of the restrictions. If it is

determined owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations (in writing) or depending upon the results, surveys may result in the Contracting Officer invoking Section 42(C)(12) including suspension of operations or increasing restrictions for the calendar year.

#### (D) <u>MISCELLANEOUS PROVISIONS</u>

(1)M-2 The Government, at its option, may administratively check scale any portion of the timber removed from the contract area, and if necessary, conduct check scaling of independent scalers contracted to BLM for administrative check scaling purposes. The Purchaser hereby agrees to make such contract timber available for such scaling at a location or locations to be approved in writing by the Authorized Officer. At the approved location or locations, the Purchaser shall provide an area for logs to be safely rolled out for scaling, to unload logs from trucks, place logs in a manner so that both ends and three faces of each log are visible for scaling, and to reload or remove logs after scaling has been completed. In the event that BLM elects to administratively check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows: If the entire sale is check scaled, the purchase price of this contract shall be reduced by two thousand six hundred eighty five dollars (\$2,685.00). In the event that only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of two thousand six hundred eighty five dollars (\$2,685.00) which is equal to the percentage of timber sold which was actually scaled by the Government. For purposes of computing this price reduction, the percentage of timber sold which has been scaled shall be determined by the Government. Any reduction in purchase price under the terms of this provision shall be full compensation to the Purchaser for any expense or loss incurred as a result of such scaling. Scaling shall be conducted in accordance with the Northwest Log Rules Eastside Log Scaling Handbook, as amended, or supplemented by BLM before the first advertisement date of the sale, by BLM scalers, and/or independent scalers contracted to BLM. A copy of the scale report will be made available to the Purchaser upon request.

#### (E) <u>FIRE PREVENTION</u>

(1) <u>F-1 Fire Prevention and Control</u>. Primarily for purposes of fire prevention and control, the Purchaser shall, prior to the operation of power driven equipment in construction or logging operations under this contract during the closed fire season or periods of fire danger, prepare a fire prevention and control plan to the satisfaction of the Authorized Officer.

- (2) <u>F-1a Fire Prevention and Control</u>. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions:
  - (a) At least three (3) days prior to the operation of power-driven equipment during any operations under this contract during the closed fire season or periods of fire danger, prepare a fire prevention and control plan to the satisfaction of the Authorized Officer and the State of Oregon Department of Forestry.
  - (b) Provide and maintain on the contract area in good working order, and immediately available, the following equipment for use during closed fire season or periods of fire danger:
    - 1. <u>F-2a</u> Fire fighting tools shall be kept at each landing or at such other place as the Authorized Officer shall designate whenever employees are working on the contract area. All fire fighting tools shall be kept in a sturdily constructed box which shall be painted red and lettered on the front or top in large letters, "For Fire Only." The box shall have a hinged lid and a hasp by which the lid can be sealed. One box may serve two landings not over six hundred (600) feet apart. When filled, the box shall not weigh over two hundred (200) pounds. The fire tools shall be in good condition, be tight on strong handles, and have sharp cutting edges. There shall be not less than four (4) tools in each box nor less than one (1) tool for each employee working on the contract area. Three-fourths (3/4) of all fire tools shall be used only for fighting fire.
    - 2. F-2b At each landing or such other place as the Authorized Officer shall designate during periods of operation one (1) tank truck of three hundred (300) gallons or more capacity with a minimum of five hundred (500) feet of  $1\frac{1}{2}$  inch hose (must be adequate length to reach 200 feet beyond active work sites), six (6) 1<sup>1</sup>/<sub>2</sub> inch wyes, six (6)  $1\frac{1}{2}$  inch to 1 inch reducers, three (3)  $1\frac{1}{2}$  inch nozzles and three (3) 1 inch nozzles. One (1) three hundred (300) gallon fire engine may be substituted for each required 300 gallon tank truck, provided that the total capability to pump and deliver water Each fire engine / tank truck shall be remains unchanged. equipped with a pump capable of delivering a minimum of forty (40) gallons per minute (gpm) water flow at one hundred fifty (150) pounds per square inch (psi) engine pressure through fifty (50) feet of  $1\frac{1}{2}$  inch fire hose. The pump may be either power take off driven or truck-mounted auxiliary engine driven, or portable. All equipment shall be acceptable to and approved by the

Authorized Officer and shall conform to the standards set forth in Oregon Revised Statutes 477.645 through 477.670. All hose couplings shall have the standard thread adopted by the BLM (1 <sup>1</sup>/<sub>2</sub> inches National Hose Thread (NH), 1 inch National Pipe Straight Hose Thread (NPSH) or be provided with suitable adapters. At the close of each working day, all bulldozers and fire/tank trucks shall be filled with fuel and made ready for immediate use. All fire/tank trucks shall be filled with water and made available for immediate use.

- 3. <u>F-2c</u> Serviceable cell phone or radio equipment able to provide prompt and reliable communication between the contract area, Medford BLM District Office, and Oregon Department of Forestry. Such communication shall be available during periods of operation including the time watchman service is required.
- 4.  $\underline{F-2d}$  A pair of headlights capable of being quickly attached to each bulldozer used on the contract area. The headlights shall be adequate to provide illumination sufficient to allow use of the bulldozers for fire fighting and construction of fire lines at night.
- 5.  $\underline{F-2f}$  A headlamp for each employee in the woods crew adequate to provide sufficient illumination for night firefighting. A headlight shall be of the type that can be fastened to the head so as to allow independent use of the hands. At least one extra set of batteries shall be provided for each such headlight.
- 6.  $\underline{\text{F-2f}}$  Two (2) back-pack pumps at each landing and one (1) at each tail block, all to be kept full of water and in good operating condition.
- 7.  $\underline{F-2g}$  A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Authorized Officer and a size 0 or larger shovel shall be carried during the closed fire season or periods of fire danger by each falling crew and each bucker using a power saw on the contract area. Such fire extinguisher shall be filled and in effective operating condition and shall at all times be immediately available to the operator when the saw is being fueled or the motor of the saw is running. Any fueling of a power saw shall be done in an area which has first been cleared of all flammable material. Power saws shall be moved at least twenty (20) feet from the place of fueling before the engine is started. Each power saw shall be equipped with an exhaust

system and a spark arresting device which are of types approved by the Authorized Officer.

- (c) <u>F-5</u> Where blocks and cables are used on the contract area during periods of fire danger, the Purchaser shall remove all flammable material at least ten (10) feet from the place where the tail or any other block will hang when the cable is tight. Such clearings shall be inspected periodically by the Purchaser and shall be kept free of flammable material.
- (3)  $\underline{F-9}$  During Oregon Department of Forestry regulated use closure, no smoking shall be permitted outside of closed vehicles.
- (F) <u>SLASH DISPOSAL</u>
  - (1) <u>SD-1 Fire Hazard Reduction</u>. In addition to the requirements of Sec. 15 of this contract, and notwithstanding the Purchaser's satisfactory compliance with State laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the State's willingness to release the Purchaser from liability for such hazard, the Purchaser shall remain responsible to the Government for performance of the following hazard reduction measures required by this contract:
    - (a) <u>SD-1a</u> LOP AND SCATTER all slash located beyond hand pile and machine pile treatments in units 20-2, 29-1NB, 29-1C, and 29-5A concurrently with normal felling operations. All top and side branches must be free of the central stem so that such stem is reduced to the extent that it is within eighteen (18) inches of the ground at all points. Slash includes woody material (brush, limbs, tops, unmerchantable stems, or chunks) severed, uprooted, or broken from live plants as a result of Purchaser's operations under the terms of this contract. Lop and scatter shall be completed in accordance with Exhibit S as directed by the Authorized Officer
      - 1. All slash shall be arranged in a discontinuous pattern across the forest floor.
      - 2. All slash shall be lopped to no more than eight (8) feet in length.
    - (b) <u>SD-1c</u> MACHINE PILE AND BURN all slash located in units 7-1A and 22-3. Machine pile and burn all slash located in the ground base portion of units 11-5, 20-2, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-5B, 30-2, and 31-4. Slash shall be piled by machine. Piling shall be completed in accordance with Exhibit S as directed by the Authorized Officer. Finished piles shall be tight and free of earth.

- 1. The BLM will prepare a fire burn plan. The purchaser shall obtain smoke clearance before ignition of piles.
- 2. Slash includes woody material (brush, limbs, tops, unmerchantable stems, or chunks severed, uprooted, or broken from live plants as a result of Purchaser's operations under the terms of this contract.
- 3. All equipment shall be approved by the Authorized Officer. Piling shall be accomplished using a track mounted hydraulic excavator or equivalent with at least a five (5) tooth brush rake. The excavator shall have a minimum reach of twenty (20) feet. The excavator shall be equipped with a hydraulic thumb or rotating controllable grapple head. Finished piles shall be tight and free of dirt and other non woody debris.
- 4. Machine piling operations are limited to existing skid trails in ground based units; to slopes less than thirty five (35) percent slope; and to seasonal restrictions described in Sec. 42(A)(12)(1-19).
- 5. Machine piles shall be constructed as compactly as possible. There should be an adequate supply of fine fuels located within and under the covered area of the pile to ensure ignition of the larger fuels. Completed piles shall be free of projecting limbs or slash which would interfere with adequate covering of the piles.
- 6. Machine piles shall be adequately covered with a cap of ten (10) feet by ten (10) feet of four (4) millimeter black polyethylene plastic. The plastic shall be held in place with woody debris or tied with rope or twine to ensure coverage. Coverage shall be completed when piles are constructed, or as directed by the Authorized Officer.
- 7. All areas that are identified in Exhibit A for ground base yarding that cannot be machine piled would be hand piled.
- 8. Machine piles will be burned within eighteen (18) months of harvest completion.
- 9. Machine piles shall not be placed within fifteen (15) feet of snags, stumps, reserve trees or large woody debris.

- 10. Machine piles will be burned in the fall to spring season after one (1) or more inches of precipitation have occurred.
- 11. The purchaser shall burn one hundred (100) percent of machine piles with a minimum consumption of ninety (90) percent.
- 12. The Purchaser is required to furnish the fuel and equipment for machine pile burning.
- (c) SD-1c HAND PILE AND BURN all slash located in units 3-4, 7-1B, 7-1C, 7-2, 22-2, 27-1SA, 27-3, 29-4, and 29-5D. Hand pile and burn all slash located in the cable portion of units 11-5, 29-1NA, 29-1D, 29-5B, 30-2, and 31-4. Hand pile and burn all slash located within one hundred (100) feet of the temporary route where the route coincides with a harvest unit boundary in the cable portion of units 29-1NB and 29-1C. Hand pile and burn all slash located within two hundred (200) feet of road 35-7-29.6 where the road coincides with a harvest unit boundary in unit 29-5A. Hand pile and burn all slash located within one hundred (100) feet of the tractor swing route where the route coincides with a harvest unit boundary; hand pile and burn all slash located within one hundred (100) feet of road 35-7-20.0 where the road coincides with a harvest unit boundary; and hand pile and burn all slash located within two hundred (200) feet of road 35-7-28.0 where the road coincides with a harvest unit boundary in unit 20-2. Slash shall be piled by hand. Piling shall be completed in accordance with Exhibit S as directed by the Authorized Officer. Finished piles shall be tight and free of earth.
  - 1. The BLM will prepare a fire burn plan. The purchaser shall obtain smoke clearance before ignition of piles.
  - 2. Slash includes woody material (brush, limbs, tops, nonmerchantable stems, or chunks severed, uprooted, or broken from live plants) as a result of Purchaser's operations under the terms of this contract.
  - 3. Hand pile all slash which is between one (1) and six (6) inches in diameter on the large end and exceeds two (2) feet in length, or as directed by the Authorized Officer
  - 4. Hand piles shall be constructed as compactly as possible. There should be an adequate supply of fine fuels located within and under the covered area of the pile to ensure ignition of the larger fuels. Completed piles shall be free of projecting limbs or slash which would interfere with adequate covering of the piles.

- 5. Hand piles shall be placed within unit boundaries, however, outside of wildlife buffers, roadways, turnouts, shoulders, or cut banks, No hand piles shall be located in any stream channel, down logs, stumps or within ten (10) feet of any other pile or trunk of the nearest reserve tree. No portion of the pile will be under the crown of any living tree. No piles shall be placed adjacent to or within twenty five (25) feet of unit boundaries.
- 6. Hand piles shall be adequately covered with a minimum cap of five (5) feet by five (5) feet of four (4) millimeter black polyethylene plastic that is large enough to cover eighty (80) percent of the pile to ensure ignition. The plastic shall be held in place with woody debris or tied with rope or twine to ensure coverage. Coverage shall be completed when piles are constructed, or as directed by the Authorized Officer.
- 7. Hand piles would not be constructed on roadways, turnouts, shoulders, or on the cut bank, unless authorized by the Authorized officer.
- 8. Hand piles will be burned within eighteen (18) months of harvest completion.
- 9. Hand piles will be burned in the fall to spring season after one (1) or more inches of precipitation have occurred.
- 10. The purchaser shall burn ninety (90) percent of hand piles with ninety (90) percent consumption for satisfactory completion of treatment.
- 11. The Purchaser is required to furnish the fuel and equipment for hand pile burning.
- (d) <u>SD-1f</u> LANDINGS Within twenty (20) feet of the edge of each landing pile, all tops, broken pieces, limbs and debris more than one (1) inch in diameter at the large end and longer than two (2) feet in length shall be piled within fourteen (14) days of completion of hauling logs from that landing. Landing piles shall be kept free of dirt and located off of the driving surface of roads and at least fifteen feet (15) from any Reserve Tree and/or as directed by the Authorized Officer.

Upon completion of landing piling, the Purchaser shall prepare the landing piles for burning by constructing a fireline by hand or machine approximately eighteen (18) inches wide and down to mineral soil around

each pile to prevent escaped fire. Cover piles with large enough piece of four (4) millimeter thick black plastic to ensure a dry ignition spot, generally ten (10) foot by ten (10) foot. The Purchaser is required to furnish the covering materials. The timing of this covering work shall be in accordance with instructions from the Authorized Officer. If the structure of the landing piles will not permit adequate consumption of piled debris by burning, the Purchaser shall re-pile them at the direction of the Authorized Officer.

- 1. Landing piles will be burned in the fall to spring season after one (1) or more inches of precipitation have occurred.
- 2. Landing piles will be burned within eighteen (18) months of harvest completion.
- 3. If purchaser elects to set aside pole/firewood decks and not put the material in piles, the purchaser will be required to remove decks before the expiration of cutting rights.
- (2) <u>SD-2</u> Notwithstanding the provisions of Sec. 15 of this contract, the Government shall assume all obligations for disposal or reduction of fire hazards created by Purchaser's operations on Government lands, except for burning and mop up assistance as required herein, and measures required in Sections 42(F)(1)(SD-1) and 42(F)(3)(SD-4). In accordance with written instruction to be issued by the Authorized Officer at least ten (10) days in advance of earliest date of required performance, the Purchaser shall, under supervision of the Authorized Officer or his designated representative, assist in preparing units for burning, mop-up, and patrol by furnishing, at his own expense, the services of personnel and equipment on each unit as shown below.

All crews shall arrive on the project area with radios capable of inter-crew communications and communication with a BLM representative at a ratio of one (1) radio per every five (5) crew members.

- (a) For Igniting and Burning Hand Pile Units 3-4, 7-1B, 7-1C, 7-2, 11-5, 20-2, 22-2, 27-1SA, 27-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-4, 29-5A, 29-5B, 29-5D, 30-2, and 31-4
  - 1. One (1) person to supervise crew and equipment operators, and to serve as Purchaser's representative.
  - 2. One (1) crew with ten (10) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel,

drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.

- 3. One (1) tank truck driver.
- 4. One (1) tank truck. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. Truck and tank shall be in good working order and shall be filled with water.
- 5. Ten (10) drip torches, Forester Sealtite, or equivalent.
- 6. Hand ignition with drip torches is required in pile burn units.
- 7. All ignition personnel will be directly supervised by a BLM representative.
- (b) For Mop-up of Hand Pile Units 3-4, 7-1B, 7-1C, 7-2, 11-5, 20-2, 22-2, 27-1SA, 27-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-4, 29-5A, 29-5B, 29-5D, 30-2, and 31-4
  - 1. One (1) person to supervise crew and to serve as Purchaser's representative.
  - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or other scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
  - 3. One (1) tank truck driver.
  - 4. One (1) tank truck. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule

promulgated pursuant to those statutes. Truck and tank shall be in good working order and shall be filled with water.

- (c) For Igniting and Burning Machine Pile Units 7-1A, 11-5, 20-2, 22-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-5B, 30-2, and 31-4
  - 1. One (1) person to supervise crew and equipment operators, and to serve as Purchaser's representative.
  - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel, drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
  - 3. One (1) tank truck driver.
  - 4. One (1) tank truck. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. Truck and tank shall be in good working order and shall be filled with water.
  - 5. Six (6) drip torches, Forester Sealtite, or equivalent.
  - 6. Hand ignition with drip torches is required in underburn units.
- (d) <u>Mop-up of Machine Pile Units 7-1A, 11-5, 20-2, 22-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-5B, 30-2, and 31-43</u>
  - 1. One (1) person to supervise crew and to serve as Purchaser's representative.
  - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
  - 3. One (1) tank truck driver.

- 4. One (1) tank truck. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzles acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. Truck and tank shall be in good working order and shall be filled with water.
- (e) For Igniting and Burning Landing Piles in Units 3-4, 7-1A, 7-1B, 7-1C, 7-2, 11-5, 20-2, 22-2, 22-3, 27-1SA, 27-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-4, 29-5A, 29-5B, 29-5D, 30-2, and 31-4
  - 1. One (1) person to supervise crew and to serve as Purchaser's representative.
  - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
  - 3. One (1) tank truck driver.
  - 4. One (1) tank truck. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. Truck and tank shall be in good working order and shall be filled with water.
- (f) For Mop-up Landing Piles in Units 3-4, 7-1A, 7-1B, 7-1C, 7-2, 11-5, 20-2, 22-2, 22-3, 27-1SA, 27-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-4, 29-5A, 29-5B, 29-5D, 30-2, and 31-4
  - 1. One (1) person to supervise crew and to serve as Purchaser's representative.
  - 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with

shovels, pulaskis, or scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.

- 3. One (1) tank truck driver.
- 4. One (1) tank truck. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. Truck and tank shall be in good working order and shall be filled with water.
- (g) For Igniting and Holding Underburn Units 11-5, 27-1SA, and 29-4
  - 1. One (1) person to supervise crews and equipment operators, and to serve as Purchaser's representative.
  - 2. Two (2) crews with ten (10) members per crew, including a designated crew foreman. Each crew shall be equipped with fuel, drip torches, shovels, pulaskis, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
  - 3. One (1) tractor/dozer operator.
  - 4. Three (3) tank truck drivers.
  - 5. One (1) tractor (Caterpillar D6 or equivalent) equipped with straight solid blade.
  - 6. Three (3) tank trucks. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. Truck(s) and tank(s) shall be in good working order and shall be filled with water.
  - 7. Sixteen (16) drip torches, Forester Sealtite, or equivalent.

- 8. Hand ignition with drip torches is required in underburn units.
- 9. All ignition personnel will be directly supervised by a BLM representative.

# (h) For Mop-up of Underburn Units 11-5, 27-1SA, and 29-4

- 1. One (1) person to supervise crew and equipment operators, and to serve as Purchaser's representative.
- 2. One (1) crew with six (6) members per crew, including a designated crew foreman. Each crew shall be equipped with shovels, pulaskis or other scraping tool, one (1) power saw and one (1) backpack pump; one (1) tool for each crew member.
- 3. One (1) tank truck driver.
- 4. One (1) tank truck. Each truck shall have three hundred (300) gallons or more capacity with one thousand (1,000) feet of hose and nozzle(s) acceptable to the Authorized Officer. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.610 as amended. Each truck shall be equipped with a mounted pump conforming to the standards set forth in ORS 477.645 through ORS 477.670 and any rule promulgated pursuant to those statutes. Truck and tank shall be in good working order and shall be filled with water.

Aircraft and pilots used for Logging Residue Reduction or the suppression of escaped fires from Logging Residue Reduction operations, shall be acquired from a list of aircraft and pilots approved (i.e., carded for these specific activities) by the Office of Aircraft Services or the U.S. Forest Service. This list is available from BLM District Offices upon request.

All listed personnel shall be physically fit, experienced and fully capable of functioning as required. All personnel shall arrive at the project area(s) with the following personal safety equipment: long sleeve natural fabric shirt, full length natural fabric trousers, minimum eight (8)-inch top leather boots, hardhat, and leather gloves. All personnel shall wear long pants and long sleeve shirts, lugsoled leather boots with minimum eight (8)-inch tall uppers that provide ankle support, approved hardhat, and leather gloves. On the day of ignition, clothing shall be of approved aramid fabric, Nomex<sup>TM</sup> or equivalent, and all personnel shall carry an approved fire shelter. Clothing shall be free of diesel fuel oil.

All listed tools and equipment shall be in good usable condition. All power driven equipment shall be fully fueled and available for immediate use. During periods of use under this subsection, the Purchaser shall provide fuel and maintenance for all such power- driven equipment.

Except as provided hereafter for fire escapement, the Purchaser shall continue the required assistance in mop up on each underburn unit shown on Exhibit S for six hundred forty (640) hours; on each hand/machine piled unit and landing decks, four hundred fifty (450) hours as directed by the Authorized Officer within a 10 days beginning 8:00 a.m. the day following completion of ignition in that unit or until released from such services by the Authorized Officer, whichever occurs first.

In the event of a fire escapement, Purchaser's personnel and equipment shall, under supervision of the Authorized Officer, take action to suppress, including control and mop-up, the escaped fire until released from such service by the Government. If it becomes necessary to suppress a fire which escapes from the prescribed fire area for a period beyond midnight of ignition day, then the Government shall, at its option:

- (a) reimburse Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for Western Area and at equipment rates shown in current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule, until the Purchaser is released from such service by the Government, or+
- (b) release the Purchaser from additional suppression work and assume responsibility for suppressing the escaped fire.

In situations where an escaped fire is controlled and contained by an adequate fire break (e.g., trail, road, stream, rock formation), the Government may permit the Purchaser to remove personnel for that day; provided that, all mop up work on the escaped fire area is included with mop up work on the prescribed fire area. In such an event, the Purchaser must sign a statement of agreement to complete mop up work on all escaped fire areas concurrently with mop up work on the prescribed fire area.

In case of injury to personnel or damage to equipment furnished by the Purchaser as required by this subsection, liability shall be borne by the Purchaser, unless such injury or damage is caused by Government negligence.

Time is of the essence in complying with this provision. In the event the Purchaser fails to provide personnel and equipment required herein, the Purchaser shall be responsible for all additional costs incurred by the Government in

disposing of slash, including but not limited to the wages and other costs of providing federal employees and others as substitute labor force, the cost of providing substitute equipment, and appropriate additional overhead expenses. If the Purchaser's failure results in deferral of burning and new conditions necessitate additional site preparation work and/or use of additional personnel and equipment to accomplish planned burning, the Purchaser also shall be responsible for such additional costs.

- (3) <u>SD-4 Logging Residue Reduction</u>. In addition to the requirements of Secs. 15 and 25 of this contract, and notwithstanding the Purchaser's satisfactory compliance with State laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the State's willingness to release Purchaser from liability for such hazard, the Purchaser shall remain responsible to the Government for performance of the following logging residue reduction and site preparation measures required by this contract:
  - (a) Perform <u>UNDERBURNING</u> in units 11-5, 27-1SA, and 29-4 as shown on Exhibit S.
    - 1. Underburn units shall follow the Resource, Prescribed Fire Objectives and Constraints (Element 5 Objectives) for each underburn unit as outlined in Prescribed Fire Burn Plan and as directed by the Authorized Officer or BLM representative.
    - 2. Smoke clearance will be obtained the day prior to planned ignition for all burn units.
    - 3. Prescribed burning shall be conducted in a manner that will minimize damage to reserve trees, duff, soil, and to avoid loss of large/coarse woody debris and will be consistent with ecosystem management objectives out-lined in the burn plan.
    - 4. Firelines will be constructed by hand mineral soil to a minimum of eighteen (18) inches wide and a maximum of three (3) feet wide.
    - 5. Create a minimum fuel break of ten (10) feet on the underburn side of the fire line and six (6) feet on the unburned side of the fire line by removing logging slash or live vegetation under eight (8) inches diameter at the large end or at eight (8) inch diameter at breast height.
    - 6. Slash shall be dispersed in a discontinuous pattern a minimum of fifteen (15) feet away from the fire line within or outside the unit

boundary as directed by the Authorized Officer or BLM representative.

- 7. Perform fuels pullback on reserve/leave trees and snags twelve (12) inches D.B.H.O.B. and greater shall have the slash cleared from around each bole. Clearing around the tree/snag to the following: all surface fuels from the bole of the tree out to the dripline plus one (1) foot wide area; aerial fuels from a two (2) foot wide area, eight (8) feet in height. Material greater than three (3) inches diameter within the clearing zone shall be rolled at least four (4) feet from the bole. Duff and litter may be removed such that the depth is six (6) inches or less. Clearing shall include removing ladder fuels eight (8) feet up the bole of the tree/snag.
- 8. Scatter all removed fuels and avoid concentrating the fuel. On sloping ground, fuel shall be scattered uphill or sidehill from the tree/snag. No removed fuel shall be below the tree/snag on a slope. On flat ground, any direction is acceptable.
- 9. Fire lines shall be constructed within thirty (30) days of notification by the Authorized Officer. Water bars shall be constructed and maintained on the fire lines to the satisfaction of the Authorized Officer.
- 10. The Purchaser is required to furnish the fuel and equipment for underburning.
- (b) Perform <u>SELECTIVE SLASHING</u> in units 3-4, 7-1B, 7-2, 22-2, 22-3, 27-1SA, 27-3, and 29-4. Perform selective slashing in the cable portion of unit 30-2. Perform selective slashing as shown on Exhibit S in unit 11-5.
  - 1. All trees between one (1) inch and eight (8) inches D.B.H.O.B. shall be felled and spaced following logging as directed by the Authorized Officer as shown on Exhibit A.
  - 2. Space live conifers twenty (20) feet by twenty (20) feet, and space hardwoods and shrubs forty (40) feet by forty (40) feet.
  - 3. In areas with multiple species of conifers, leave tree preference is:
    1. Healthy sugar pine or ponderosa pine.
    2. All other conifers (i.e. Douglas-fir, western red cedar, incense cedar, true fir, knobcone).

- 4. In areas with multiple species of hardwoods, leave tree preference is:
  - 1. Black or white oak.
  - 2. Pacific madrone.
  - 3. Golden chinquapin.
  - 4. Canyon live oak.
  - 5. Tan Oak.

Acceptable Leave Trees are described below:

Minimum four (4) inches terminal leader with thirty (30) percent live crown ratio.

Non-chlorotic, light or dark green with very little or no yellowish tint.

Undamaged top.

Free of visible disease, cankers, fire damage, or blister rust.

Demonstrates good form and vigor.

No multiple tops.

In the absence of trees that meet the above definition for an Acceptable Crop/ Leave Tree, include any live conifer seedling, natural or planted, that has a two (2) inch terminal leader with a twenty five (25) percent crown ratio.

- <u>SD-5</u> The Purchaser shall perform logging residue reduction and site preparation work on approximately three hundred eighteen (318) acres of harvest area located in Harvest Unit Nos. 3-4, 7-1A, 7-1B, 7-1C, 7-2, 11-5, 20-2, 22-2, 22-3, 27-1SA, 27-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-4, 29-5A, 29-5B, 29-5D, 30-2, and 31-4 as shown on Exhibit A.
  - (a) The required work shall consist of any treatment or combination of treatments listed in the table below, as determined by the Authorized Officer and specified in writing by the Contracting Officer. The number of acres of each treatment shall be determined by the Authorized Officer.

Treatment	Cost/Acre
Lop and Scatter	\$42.00
Selective Slashing	\$300.00

Handpile and Cover	\$325.00
Handpile Burn and Mop-up	\$42.00
Machine Pile and Cover	\$375.00
Machine Pile Burn and Mop-up	\$28.00
Machine Pile Landing Decks	*\$100/Hour
Cover and Burn Landing Decks	\$56.00
Fire line Construction	*\$.80/LF
Fuels Pullback	\$40.00
Underburning	\$225.00

(b) The following treatments were assumed for appraisal purposes on this contract:

			Total Cost
Appraised Treatment	Acres	Cost/Acre	Per Treatment
Lop and Scatter	42.25	\$42.00	\$1,900.50
Selective Slashing	185.00	\$300.00	\$55,500.00
Handpile and Cover	209.50	\$325.00	\$68,087.50
Handpile Burn and Mop-up	209.50	\$42.00	\$8,799.00
Machine Pile and Cover	63.25	\$375.00	\$23,718.75
Machine Pile Burn and Mop-up	63.25	\$28.00	\$1,771.00
Machine Pile Landing Decks	24.50	*\$100/Hr	\$5,200.00
Cover and Burn Landing Decks	24.50	\$56.00	\$1,372.00
Fire line Construction	11,500 Linear Feet	*\$.80/LF	\$9,200.00
Fuels Pullback	75.00	\$40.00	\$3,000.00
Underburning	75.00	\$225.00	\$16,875.00
Total Appraised Cost			\$195,423.75

(c) The Total Purchase Price set forth in Section 2 shall be adjusted in a unilateral modification executed by the Contracting Officer by the amount that the total cost of the site preparation treatments designated pursuant to Section 42(F)(4)(SD-5)(a) differs from one hundred ninety five thousand four hundred twenty three and 75/100 (\$195,423.75) dollars, as calculated

by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 42(F)(4)(SD-5)(a).

(d) Lop and scatter shall be done in accordance with Section 42(F)(1)(a)(SD-1a), selective slashing shall be done in accordance with Section 42(F)(3)(SD-4)(b), handpile and handpile burning shall be done in accordance with Sections 42(F)(1)(c)(SD-1c) and 42(F)(2)(SD-2)(a&b), machine pile and machine pile burning shall be done in accordance with Sections 42(F)(1)(b)(SD-1c) and 42(F)(2)(SD-2)(c&d), machine pile and burn landing decks shall be done in accordance with Sections 42(F)(1)(d)(SD-1f) and 42(F)(2)(SD-2)(c&f), fire line construction shall be in accordance with Section 42(F)(3)(SD-4)(a), underburning and mop-up will be in accordance with Sections 42(F)(3)(SD-4)(a), and 42(F)(3)(SD-4)(a).

# (G) <u>LOG EXPORTS</u>

(1)LE-1 All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export from the United States in the form of unprocessed timber, and is prohibited from being used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three-quarters (8<sup>3</sup>/<sub>4</sub>) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 Common or better. Thus, timber manufactured into the following will be considered processed: (1) lumber and construction timber, regardless of size, manufactured to standards and specifications suitable for end-product uses; (2) chips, pulp, and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacturing of eight and three quarters  $(8\frac{3}{4})$  inches in thickness or less; (6) shakes and shingles.

Substitution will be determined under the definition found in 43 CFR 5400.0-5(n).

The Purchaser is required to maintain and upon request to furnish the following information:

- (a) Date of last export sale.
- (b) Volume of timber contained in last export sale.

- (c) Volume of timber exported in the past twelve (12) months from the date of last export sale.
- (d) Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.
- (e) Volume of timber exported in succeeding twelve (12) months from date of last export sale.
- (f) Volume of Federal timber purchased in succeeding twelve (12) months from date of last export sale.

In the event the Purchaser elects to sell any or all of the timber sold under this contract in the form of unprocessed timber, the Purchaser shall require each party buying, exchanging, or receiving such timber to execute a Form 5460-16 (Certificate as to Nonsubstitution and the Domestic Processing of Timber). The original of such certification shall be filed with the Authorized Officer. Additionally, when the other party is an affiliate of the Purchaser, the Purchaser will be required to update information under item (2) of Form 5450-17 (Export Determination) and file the form with the Authorized Officer.

In the event an affiliate of the Purchaser has exported private timber within twelve (12) months prior to purchasing or otherwise acquiring Federal timber sold under this contract, the Purchaser shall, upon request, obtain from the affiliate information in a form specified by the Authorized Officer and furnish the information to the Authorized Officer.

Prior to the termination of this contract, the Purchaser shall submit to the Authorized Officer Form 5460-15 (Log Scale and Disposition of Timber Removed Report) which shall be executed by the Purchaser. In addition, the Purchaser is required under the terms of this contract to retain for a three-year period from the date of termination of the contract the records of all sales or transfer of logs involving timber from the sale for inspection and use of the Bureau of Land Management.

Unless otherwise authorized in writing by the Contracting Officer, the Purchaser shall brand clearly and legibly one end of all logs with a scaling diameter (small end inside bark) of over 10 inches, prior to the removal of timber from the contract area. All loads of 11 logs or more will have a minimum of 10 logs clearly and legibly branded on one end regardless of the diameter of the logs. All logs will be branded on loads of 10 logs or less. One end of all branded logs to be processed domestically will be marked with a 3 square inch spot of highway

yellow paint. The purchaser will stop trucks for accountability monitoring at mutually agreed upon locations when notified by the Authorized Officer. If multiple trailers (mule trains) are used, each bunked load shall be considered an individual load, and these guidelines will apply to each bunked load. If a flatbed stake trailer is used, each bundle will be treated as a separate load.

At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. Any increased costs for log branding and painting shall be the responsibility of the Purchaser.

In the event of the Purchaser's noncompliance with this subsection of the contract, the Authorized Officer may take appropriate action as set forth in Section 10 of this contract. In addition, the Purchaser may be declared ineligible to receive future awards of Government timber for a period of one year.

# Pickett Hog T.S. Seasonal Restriction Matrix ORM07-TS-17-07

\* Operations will be suspended if unacceptable damage to residual trees occur.

\*\* In-stream work periods for culvert cleaning are June 15th- September 15th

ribbons; continuous mud splash or tire slide; fines being pumped through road surfacing from the subgrade and resulting in a layer of surface sludge; road drainage causing a visible Dry Condition Haul Waiver Required = Loading and hauling, and road maintenance (including blading of aggregate roads, rocking, and cross drain installation) would not occur on increase in stream turbidities, or any condition that would result in water being chronically routed into tire tracks or away from designed road drainage during precipitation events. rocked or natural surface roads when water is flowing in the ditchlines or during any conditions that would result in any of the following; surface displacement such as rutting or Hauling on natural surface or rocked roads would not resume for a minimum of 48 hours following any storm event that results in ½ inch or more precipitation within a 24 hour period, and until road surface is sufficiently dry to prevent any of the above conditions from reoccurring.

<u>Ditch Maintenance</u> Is allowed during the dry season, generally May 15th through October 15th.

Dry Condition Yarding and Temporary Route work= Ground-based harvesting and yarding, temporary route work, and rehabilitation activities would not occur when soil moisture at a depth of 4-6 inches is wet enough to maintain form when compressed, or when soil moisture at the surface would readily displace, causing ribbons and ruts along equipment tracks. These conditions are generally found when soil moisture at a depth of 4-10 inches is between 15-25% depending on soil type.

		Jan	Feb	q	Mar	Apr		Мау	Ē	lun	Jul	4	Aug	Sep	Oct		Nov		Dec
Sale Area	Activity	1 15	1	15	1 15	1	15 1	l 15	1	15	1 1	15 1	15	1 15	1	15	1 1	15 1	15
	Manual Falling and Bucking*																		
Cable & ground	Cable Yarding*																		
based yard units:	<b>Mechanical Ground Based</b>																		
11-5, 22-2, 29-	Harvesting & Yarding, and All																		
1NA, 29-4, 29-5B,	Rehabilitation Activities																		
31-4	Loading, Hauling and Road																		
	Maintenance <sup>**</sup>																		
	Manual Falling and Bucking*																		
Cable & ground	Cable Yarding*																		
based yard units	<b>Mechanical Ground Based</b>																		
with road/temp	Harvesting & Yarding, and All																		
route	Rehabilitation Activities																		
const./reconst.: 7-	const./reconst.: 7- Road & Temporary Route																		
1C, 7-2, 20-2, 27-	<b>1C, 7-2, 20-2, 27-</b> Construction and																		
1SA, 29-1NB, 29-	Rehabilitation																		
1C, 29-1D, and	Loading, Hauling, and Road																		
30-2	Maintenance (N/A ditch																		
	maintenance)**																		
		Jan	Feb	q	Mar	Apr		Мау		Jun	lul	4	Aug	Sep	Oct	;;	Nov		Dec

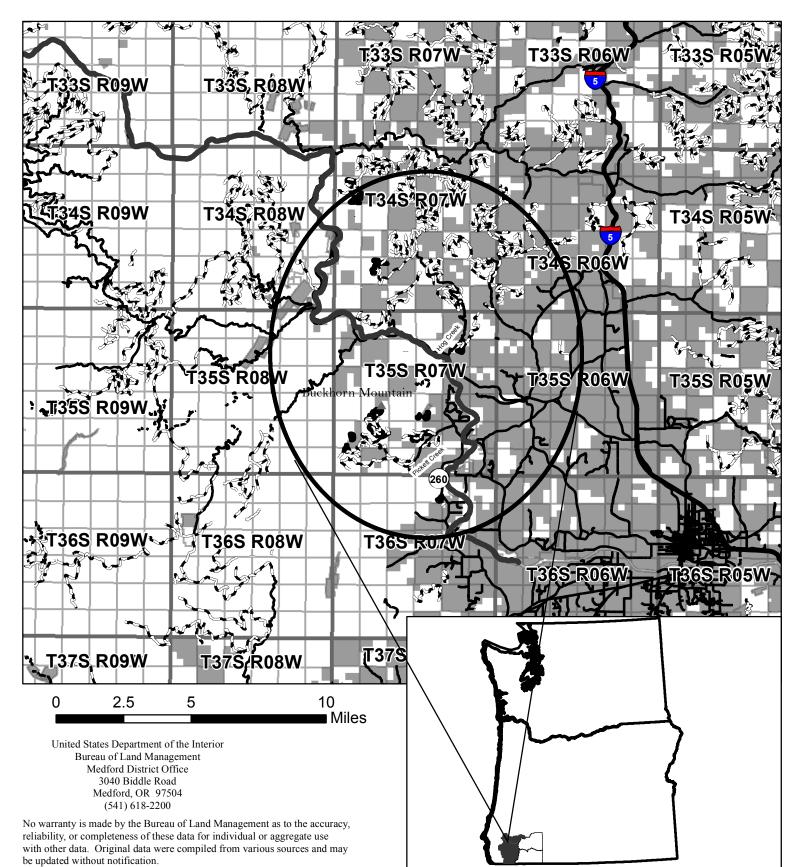
Construction and

U.S.D.I BLM MEDFORD DISTRICT T. 34 S., R. 7 W., SEC. 7, 29 T. 35 S., R. 7 W., SEC. 11, 20, 22, 27, 28, 29, 30, 31 T. 36 S., R. 7 W., SEC. 3 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY



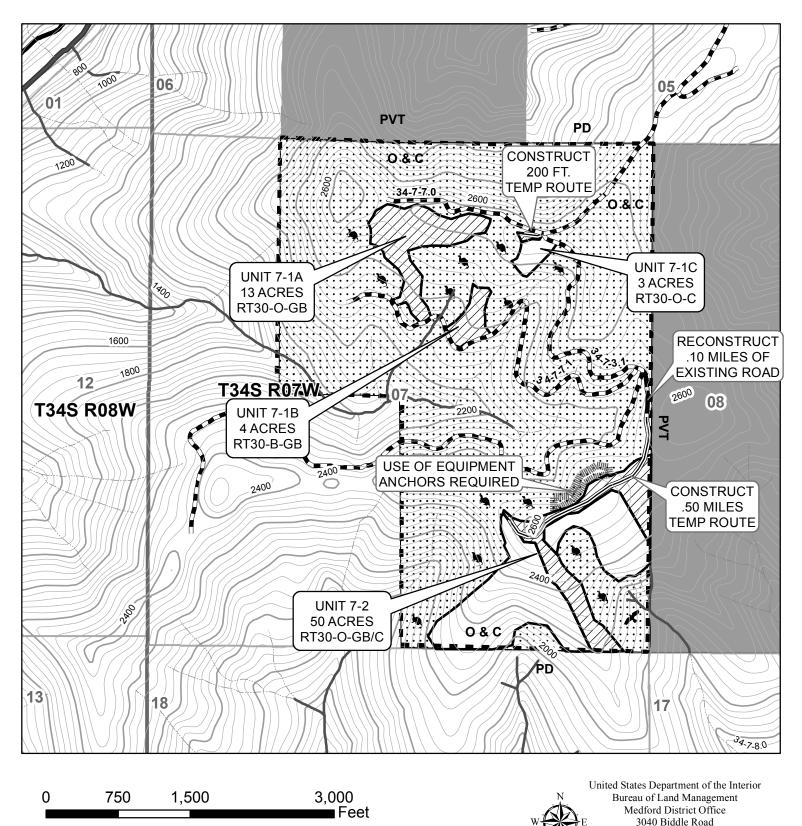
TIMBER SALE LOCATION MAP TIMBER SALE NO. ORM07-TS-17-07 PAGE 1 OF 1

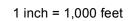




### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 34 S., R. 7 W., SEC. 7 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 1 OF 12





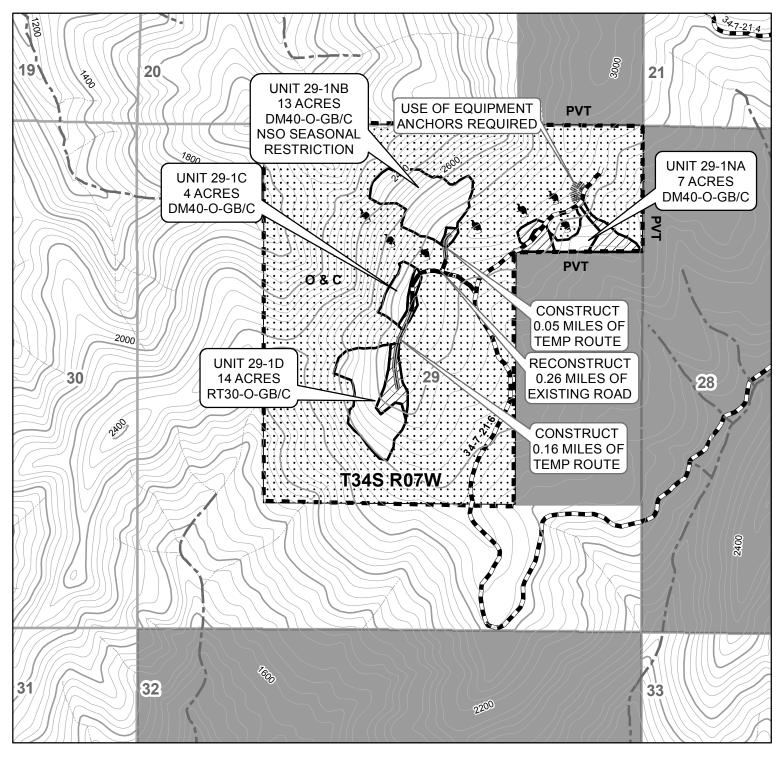
40 FOOT CONTOUR INTERVAL



Medford, OR 97504

### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 34 S., R. 7 W., SEC. 29 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 2 OF 12







40 FOOT CONTOUR INTERVAL

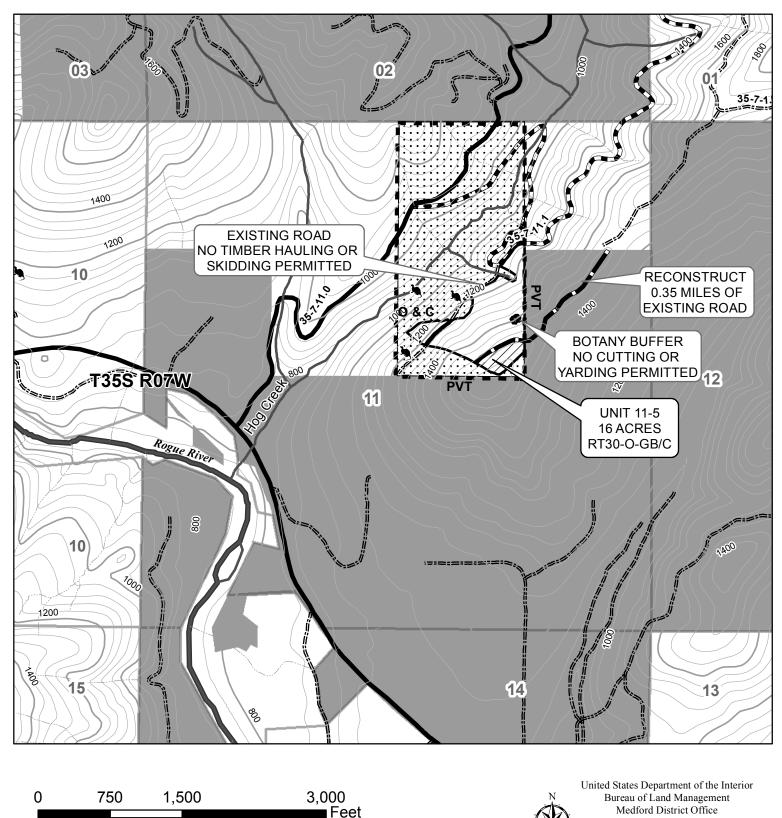


United States Department of the Interior

Bureau of Land Management

### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC.11 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 3 OF 12



1 inch = 1,000 feet

40 FOOT CONTOUR INTERVAL

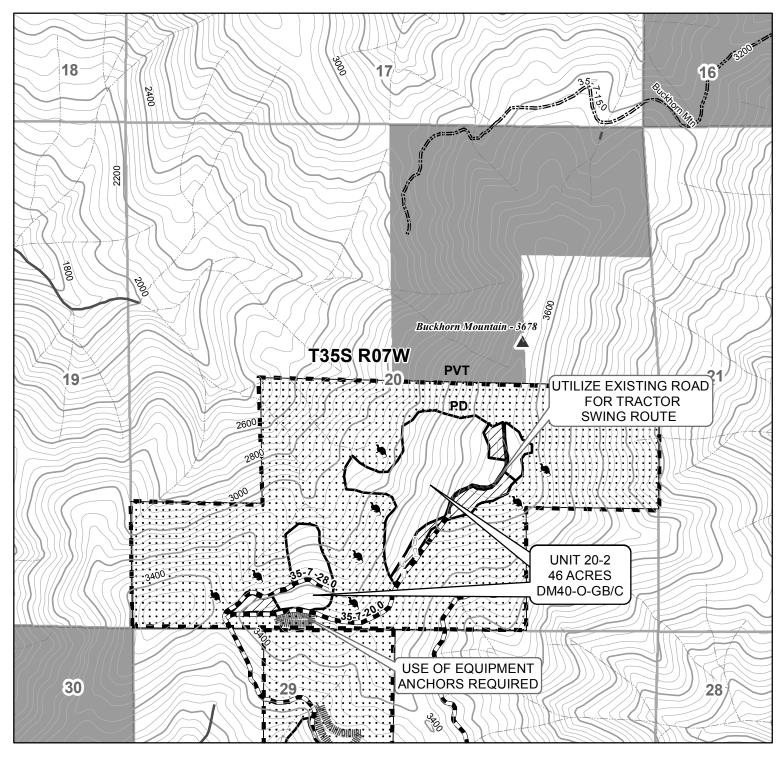


3040 Biddle Road Medford, OR 97504

(541) 618-2200

### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 20 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

### TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 4 OF 12





1 inch = 1,000 feet

40 FOOT CONTOUR INTERVAL



United States Department of the Interior

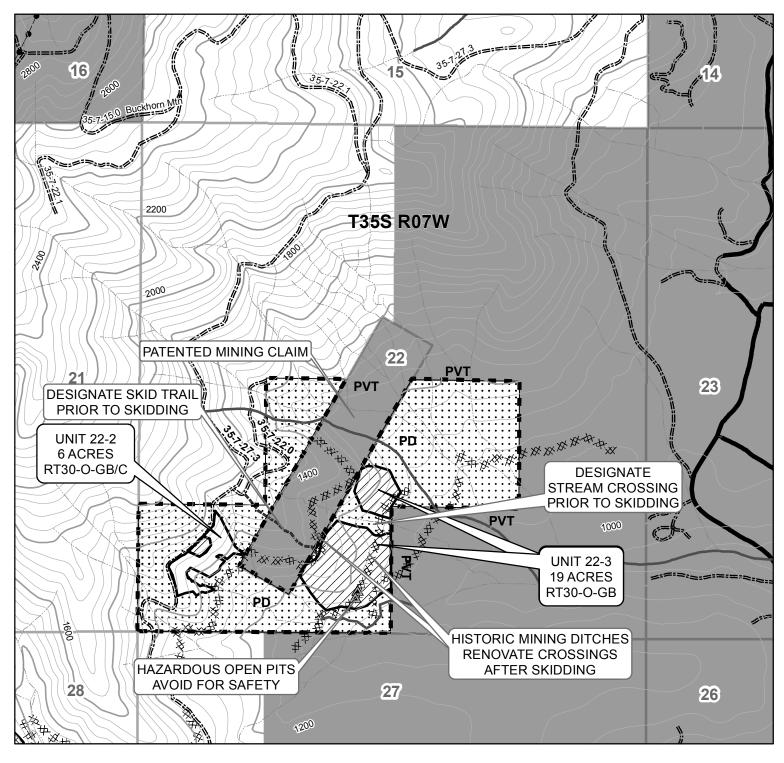
Bureau of Land Management Medford District Office

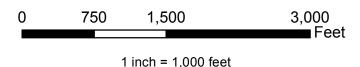
3040 Biddle Road Medford, OR 97504

(541) 618-2200

### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 22 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

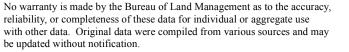
TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 5 OF 12





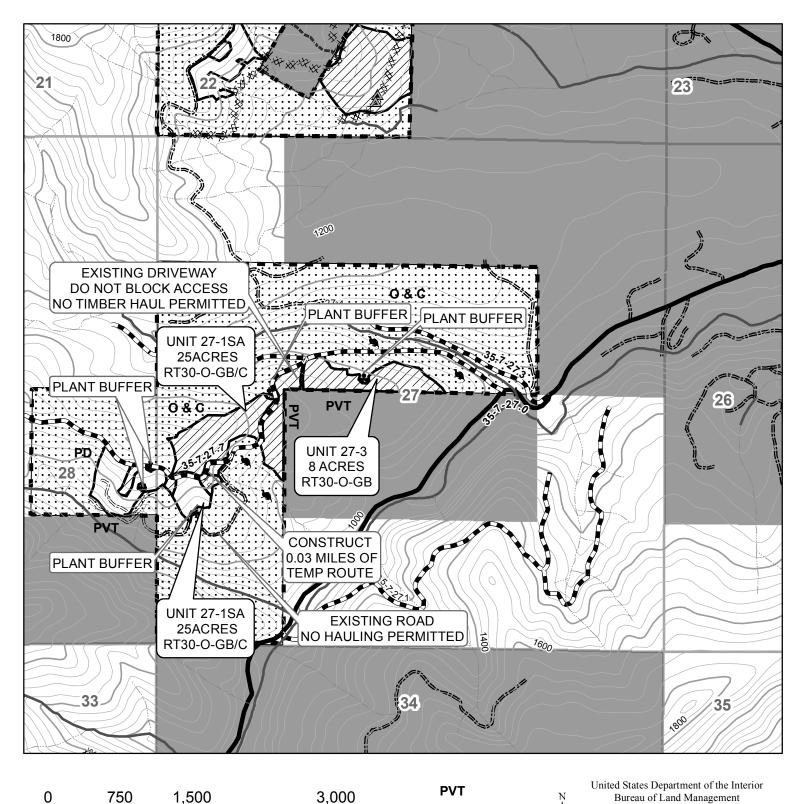
United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

40 FOOT CONTOUR INTERVAL

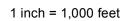


### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 27 & 28 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 6 OF 12



Feet



40 FOOT CONTOUR INTERVAL

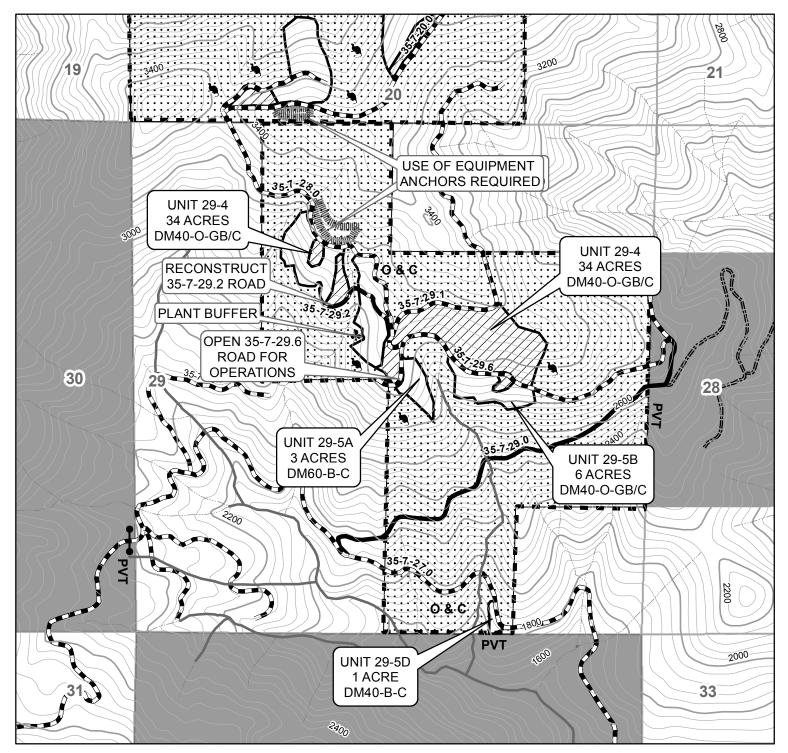


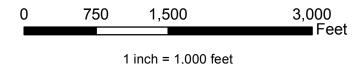
Medford District Office 3040 Biddle Road Medford, OR 97504

(541) 618-2200

### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 29 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

### TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 7 OF 12





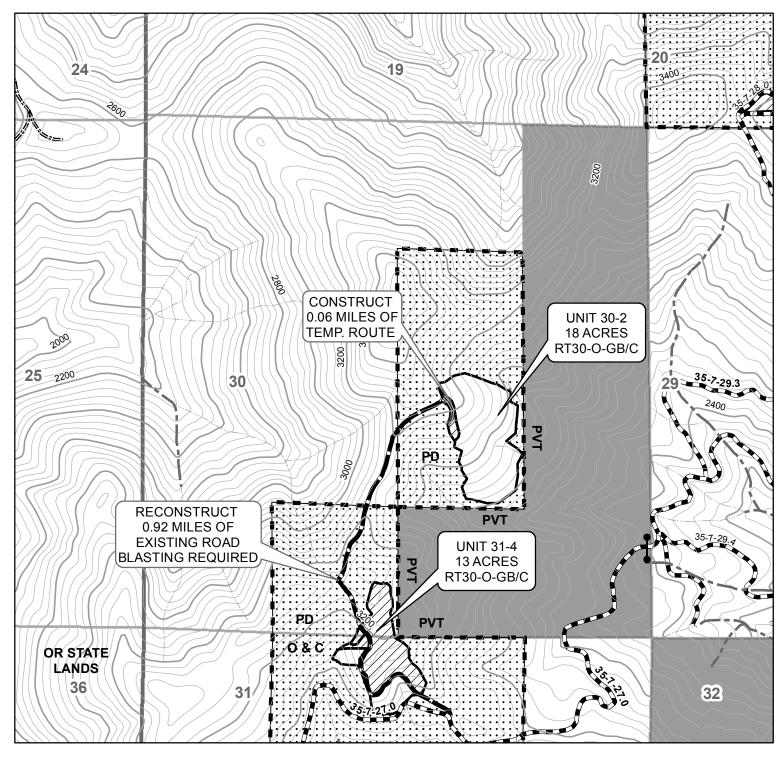
United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

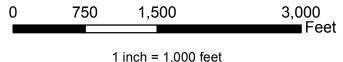
40 FOOT CONTOUR INTERVAL



### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 30 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

### TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 8 OF 12





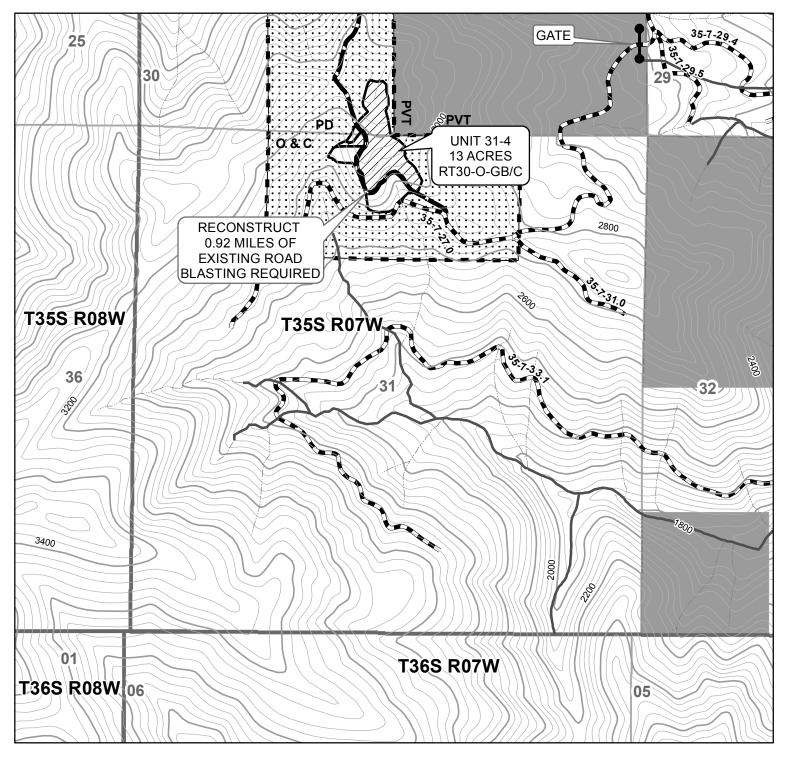
United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

40 FOOT CONTOUR INTERVAL

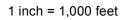


# U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 31 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 9 OF 12







40 FOOT CONTOUR INTERVAL

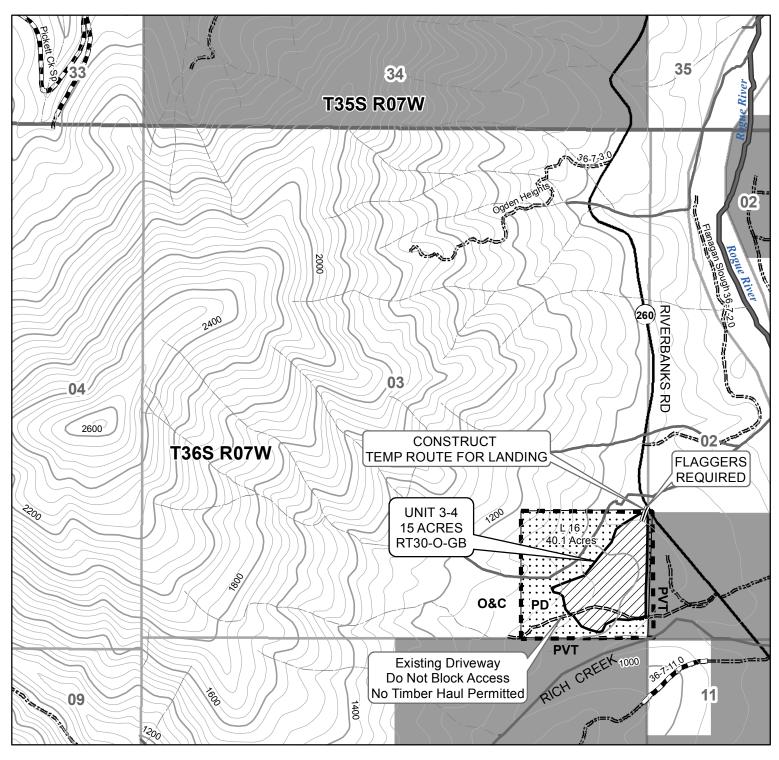


United States Department of the Interior

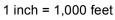
Bureau of Land Management Medford District Office

### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 36 S., R. 7 W., SEC. 3 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT A PAGE 10 OF 12







40 FOOT CONTOUR INTERVAL

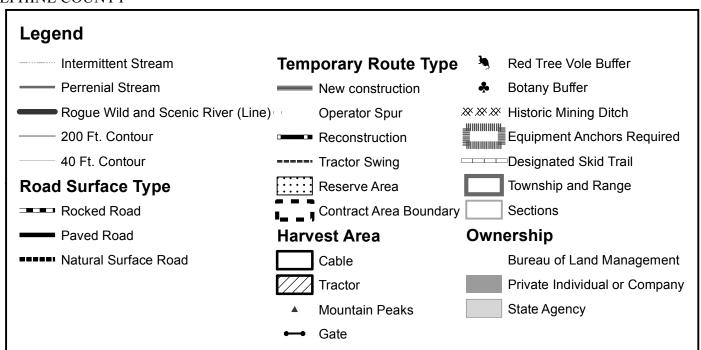


United States Department of the Interior

Bureau of Land Management Medford District Office

3040 Biddle Road Medford, OR 97504

U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 34 S., R. 7 W., SEC. 7, 29 T. 35 S., R. 7 W., SEC. 11, 20, 22, 27, 28, 29, 30, 31 T. 36 S., R. 7 W., SEC. 3 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY



	Summary	Acres
RT30-O-GB	Restoration Thinning to 30% Canopy Cover-Orange Mark-Ground Based Yard (Units 3-4, 7-1A, 22-3, 27-3)	55
RT30-O-GB/C	Restoration Thinning to 30% Canopy Cover-Orange Mark-Ground	145
RT30-B-GB	Restoration Thinning to 30% Canopy Cover-Blue Mark-Ground Based Yard (Unit 7-1B)	4
DM40-0-C	Density Management Thinning to 40% Canopy Cover- Orange Mark- Ground Based/ Cable Yard (Units 20-2, 29-1NA, 29-1NB, 29-1C, 29-4, 29-5B)	110
DM40-B-C	Density Management Thinning to 40% Canopy Cover- Blue Mark-Cable Yard (Unit 29-5D)	1
DM60-B-C	Density Management Thinning to 60% Canopy Cover- Blue Mark-Cable Yard (Unit 29-5A)	3
	Total Timber Sale Unit Area	318
	Reserve Area	1288.1
	Total Contract area	1606.1

United States Department of the Interior Bureau of Land Management Medford District Office 3040 Biddle Road Medford, OR 97504 (541) 618-2200



No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 34 S., R. 7 W., SEC. 7, 29 T. 35 S., R. 7 W., SEC. 11, 20, 22, 27, 28, 29, 30, 31 T. 36 S., R. 7 W., SEC. 3 WILL. MER. PICKETT HOG TIMBER SALE

JOSEPHINE COUNTY

Unit	Unit Acres	RX	Logging System (ac)	Tree Marking Paint Color
3-4	15.0	RT 30%	Т	Orange
7-1A	13.0	RT 30%	Т	Orange
7-1B	4.0	RT 30%	Т	Blue
7-1C	3.0	RT 30%	C(2) T(1)	Orange
7-2	50.0	RT 30%	C(35) T(15)	Orange
11-5	16.0	RT 30%	C(14) T(2)	Orange
20-2	46.0	DM 40%	C(38) T(8)	Orange
22-2	6.0	RT 30%	C(5) T(1)	Orange
22-3	19.0	RT 30%	T(19)	Orange
27-1SA	25.0	RT 30%	C(9) T(16)	Orange
27-3	8.0	RT 30%	Т	Orange
29-1NA	7.0	DM 40%	T(5) C(2)	Orange
29-1NB	13.0	DM 40%	C(12) T(1)	Orange
29-1C	4.0	DM 40%	C(3) T(1)	Orange
29-1D	14.0	RT 30%	C(11) T(3)	Orange
29-4	34.0	DM 40%	C(13) T(21)	Orange
29-5A	3.0	DM 60%	С	Blue
29-5B	6.0	DM 40%	C(5) T(1)	Orange
29-5D	1.0	DM 40%	С	Blue
30-2	18.0	RT 30%	C(17) T(1)	Orange
31-4	13.0	RT 30%	T(9) C(4)	Orange
SALE TOTAL	318		T (144) C (174)	

ALL ACRES COMPUTED BY GPS TRAVERSE.

BOUNDARIES OF HARVEST UNITS ARE POSTED WITH "BOUNDARY OF TIMBER RESERVE" TAGS AND PAINTED IN ORANGE.

RT30= RESTORATION THINNING TO 30% CANOPY COVER DM40= DENSITY MANAGEMENT THINNING TO 40% CANOPY COVER DM60= DENSITY MANAGEMENT THINNING TO 60% CANOPY COVER C= CABLE YARD

T=TRACTOR YARD

United States Department of the Interior Bureau of Land Management Medford District Office 3040 Biddle Road Medford, OR 97504 (541) 618-2200



Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Appraised Price/MBF		Appraised Value
Douglas Fir	17,427	3,441.0	\$586.85	\$64.55	\$388.93	\$0.69	\$134.10		\$461,438.10
Ponderosa Pine	610	118.0	\$288.57	\$31.74	\$388.93	\$0.00	\$28.90	*	\$3,410.20
Sugar Pine	207	16.0	\$287.62	\$31.64	\$388.93	\$0.00	\$28.80	*	\$460.80
Incense- cedar	128	5.0	\$505.60	\$55.62	\$388.93	\$0.00	\$61.10		\$305.50
Totals	18,372	3,580.0							\$465,614.60

#### Stumpage Computation

\* Minimum Stumpage values were used to compute the Appraised Price/MBF (10% of Pond Value)

#### **Other Wood Products**

Product	Unit of Measure	# of Units	\$/Unit	Appraised Value
Biomass	Green Tons	1	\$0.01	\$0.01
Totals				\$0.01

# Total Appraised Value: \$465,614.61

#### Percent of Volume By Log Grade

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine				22.0 %	59.0 %	19.0 %	
Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar				2.0 %	56.0 %	42.0 %	
Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine				57.0 %	38.0 %	5.0 %	
Species	No. 1 & 2 Peeler	No. 3 Peeler	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
Douglas Fir			1.0 %	54.0 %	40.0 %	5.0 %	

## Marginal Log Volume By Grade

Species	Utility Cull	Peeler Cull	
Douglas Fir	0	17.60	

# Pickett Hog

## Unit Summary

# Unit: 3-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	133.0	146.0	154.0	937
Ponderosa Pine	6.0	6.0	6.0	62
Sugar Pine	1.0	1.0	1.0	20
Totals:	140.0	153.0	161.0	1,019

#### Unit: 7-1A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	166.0	182.0	192.0	1,047
Ponderosa Pine	2.0	2.0	2.0	13
Totals:	168.0	184.0	194.0	1,060

#### Unit: 7-1B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	26.0	29.0	30.0	158
Totals:	26.0	29.0	30.0	158

## Unit: 7-1C

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	27.0	30.0	31.0	142
Totals:	27.0	30.0	31.0	142

#### Unit: 7-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	763.0	836.0	883.0	3,581
Ponderosa Pine	37.0	40.0	41.0	149
Sugar Pine	2.0	2.0	2.0	17
Totals:	802.0	878.0	926.0	3,747

## ORM07-TS-2017.0007

## Net Volume/Acre: 9.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	15.0
Right of Way	0.0
Total Acres:	15.0

## Net Volume/Acre: 12.9 MBF

Regeneration Harvest	0.0
Partial Cut	13.0
Right of Way	0.0
Total Acres:	13.0

#### Net Volume/Acre: 6.5 MBF

Regeneration Harvest	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

## Net Volume/Acre: 9.0 MBF

Regeneration Harvest	0.0
Partial Cut	3.0
Right of Way	0.0
Total Acres:	3.0

# Net Volume/Acre: 16.0 MBF

Regeneration Harvest	0.0
Partial Cut	50.0
Right of Way	0.0
Total Acres:	50.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	127.0	139.0	146.0	860
Sugar Pine	5.0	5.0	5.0	82
Totals:	132.0	144.0	151.0	942

## Unit: 20-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	489.0	537.0	566.0	1,924
Ponderosa Pine	15.0	16.0	18.0	51
Sugar Pine	1.0	1.0	1.0	2
Totals:	505.0	554.0	585.0	1,977

#### Unit: 22-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	45.0	49.0	52.0	228
Sugar Pine	1.0	1.0	1.0	10
Totals:	46.0	50.0	53.0	238

#### Unit: 22-3

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	148.0	162.0	171.0	802
Ponderosa Pine	4.0	5.0	5.0	72
Sugar Pine	2.0	2.0	2.0	26
Totals:	154.0	169.0	178.0	900

# Net Volume/Acre: 8.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	16.0
Right of Way	0.0
Total Acres:	16.0

## Net Volume/Acre: 11.0 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	46.0
Right of Way	0.0
Total Acres:	46.0

## Net Volume/Acre: 7.7 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	6.0
Right of Way	0.0
Total Acres:	6.0

# Net Volume/Acre: 8.1 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	19.0
Right of Way	0.0
Total Acres:	19.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	273.0	300.0	316.0	1,533
Sugar Pine	2.0	2.0	2.0	33
Ponderosa Pine	1.0	1.0	1.0	13
Totals:	276.0	303.0	319.0	1,579

#### Unit: 27-3

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	83.0	91.0	96.0	487
Totals:	83.0	91.0	96.0	487

#### Unit: 29-1C

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	55.0	60.0	63.0	254
Sugar Pine	1.0	1.0	2.0	4
Totals:	56.0	61.0	65.0	258

#### Unit: 29-1D

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	86.0	94.0	99.0	545
Ponderosa Pine	10.0	10.0	12.0	85
Totals:	96.0	104.0	111.0	630

#### Unit: 29-1NA

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	60.0	66.0	70.0	411
Ponderosa Pine	1.0	1.0	1.0	8
Totals:	61.0	67.0	71.0	419

## Net Volume/Acre: 11.0 MBF

Regeneration Harvest	0.0
Partial Cut	25.0
Right of Way	0.0
Total Acres:	25.0

# Net Volume/Acre: 10.4 MBF

Regeneration Harvest	0.0
Partial Cut	8.0
Right of Way	0.0
Total Acres:	8.0

## Net Volume/Acre: 14.0 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

## Net Volume/Acre: 6.9 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	14.0
Right of Way	0.0
Total Acres:	14.0

## Net Volume/Acre: 8.7 MBF

Regeneration Harvest	0.0
Partial Cut	7.0
Right of Way	0.0
Total Acres:	7.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	125.0	137.0	144.0	625
Totals:	125.0	137.0	144.0	625

## Unit: 29-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	397.0	436.0	459.0	1,989
Ponderosa Pine	36.0	38.0	40.0	108
Incense-cedar	3.0	3.0	3.0	68
Totals:	436.0	477.0	502.0	2,165

#### Unit: 29-5A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	25.0	28.0	29.0	115
Totals:	25.0	28.0	29.0	115

#### Unit: 29-5B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	63.0	69.0	72.0	402
Ponderosa Pine	4.0	4.0	5.0	35
Incense-cedar	1.0	1.0	1.0	21
Totals:	68.0	74.0	78.0	458

### Unit: 29-5D

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	8.0	9.0	10.0	37
Totals:	8.0	9.0	10.0	37

# Net Volume/Acre: 9.6 MBF

Regeneration Harvest	0.0
Partial Cut	13.0
Right of Way	0.0
Total Acres:	13.0

# Net Volume/Acre: 12.8 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	34.0
Right of Way	0.0
Total Acres:	34.0

# Net Volume/Acre: 8.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	3.0
Right of Way	0.0
Total Acres:	3.0

## Net Volume/Acre: 11.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	6.0
Right of Way	0.0
Total Acres:	6.0

# Net Volume/Acre: 8.0 MBF

Regeneration Harvest	0.0
Partial Cut	1.0
Right of Way	0.0
Total Acres:	1.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	154.0	169.0	178.0	605
Incense-cedar	1.0	1.0	1.0	39
Totals:	155.0	170.0	179.0	644

## Unit: 31-4

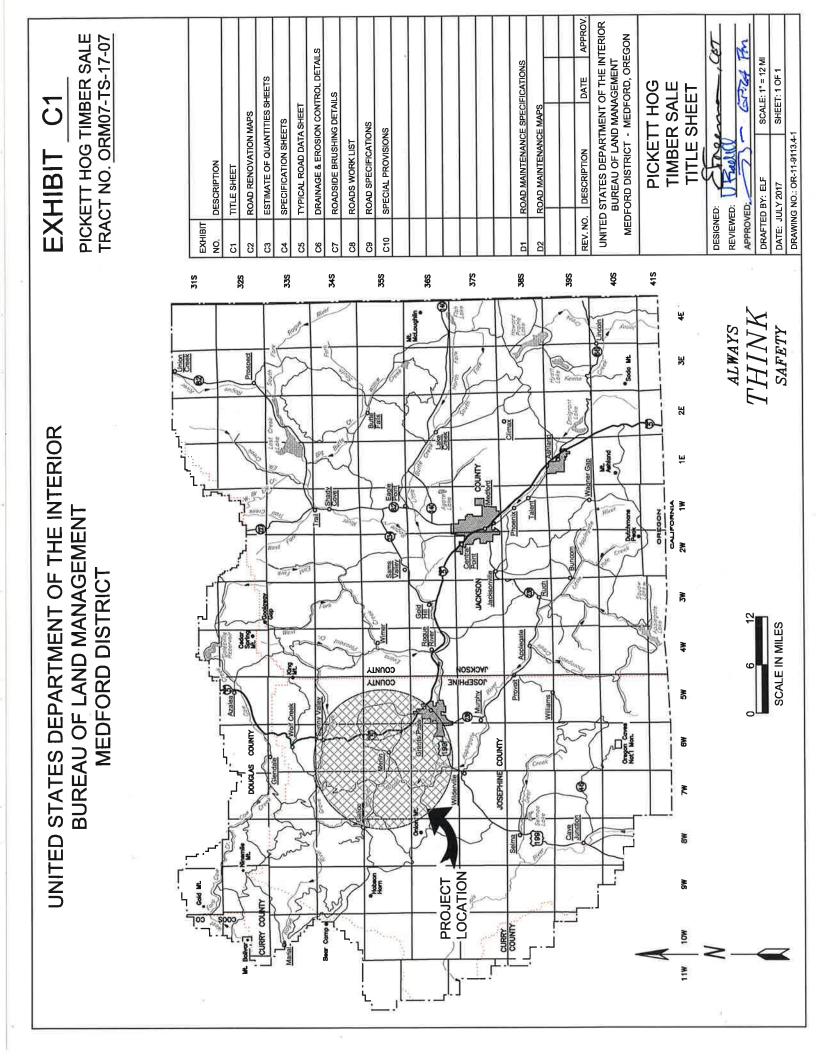
Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	188.0	207.0	218.0	745
Ponderosa Pine	2.0	2.0	2.0	14
Sugar Pine	1.0	1.0	2.0	13
Totals:	191.0	210.0	222.0	772

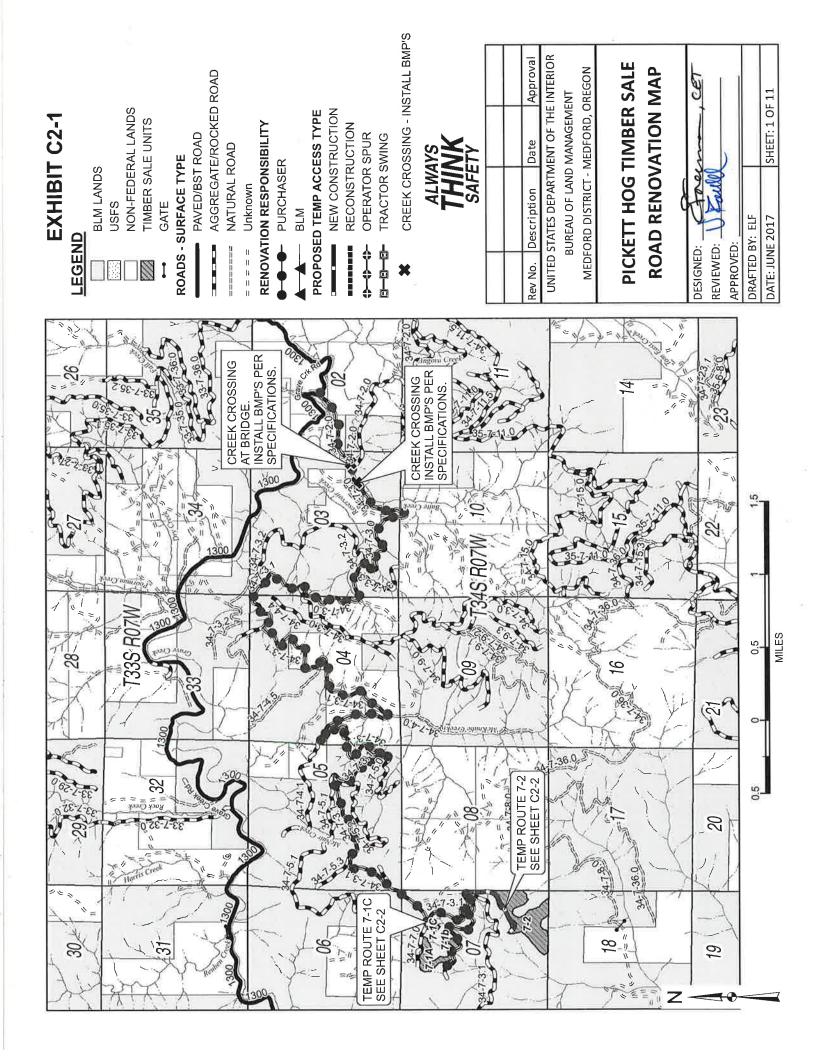
# Net Volume/Acre: 8.6 MBF

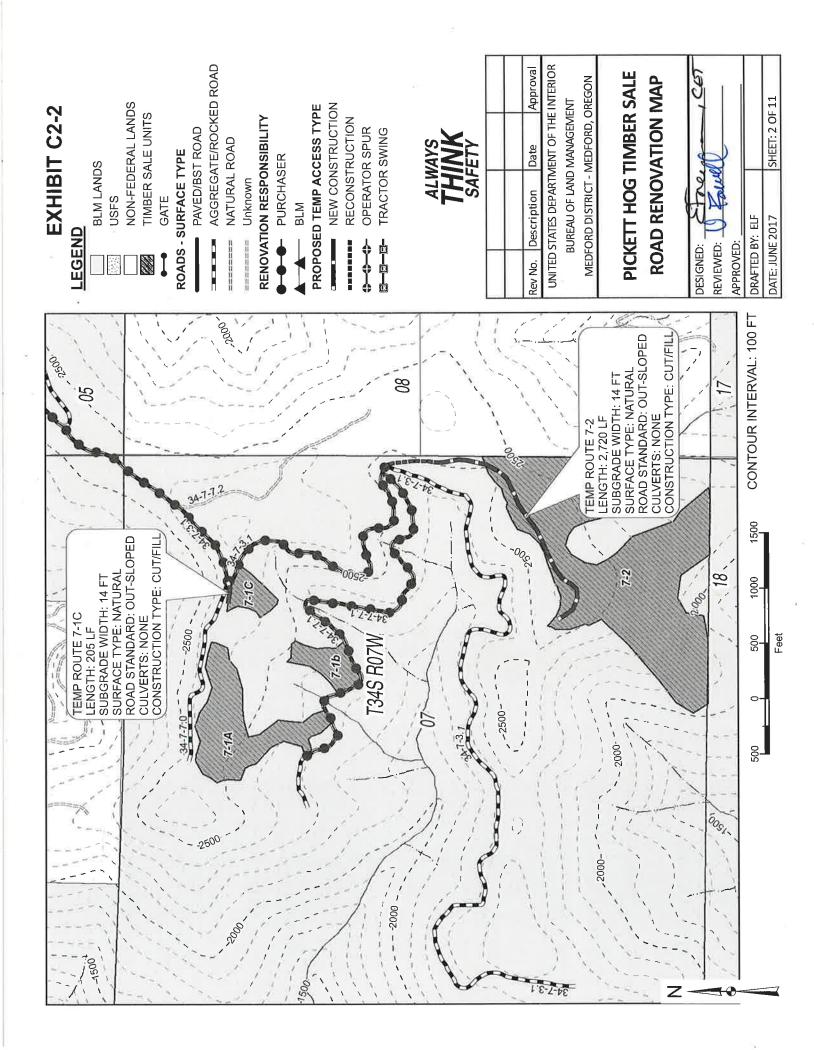
<b>Regeneration Harvest</b>	0.0
Partial Cut	18.0
Right of Way	0.0
Total Acres:	18.0

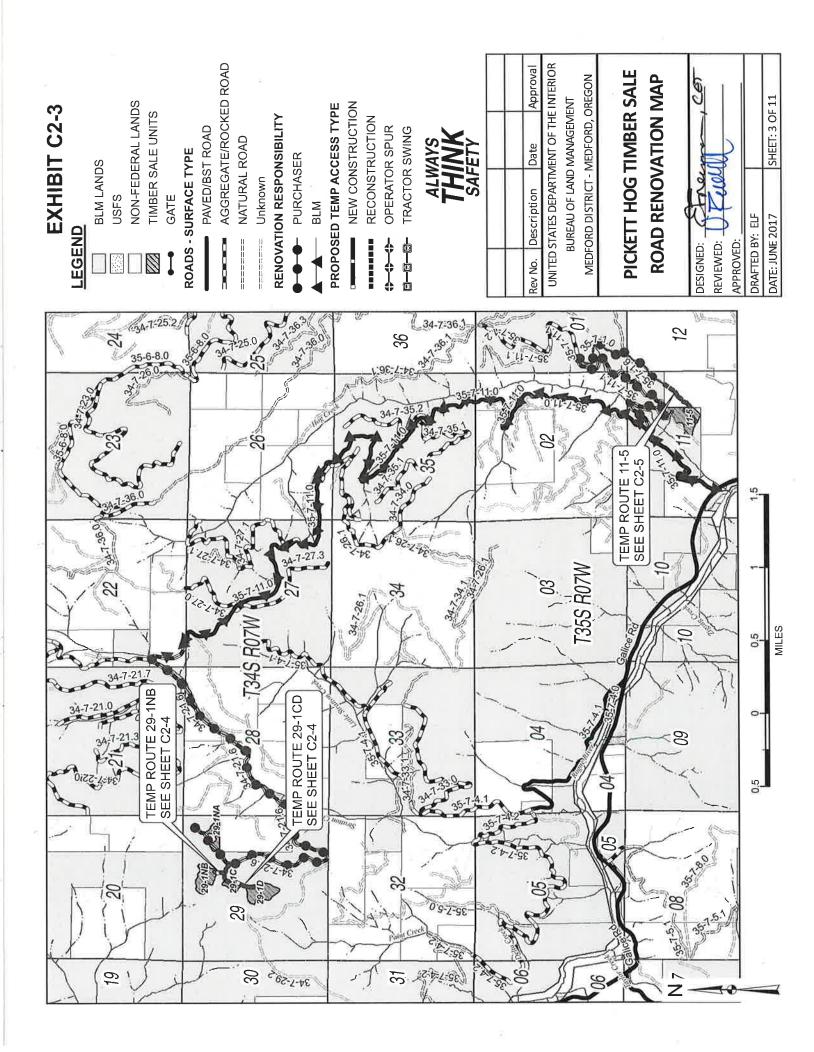
# Net Volume/Acre: 14.7 MBF

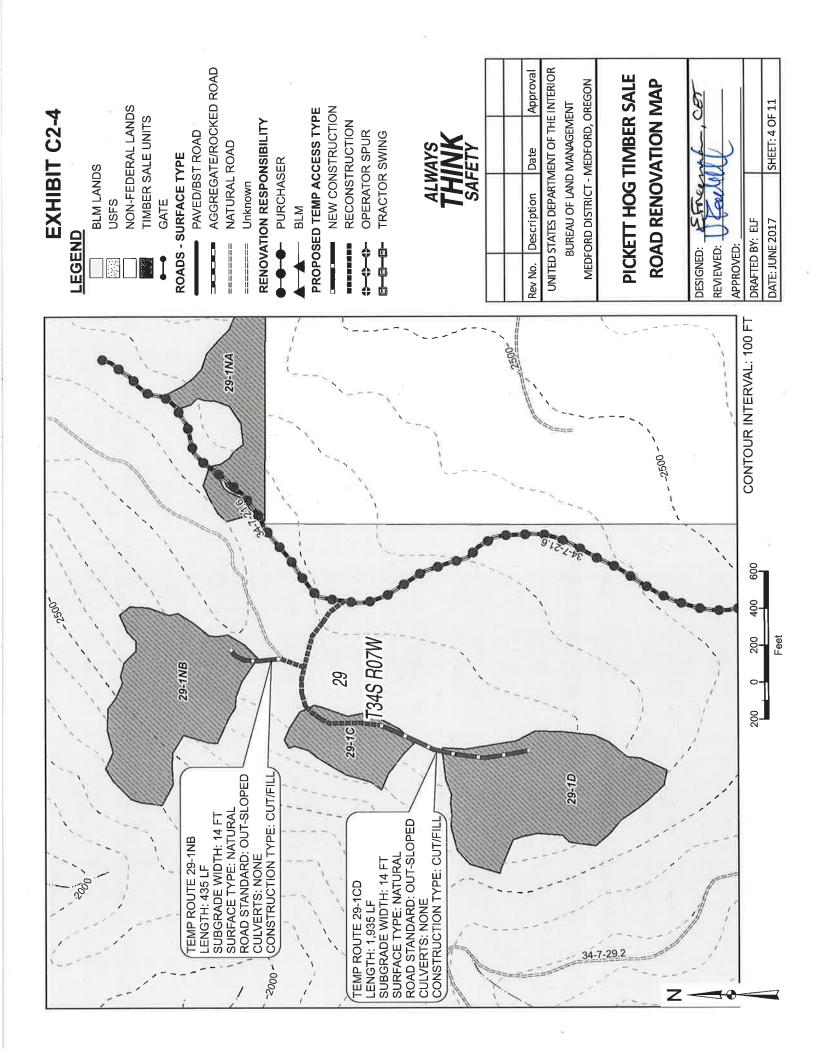
Regeneration Harvest	0.0
Partial Cut	13.0
Right of Way	0.0
Total Acres:	13.0

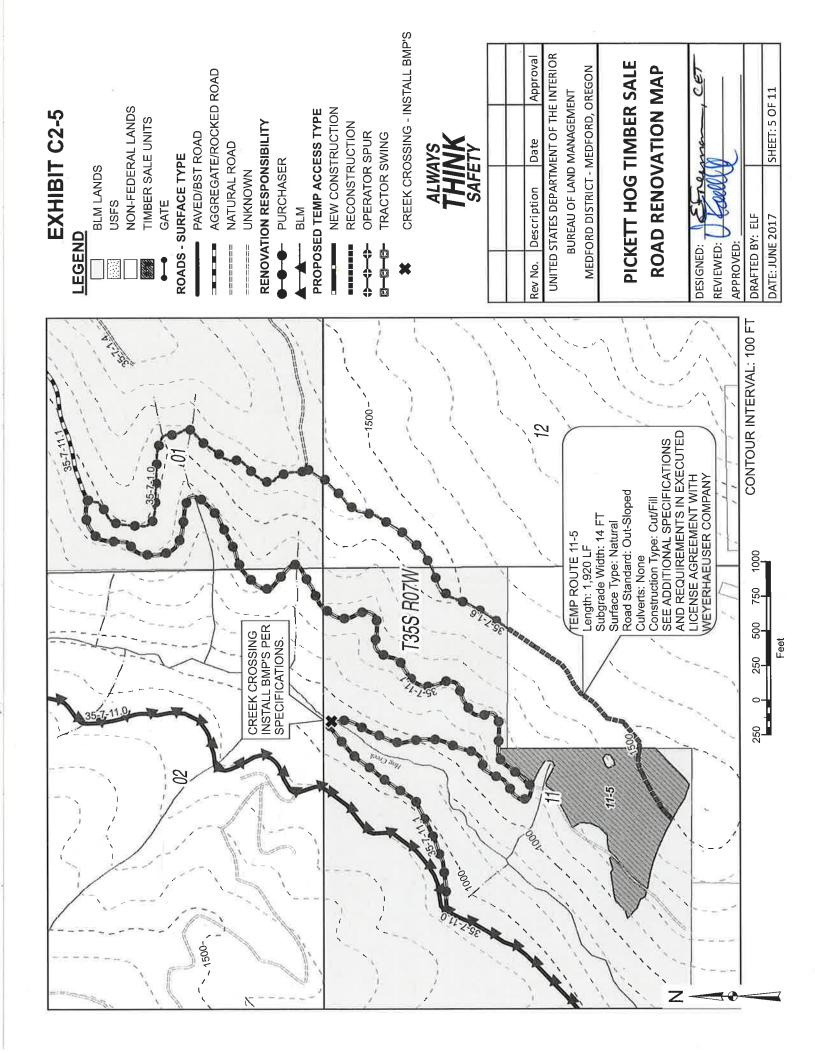


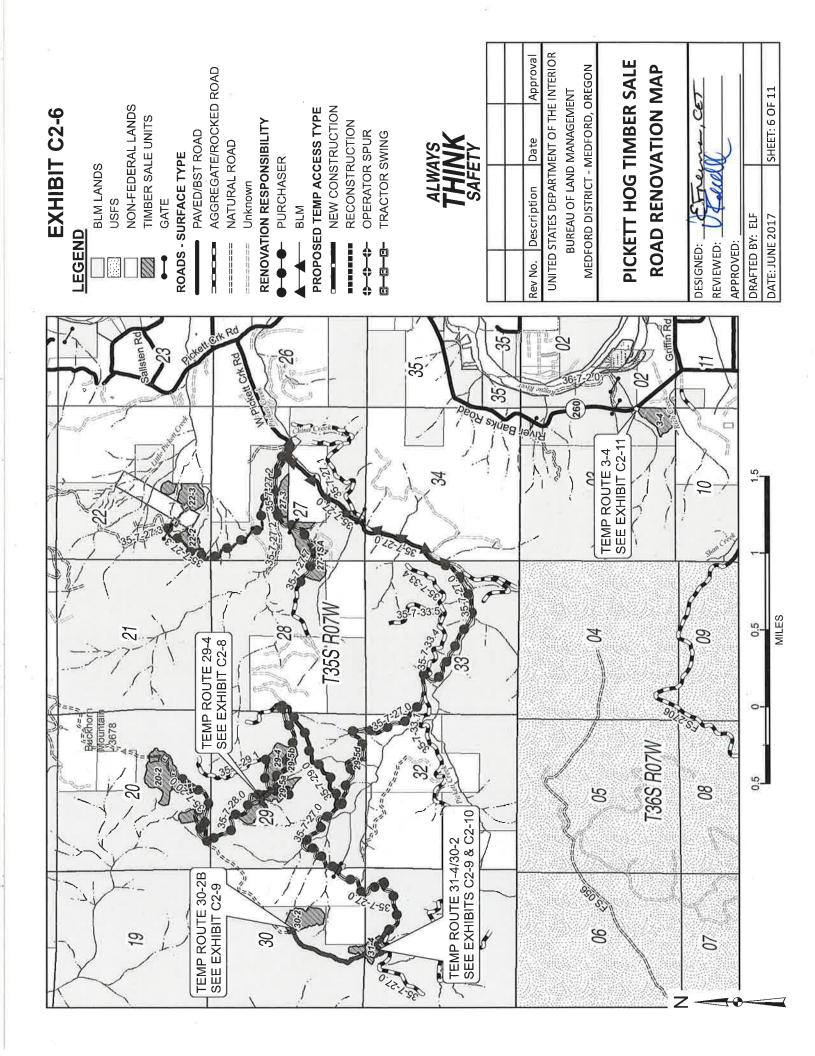


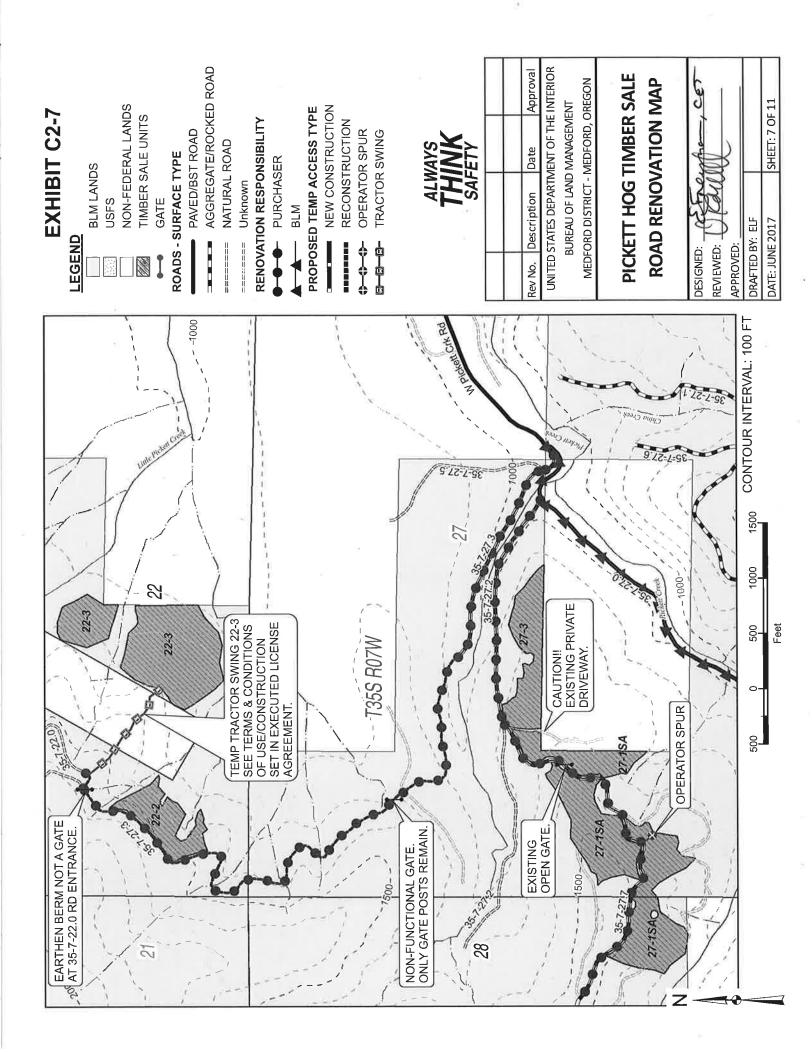


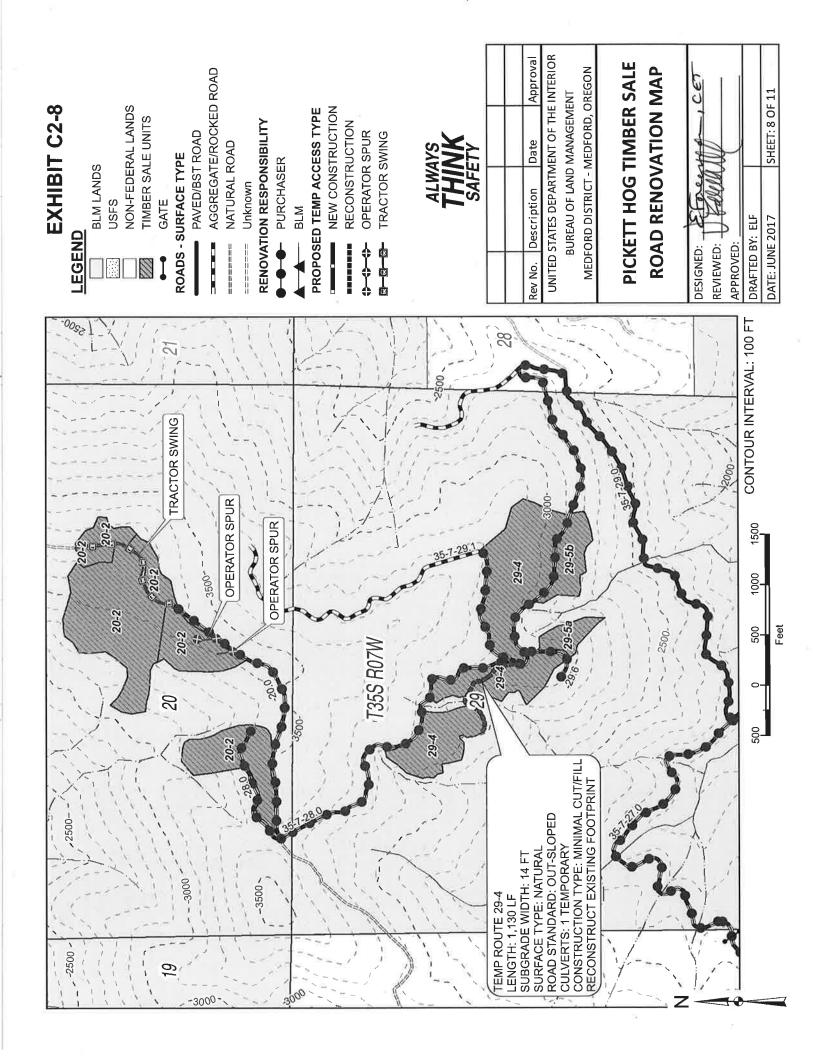


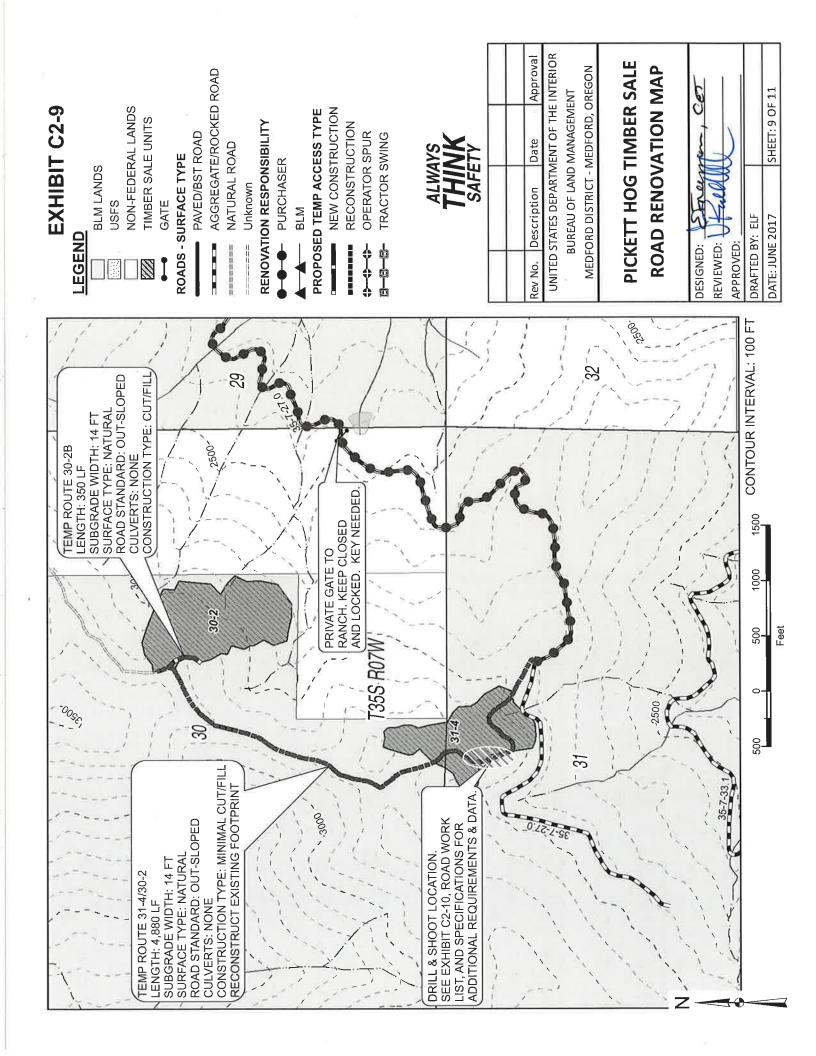


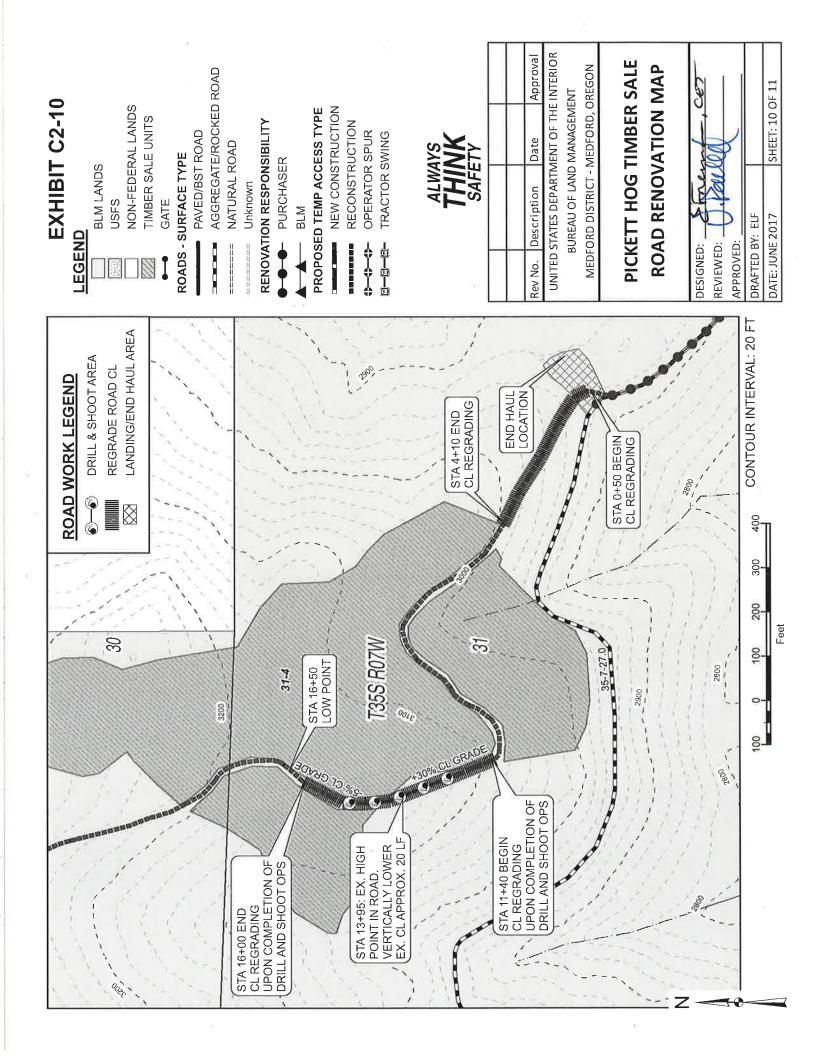


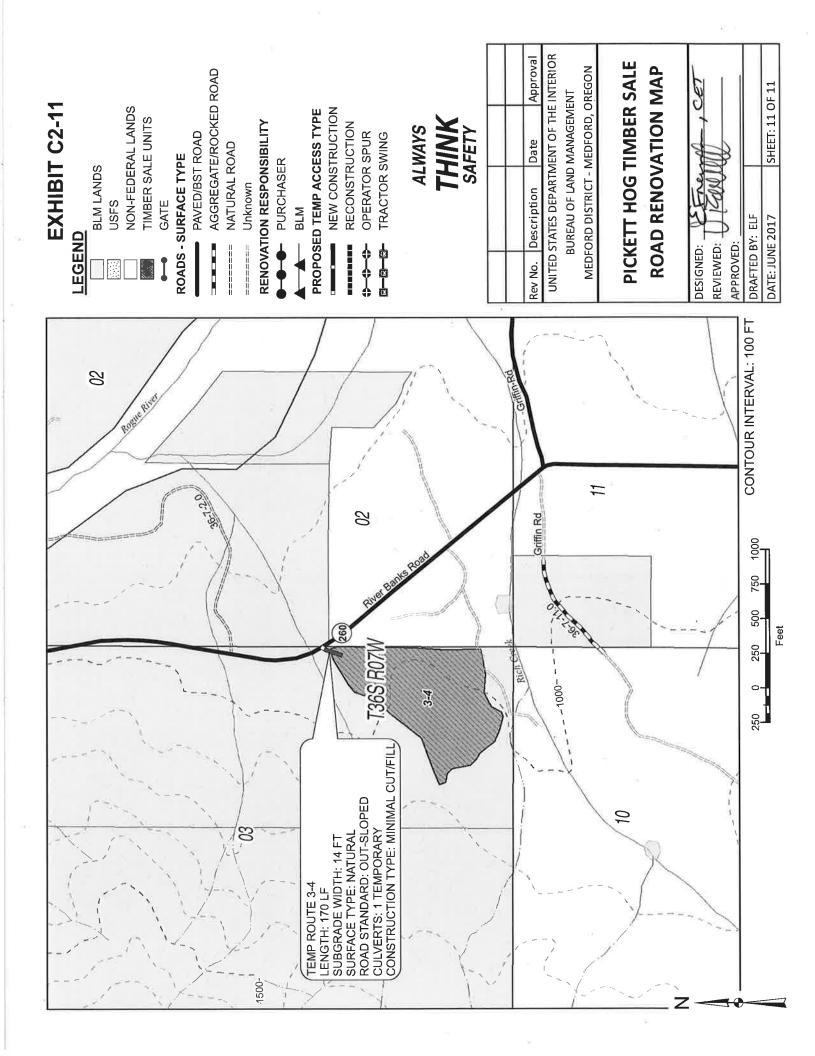












			* *													•					EXHIBIT	<u>m</u>	F		C3-1		Ĭ
					EXCAVATION	ATION		Ľ۵	DRAINAGE	ы Ш			RENO	RENOVATION		ĀĢ	AGGREGATE	E	୨ ୭				MIS	SCEL	MISCELLANEOUS	SUC	
				anA			CORI	RRUGATE SIZE	CORRUGATED METAL PIPE 16 GA	AL PIPE	PIPE 16 GA DOWNSPOUT		୪୦/୦	NOIT, YVAE					TALLED	NOL	ÐNId	Sc	ଟ୍ୟ	Sc	EPLACE	TRUCT	
ROAD NUMBER	FROM (M.P.)	TO (M.P.)	(MILES)	GRUBBING CLEARING	воск	соммои	18"	24" 3	ELBOWS %		Round B" 24"	BLADING, % ROLLING 8 ROLLING		SCARIFICA AND/OR HE BLADING	SLIDE SLIDE	ТіЧ В∪И	воск свленер	WOЯЯО8 JAIЯЭТАМ	ISNI 2'9M8 D MA3972	SOIL SOIL	ROADSIDE BRUSHING AND CHIPF	RECONSTER DIF WATER DIF	RECONSTRUC WATER BA CONSTRUC	WATER DIF	AB ABTAW BA\BVOMBA	EX. BARRIC, COUS TURNAROI	
SPECIFICATION NO.	0		4	200	300	0			<b>6</b> 4				2	500		200	1200		8000	1800	2100				8000		
UNITS	MP	МР	MILE	ACRE	С	ς	Ч	LF L	LF EA	A LF	5	MILE	MILE	MILE	ς	Շ	ς	ς	EA	ACRE	MILE	Ē	Ē	EA	EA EA	R	EA
MCKNABE CREEK AREA	AREA																								_		
34-7-2.0 (A)	0.00	0.58	0.58									0.58	0.58						-		0.58		_	-	-		
34-7-3.0 (A1-A2)	0.00	2.07	2.07									2.07	2.07						-		2.07					_	
34-7-3.1 (A-F)	0.00	6.21	6.21									6.21	6.21								6.21			-	_	_	
34-7-7.1	0.00	0.84	0.84									0.84	0.84								0.84					-	
HOG CREEK ARE	A									_														_	-	_	_
34-7-22.0 (A-B)	0.00	0.27	0.27					_	_			0.27	0.27								0.27				_	$\rightarrow$	
34-7-21.6 (A-C)	0.00	2.86	2.86					- 6	_			2.86	2.86								2.86			-	_	-	_
35-7-11.1 (A)	0.00	1.66	1.66									1.66	1.66	0.60	13				-	0.3	1.66					_	
35-7-1.0 (A)	0.00	0.46	0.46					_	_			0.46	0.46	0.29							0.46			+	_	_	
35-7-1.6	0.00	0.36	0.36	0.9								0.36		0.36						0.3	0.36	3	_		-	-	
PICKETT CREEK	AREA							-	_	_												-	+	-	+	_	
35-7-27.3 (A-B)	0.00	1.52	1.52						_			1.52	1.52	1.10							1.52	e		-	_	_	
35-7-22.0	0.00	0.03	0.03	0.1								0.03		0.03						0.1	0.03			_	-	-	_
TOTALS	SE	E EXHIE	SEE EXHIBIT C3-2 FOR TOTAL ROAD PROJECT QUANTIT	OR TO	TAL RO	4D PRC	NECI	QUA	NTITIL	IES –																1 I	
																										_	
RENOVATION NOTES	ON NC	TES		1		AGGREGATE	Ш Ш	ÄT		RA	ITA	ON R	<b>GRADATION REQUIREMENTS</b>	REM	NT/				LL ī				-	$\square$			
1. ROADS LISTED FOR SURFACE RESHAPING	FOR SUF	<b>REACE R</b>	ESHAPIN	ŋ	_	ITEM 900	00				ITEN	<b>ITEM 1000</b>	_		Ξ	<b>ITEM 1200</b>	8		æ	REV. NO.	DESCRIPTION	PTION			DATE	APPI	APPROVAL
SHALL CONSIST OF BLADING, WATERING, & ROLLING PER CONTRACT SPECIFICATIONS & DRAWINGS.	OF BLADI NTRACT	NG, WA SPECIFI	rering, { cations	ిర	W 4 0	SIZE 4 inch 3 inch		<u>GRADATION</u> A B	NOIL		SIZE 3 inch 2 inch		GRADATION A,C,F B,D,G,H	NO T	SIZE 1 1/2 1 inch	SIZE 1 1/2 inch 1 inch	GRAD	GRADATION C,C-1 D,D-1		MEDI	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON	S DEP, U OF L ISTRIC	ARTM LAND CT - N	MANA MEDFO	of the Gemei Ord, C	NT INTE	N N
2. DITCH/CULVERT CLEANING SHALL CONSIST OF DITCH BLADING AND RESHAPING,	RT CLEAN	ING SHA	ILL CONS	IST	~~~	2 inch 1 1/2 inch	£	СO							3/4		Ц	7			۵. ۲	PICKETT HOG		UHC HC	Ю Ц		
CLEARING DEBRIS, VEGETATION, SEDIMENT, ROCK AND ALL OTHER MATERIAL HINDERING	IS, VEGET THER MA	TERION,	SEDIMEN	Ĕ,δ																ES	ESTIMATE OF QUANTITIES		ЧЧ ЧЧ	5 NO	ANT	Ë	S
THE FLOW OF RUNOFF PER CONTRACT SPECIFICATIONS & DRAWINGS.	JNOFF PE	er cont NGS.	RACT													4 1 1	00.11			DESIGNED: REVIEWED:		4	Pool of		Ĭ	G	h1
															L	H	THINI	1		APPROVED:	APPROVED:		ĭ  ⊦		NON		
*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.	AATION, SHOWN	AL USE	CONLY.	Y ITEN	MS.										T	SAF	SAFETY	-		ATE: JL RAWING	DATE: JULY 2017 DATE: JULY 2017 DRAWING NO.: OR-11-9113.4-1	R-11-91		SHEET:	1 0F3		

															>		EXHIBI	IIBIT		C3-2	N	
				EXCAVATION	VTION		DRAINA	AGE		RENOV	RENOVATION		AGGF	AGGREGATE			-	Σ	MISCELLANEOUS	LANEO	SU	П
ROAD NUMBER (M.P.)	(M.P.)	(MILES)	GRUBBING CLEARING AND	воск		CORRUGA SIZE 18" 24"	ELBOWS	AL PIPE 16 DOWNSF ROUNC 18"			SCARIFICATION AND/OR HEAVY BILADING	REMOVAL SLIDE/LSUMP	CRUSHED RUN PIT	BOKKOM KOCK BYZE CKN2HED	MATERIAL INSTALL BMP'S @ STREAM CROSSIN	(EA = CROSSING) SOIL STABILIZATION	AND CHIPPING BRUSHING ROADSIDE	RECONSTRUCT WATER DIPS RECONSTRUCT WATER BARS	CONSTRUCT WATER DIPS CONSTRUCT	WATER BARS REMOVE/REPLACE EX. BARRICADES	(RE)CONSTRUCT ТURNAROUND	соизтяист тириоит
SPECIFICATION NO.	4	A	200	300			400			5(	500		700 1	1200	8000	0 1800	0 2100			8000		
UNITS	MP	MILE	ACRE	с	ς	LF LF	LF EA	Ч	LF MILE	: MILE	MILE	ς	ζ	с С	CY EA	ACRE		EA EA	EA	EA EA	Ē	Ā
35-7-27.2 (A) 0.00	0.40	0.40							0.40	0.40						_	0.40			_		T
35-7-27.7 (A) 0.00	0.66	0.66							0.66	0.66						_	0.66			_	-	1
35-7-27.0 (C-F) 1.50	5.55	4.05							4.05	4.05	4				_	_	4.05	_				
35-7-29.0 (A) 0.00	0.95	0.95							0.95	0.95							0.95					
35-7-28.0 (A) 0.00	1.60	1.60							1.60	1.60					_	_	1.60				-	
35-7-29.6 0.00	0.09	0.09	0.2			_			0.09		0.0				-	_	0.09				-	T
35-7-29.1 0.00	0.25	0.25							0.25	0.25					-		0.25				-	
35-7-20.0 0.00	0.54	0.54				_			0.54						+	_	0.54			_	-	
27														++	+							11
							-									_						
							7		-													
ROAD TOTALS		25.40	1.2						25.40	0 24.38	2.47	13			e	0.7	7 25.40	9			6	
RENOVATION NOTES	IOTES			I.	AGG	REGA	TEG	AGGREGATE GRADATION REQUIREMENTS	TION F	REQUI	REME	INTS			1							
1. ROADS LISTED FOR SURFACE RESHAPING SHALL CONSIST OF BLADING, WATERING, & ROLLING PER CONTRACT SPECIFICATIONS &	SURFACE   NDING, WA	RESHAPIN TERING, { ICATIONS	0 × ×	- 0 4	ITEM 900 SIZE 4 inch	0	<u>GRADATION</u> A	100	1000	) <u>GRADATION</u> A,C,F	NO	ITEN SIZE 1 1/2 i	8	с С	NO	UNITED MEDE	O. DESCF ED STATE BURE	TEV.NO. DESCRIPTION DATE APPROVAL UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD. OREGON	IMENT ( D MANA	DATE DATE DF THE I	APPROVAL NTERIOR T REGON	¥ K
2. DITCH/CULVERT CLEANING SHALL CONSIST	ANING SH	ALL CONS	IST	ωα <del>-</del>	3 inch 2 inch 1 1/2 inch	-	നറന	2	ត្ន	B,D,G,I	т	1 inch 3/4 inch	_ <del>5</del>	сщ Чщ				PICKETT HOG		ပြုပ္ပ		Τ
CLEARING DEBRIS, VEGETATION, SEDIMENT, CLEARING DEBRIS, VEGETATION, SEDIMENT, ROCK AND ALL OTHER MATERIAL HINDERING	MATERIAL	SEDIMEN HINDERIN	ĔΫ													Ш	STIM	TIMBER SALE ESTIMATE OF QUANTITIES	R SA	ANTI.	TIES	(0)
THE FLOW OF KUNOFF PER CC SPECIFICATIONS & DRAWINGS	MINGS.	IKACI											ALWAYS	XS		DESIGNED: REVIEWED:	DESIGNED: REVIEWED:	- And			e	εÎ I
*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.	NAL US	E ONLY. NOT PA	Y ITEN	ŝ					•)			L.	THIN SAFETY	٧K		DRAF	AFFICUTED BY: ELF DRAFTED BY: ELF DATE: JULY 2017 DRAWING NO.: OR	DRAFTED BY: ELF DATE: JULY 2017 DRAWING NO.: OR-11-9113.4-1	SCALE: SHEET:	:: NONE I: 2 OF 3		

																				ЖШ	EXHIBIT	3IT	-	C3-3	
					EXCAV	EXCAVATION			DRAINAGE	AGE		H	REN	RENOVATION		N N	AGGREGATE	ATE			ск		DECOMMISSIONING	MISSIO	DNING
ROAD	FROM (STA)	TO (STA)	(MILES)	CLEARING AND	воск	соммои	8	POL SIZE			PE) DOWNSPOUT HALE ROUND 18" 24"	Р ВLADING, "ФИТЕRING,	(RE)CONSTRUCT	тиялароиир Ореи Footprint Неауу вlading (Dozer)	REMOVAL SLIDE	RUN RUN	KOCK BYZE CKN2HED	NOON WORROW JAIRETAM	SOIL NOITAZIJIBATS	SAGACIADES	СОИЗТRUCT ТRU СОИЗТRUCT ТRU ТŲRИАROUND	соизтялост МАТЕЯ DIP	TOUATRUOO SAAB AƏTAW	SUBGRADE Ripping	
SPECIFICATION NO.			A	200	ы Ж	300		1	400					500		700	1200		1800		8000			2600	
UNITS	STA	STA	MILE	ACRE	ς	сY	Ч	LF	LF E	EA LF	-	LF MILE	LE EA	MILE V	ک 	Շ	Շ	ζ	ACRE	EA	EA	EA	EA	MILE	EA
TEMPORARY ROUTES	TES																								
Tmp Rte 07-1C	00+0	2+05	0.04	0.12		164					-								0.12	-	-		<del>SI-6</del>	IE ND	קר.
Tmp Rte 07-2	00+0	27+20	0.52	1.56		4,184											_		1.56	-	2		nd	∀ A	
Tmp Rte 29-1CD	00+0	19+35	0.37	1.11		2,067													1.11	-	-		Я Y 104	EB EO	/ਬਰ
Tmp Rte 29-1NB	00+0	4+35	0.08	0.25		465								_				5	0.25		-		AA9	DED.	
Tmp Rte 11-5	00+0	19+20	0.36	1.10		1,544													1.10	-	-		ЯO	TΑ	
Tmp Rte 29-4	00+0	11+30	0.21	0.65			40					0.21	<u></u>	0.21					0.65	-	-		IME		
Tmp Rte 31-4/30-2	00+0	48+80	0.92		3,260	1,206						0.92	2	0.16					1.00		2		313 31	) SE	Т
Tmp Rte 30-2B	00+0	3+50	0.07	0.20		475					_								0.20	-					
Tmp Rte 3-4	00+0	1+70	0.03	0.10		100	64												0.10		-				
										-				_	_										
												_													
									-		-		_				_								
TEMP ROUTE TOTALS	TOTAL	S	2.60	5.09	3,260	10,205	80					1.13	13	1.13					6.09	9	10				
RENOVATION NOTES	ON NO	DTES	>			AGGREGATE	RE	GAT	Ш	SRA	DAT	NOL	REQ	GRADATION REQUIREMENTS	IENT	S							$\left  \right $		4
1 ROADS LISTED	FOR SU	RFACE F	RESHAPIN	0		ITEM 900	006				Ë	<b>ITEM 1000</b>	00		E	<b>ITEM 1200</b>	00			REV. NO. DI	DESCRIPTION	Z	DA	DATE	APPROVAL
SHALL CONSIST OF BLADING, WATERING, & ROLLING PER CONTRACT SPECIFICATIONS & DRAWINGS.	OF BLAD	ING, WA	TERING, ICATIONS	8 8 8		SIZE 4 inch 3 inch		BRAD	GRADATION A B	71	SIZE 3 inch 2 inch	៣ ខ ខ	GRADATION A,C,F B,D,G,H	ATION 3,F G,H	201212	SIZE 1 1/2 inch 1 inch		C,C-1 C,C-1 D,D-1		MEDFO	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON	EPARTM )F LAND RICT - N	ENT OF MANAGE MEDFOR	The Int Ement D, ore(	ERIOR
2. DITCH/CULVERT CLEANING SHALL CONSIST OF DITCH BLADING AND RESHAPING, CLEARING DEBRIS, VEGETATION, SEDIMENT, ROCK AND ALL OTHER MATERIAL HINDERING	RT CLEAN VG AND F IS, VEGE THER MA	VING SH RESHAPI TATION,	ALL CON NG, SEDIMER HINDERI	NG, YI		2 inch 1 1/2 inch	5		20						0	5		1		ESTI	PICKETT HOG TIMBER SALE ESTIMATE OF QUANTITIES	PICKETT HOG TIMBER SALE ATE OF QUAN	SALE		ES
THE FLOW OF RUNOFF PER CC SPECIFICATIONS & DRAWINGS.	UNOFF PI	INGS.	TRACT													AL	ALWAYS	P		DESIGNED: REVIEWED:	a p	-Factor		S	
*FOR INFORMATIONAL USE ONLY. QUANTITIES SHOWN ARE NOT PAY ITEMS.	ATION	AL USI	E ONLY NOT PA	Y ITE	MS.										. 1	THIN SAFETY	HIN. Safety	X.	< □ 〕	APPROVED: DRAFTED BY: ELF DATE: JULY 2017 DRAWING NO.: OR	APPROVED: DRAFTED BY: ELF DATE: JULY 2017 DATE: JULY 2017 DRAWING NO.: OR-11-9113.4-1	-9113.4-1	SCALE: A	NONE 3 OF 3	

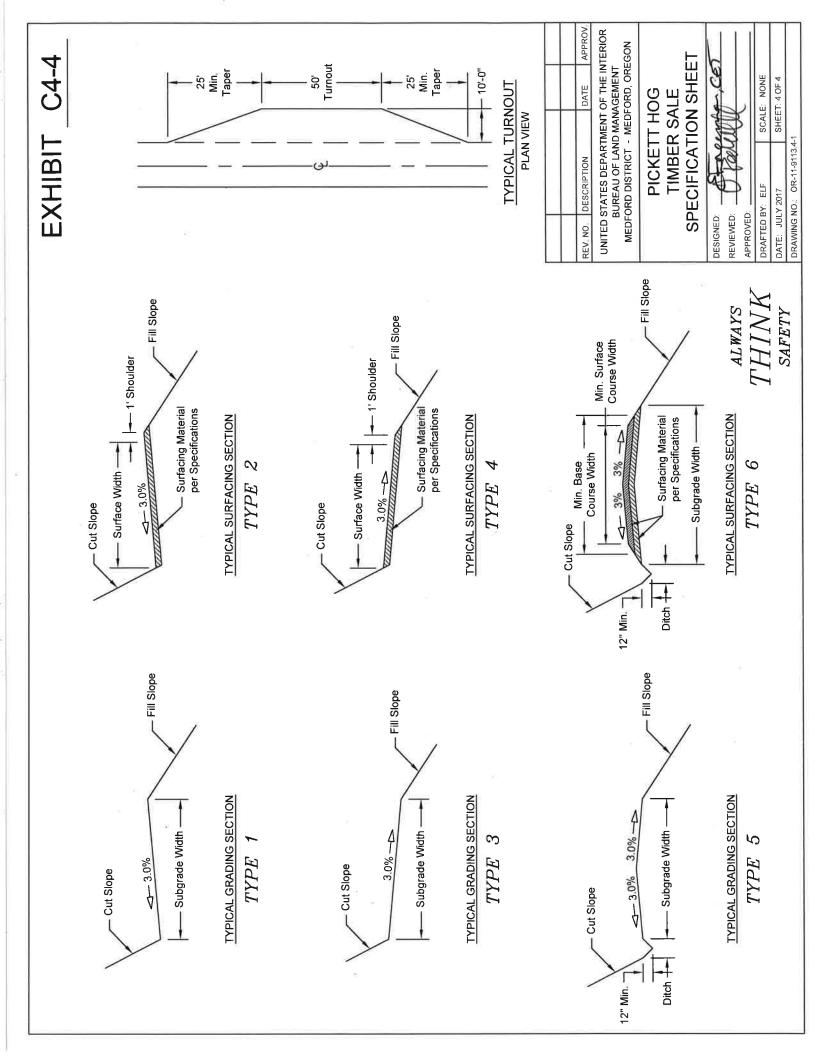
	-		ALIGNMENT ROAD WIDTH	ROAD WI	DTH <sup>1-3</sup>	GRADIENT	DIENT	BRUSH	SHING		T U -	BASE C	BASE COURSE	SURFACING SE SU	SUR	VG <sup>3</sup> SURFACE COURSE	OURSE	
TO L ((M.P.)	(MILES)	TYPICAL STATION TYPE	MAXIMUM DEGREE OF CURVE	EXISTING	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	тор сит	1 1		MUMINIM MUMINIM HTOIW		z Java	ONIDAAD	MINIMUM WIDTH	DEPTH	GRADING	REMARKS
											_					_	+	
0.58	0.58	9		16'	ъ					4	_						0	
2.07	2.07	9		16'	ŝ					4	_						_	
6.21	6.21	9		14'	ъ					4	_						0	
0.84	0.84	9		14'	а С					4	_						8	
										_	_						+	
0.27	0.27	9		14'	3					4	4			-			0	
2.86	2.86	9		14'	3					4	_					-	۵	*SEG A is PVT
1.66	1.66	9		14'	ъ					4 4		_		-			۵	
0.46	0.46	9		14'	ŝ					4							E/D	
0.36	0.36	e		12'				- 2		4	4						ш	24
										-	_						-	
1.52	1.52	2/1		14'	ъ.					4	4						B/E	
0.03	0.03	5		16'						4	_	_					ш	
												I						
1. EXTRA SUB-GRADE WIDTHS TO EACH FILL SHOULDER, ADD OF 1-6 FEET AND 2 FEET FOR FI WIDEN THE INSIDE SHOULDER (	EXTRA SUB-GRADE WIDTHS TO EACH FILL SHOULDER, ADD 1 FOOT FOR FILLS OF 1-6 FEET AND 2 FEET FOR FILLS OVER 6 FEET WIDEN THE INSIDE SHOULDER OF ALL CURVES AS	DR FILLS 86 FEET IRVES AS		N	N N N N N N N N N N N N N N N N N N N	SURFACING TYPES A. PIT RUN ROCK B. GRID ROLLED ROCK MATERIAL C. SCREENED ROCK MATERIAL	ROCK M	ATERI. ERIAL	AL						REV. NO		DESCRIPTION	ION DATE APPROV
EGREE (	FOLLOWS WHEN THE DEGREE OF CURVE EQUALS: 7-21 ADD 1 FT.	EQUALS	. 28			CRUSHED ROCK MATERIAL NATURAL/NATIVE SOIL	CK MATE	RIAL							N.	TED ST BU	ATES D REAU 0	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT
22-35 ADD 2 FT. 36-48 ADD 3 FT.				സി	3. TURNOUTS	UTS									2	TEDFOI	RD DIST	MEDFORD DISTRICT - MEDFORD, OREGON
49-64 ADD 4 FT. 65-96 ADD 5 FT.					A UD V	WIDTH 10 FT. IN ADDITION TO SUB-GRADE WIDTH, OR AS SHOWN ON THE PLANS.	SHOWN	Ŭ L NO NO L NO L NO	O SUB HE PL/ AS SH	GRAD NS	Ш HE	а 1						PICKETT HOG TIMBFR SAI F
CUT SLOPE	FILL SLOPE	삤			_	ROAD PLANS. INVISIBLE AND NOT MORE THAN 750 FT. APART.	D NOT MC	DRE TI	HAN 7	50 FT. /	APART	*				SPE	ECIFI	SPECIFICATION SHEET
	1 1/2 :=1			~	SLIPEAC	UNIC									DESIG	DESIGNED:	2	Deunan, CET
	1 1/2 : 1			ri	TURNO	TURNOUTS, CURVE WIDENING, AND ROAD APPROACH APRONS SHALL BE SURFACED.	VE WIDE ONS SHA	NING, LL BE	AND F SURF/	COAD ACED.	Ē	THIN	VK	K.	APPF	REVIEWED:		SCALE: NONE
	angle of repose	esod		ωI	. CLEARII	5. CLEARING WIDTH	2				4 ° 4	7 T T T T T	1	30	DATE	DATE: JULY 2017	2017	SHEET: 1 OF 4

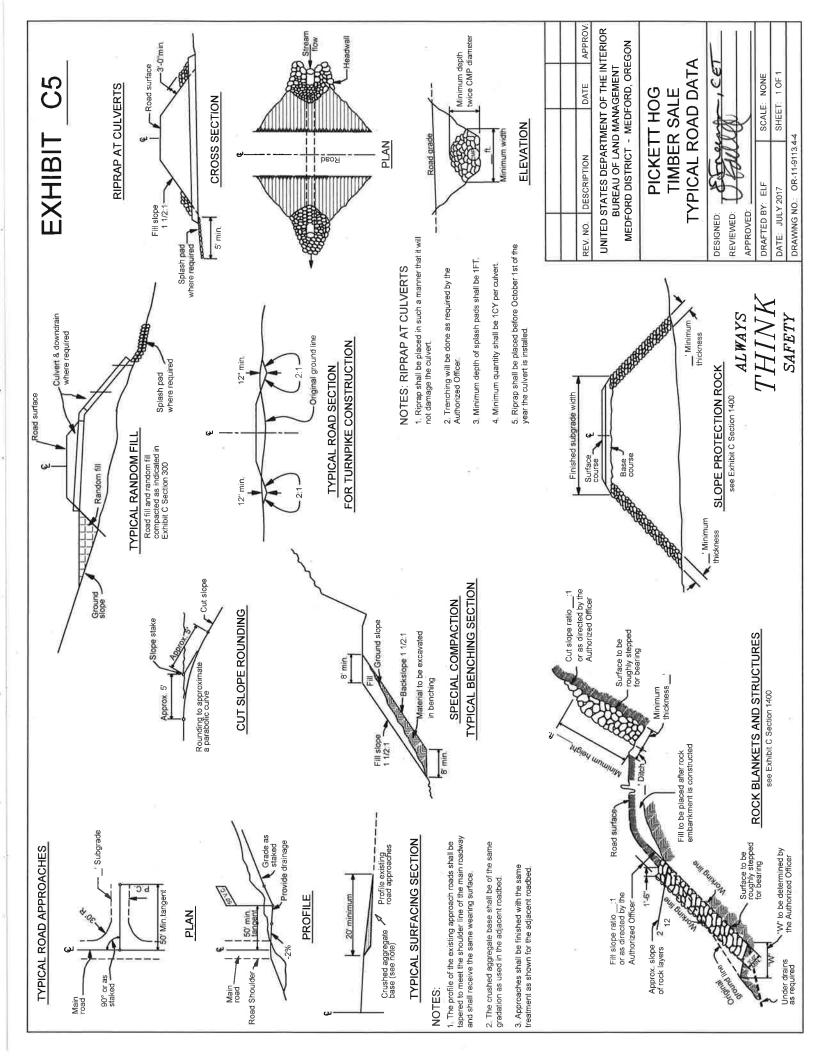
EXHIBIT C4-1

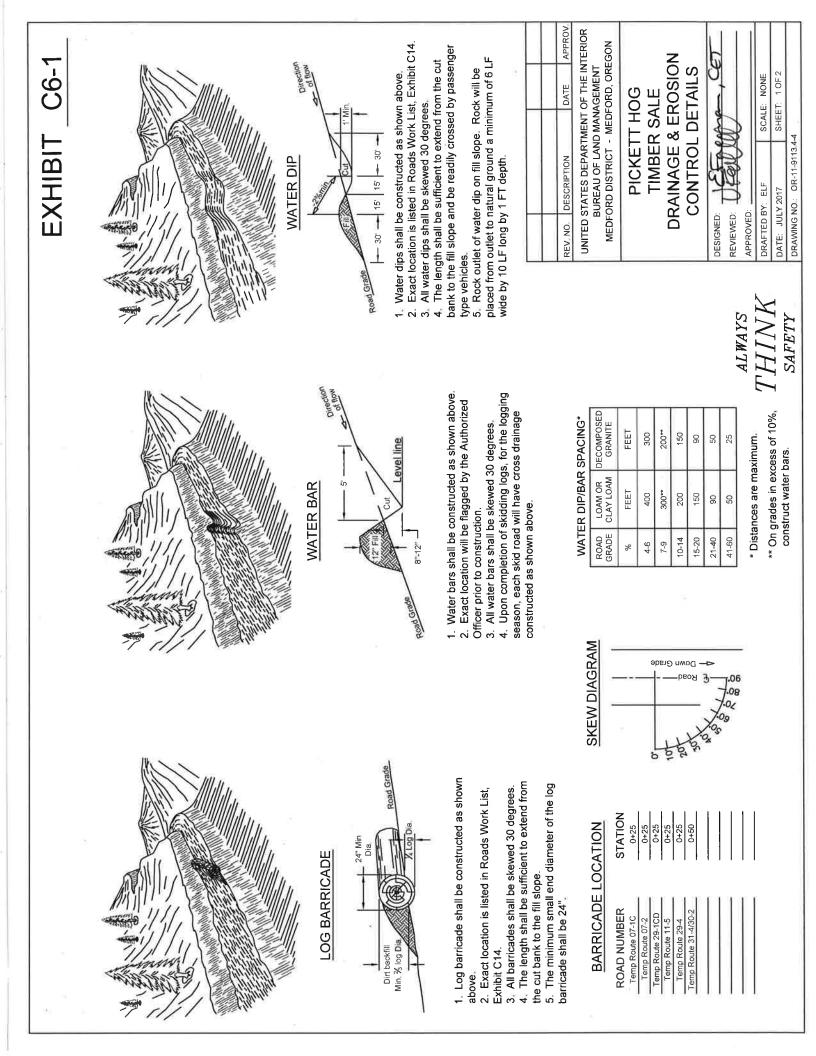
.

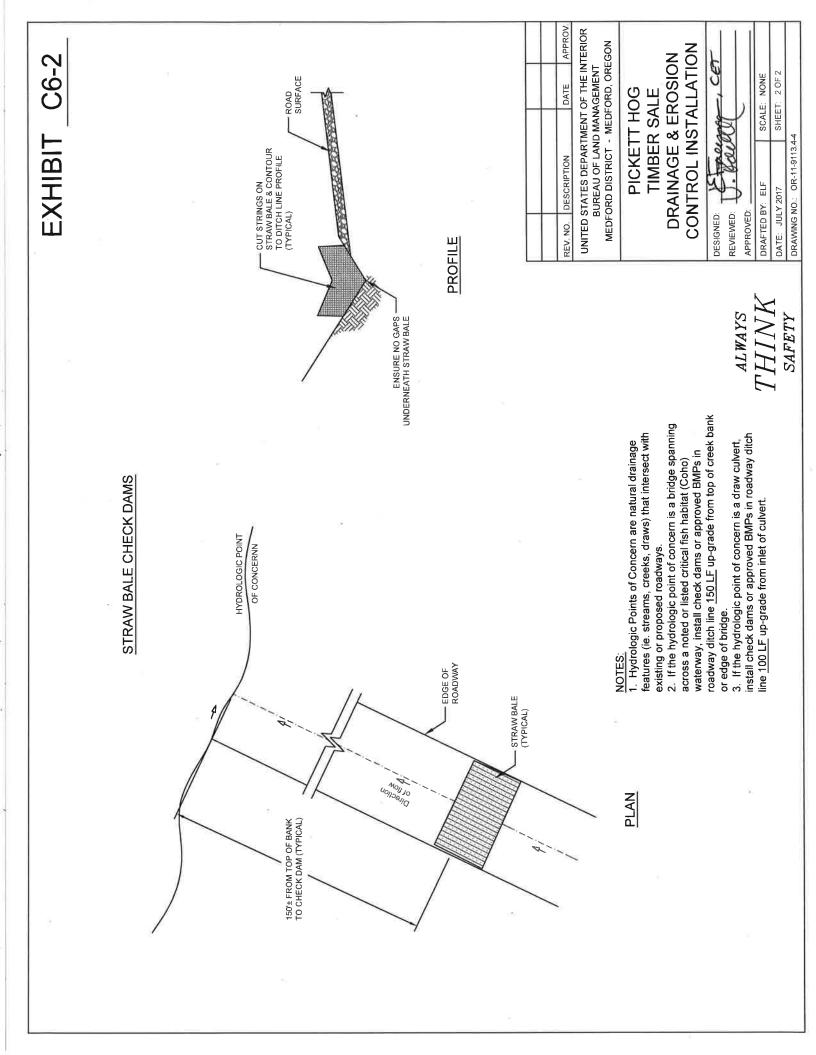
			(4															III III	L C	EXHIBIT C4-2
					ALIGNMENT ROAD WIDTH	ROAD WI	DTH 1-3	GRADIENT	ENT	BRUS	BRUSHING WIDTH	VIDTH			SURI	SURFACING			-	
										BEYOND	Ш Ш Ш Ш	EXISTING ROAD(S)	3	BASE COURSE	SE	S	URFACE	SURFACE COURSE		
ROAD NUMBER	FROM (M.P.)	ТО (М.Р.)	(MILES)	TYPICAL STATION TYPE	MAXIMUM DEGREE OF CURVE	EXISTING SUBGRADE	рітсн	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	TUP GUT		۲	MUMIMUM WIDTH	DEPTH DEPTH TYPE <sup>2</sup>	екеріие	MINIMUM MINIMUM	COMPACTIC DEPTH	GRADING		REMARKS
35-7-27.2 (A)	00.00	0.40	0.40	9		14'	ŝ				4	4						4		
35-7-27.7 (A)	0.00	0.66	0.66	9		14'	3				4	4		-				8		
35-7-27.0 (C-F)	1.50	5.55	4.05	9		14'	3				4	4				_		Ъ	AHighly [	<sup>A</sup> Highly Damaged Chipseal
35-7-29.0 (A)	0.00	0.95	0.95	9		14'	3‡				4	4						à	AHighly [	<sup>A</sup> Highly Damaged Chipseal
35-7-28.0 (A)	0.00	1.60	1.60	9		14'	ů.				4	4		$\neg$						
35-7-29.6	0.00	60.0	0.09	σ		14'	x				4	4		+	2	-		ш		
35-7-29.1	0.00	0.25	0,25	9		14'	3				4	4		-		_		4		
35-7-20.0	0.00	0.54	0.54	4		16'					4	4		-	_	_		m		
															-	-				
										$\square$					1					
															_					
NOTES																				
1. EXTRA SUB-GRADE WIDTHS	RADE WIL	DTHS				7	SUR	REACING TYPES	<b>ω</b> Ι.							L				
OF EACH FILL SHOULDER, AUD 1 FOUT FOR FILLS OF 1-6 FEET AND 2 FEET FOR FILLS OVER 6 FEET. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS WHEN THE DEGREE OF CURVE EQUALS; 7-21 ADD 1 FT. 22-35 ADD 2 FT.	FILL SHOULDE EET AND 2 FEET HE INSIDE SHOU S WHEN THE DE 7-21 ADD 1 FT. 22-35 ADD 2 FT.	DEGREE DEGREE T	FILLS OV R OF ALL C OF CUR	ER 6 FEE CURVES , VE EQUAL	o	c	A. TI TUTAU B. GRID RC C. SCREET D. CRUSHI E. NATURA	GRID FOUNDOR GRID FOLLED ROCK MATERIAL SCREENED ROCK MATERIAL CRUSHED ROCK MATERIAL NATURAL/NATIVE SOIL	ROCK MATE CK MATE CK MATEF CK MATEF IVE SOIL	TERIA ERIAL tiAL							REV. NO.	DESCRIPTION STATES DEP/ SUREAU OF L	DESCRIPTION DATE STATES DEPARTMENT OF THE IN BUREAU OF LAND MANAGEMENT CORD DISTRICT - MEDFORD, ORI	REV. NO. DESCRIPTION DATE APPROV UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON
65-9 65-9	49-64 ADD 4 FT. 65-96 ADD 5 FT.	- F F				5	A. WID	WIDTH 10 FT. IN ADDITION TO SUB-GRADE MIDTH, OR AS SHOWN ON THE PLANS.	SHOWN (		SUB-G	RADE S.							PICKETT HOG	00 1
MATERIALS	CUT SLOPE	OPE	FILL SLOPE	OPE				LOCATED APPROXIMATELT, AS SHOWN ON THE ROAD PLANS. INVISIBIE AND NOT MOBE THAN 750 FT. APART.		CLT, A RE TH	9 750	FT. AF	ART.				SP	ECIFI	CATION	SPECIFICATION SHEET
COMMON	1/2 : 1		1 1/2 : 1													B	DESIGNED:	TY	the set	- Cer
SOFT ROCK & SHALE	1/2 : 1		1 1/2 : 1			1	APPRO	4. SURFACING TURNOUTS, CURVE WIDENING, AND ROAD APPROACH APRONS SHALL BE SURFACED.	ve widen JNS SHAL	ING, A L BE S	ND RC URFAC		THIN	ALWAYS HIN	X	AF R	REVIEWED:		sca	SCALE: NONE
SOLID ROCK	1/2 : 1		angle of	angle of repose		ان ا	CLEARII SEE SU	5. CLEARING WIDTH SEE SUBSECTION 2100	J 2100				SA	SAFETY	1	A H H	DATE: JULY 2017 DRAWING NO.: O	DATE: JULY 2017 DRAWING NO.: OR-11-9113.4-1		ET: 20F4

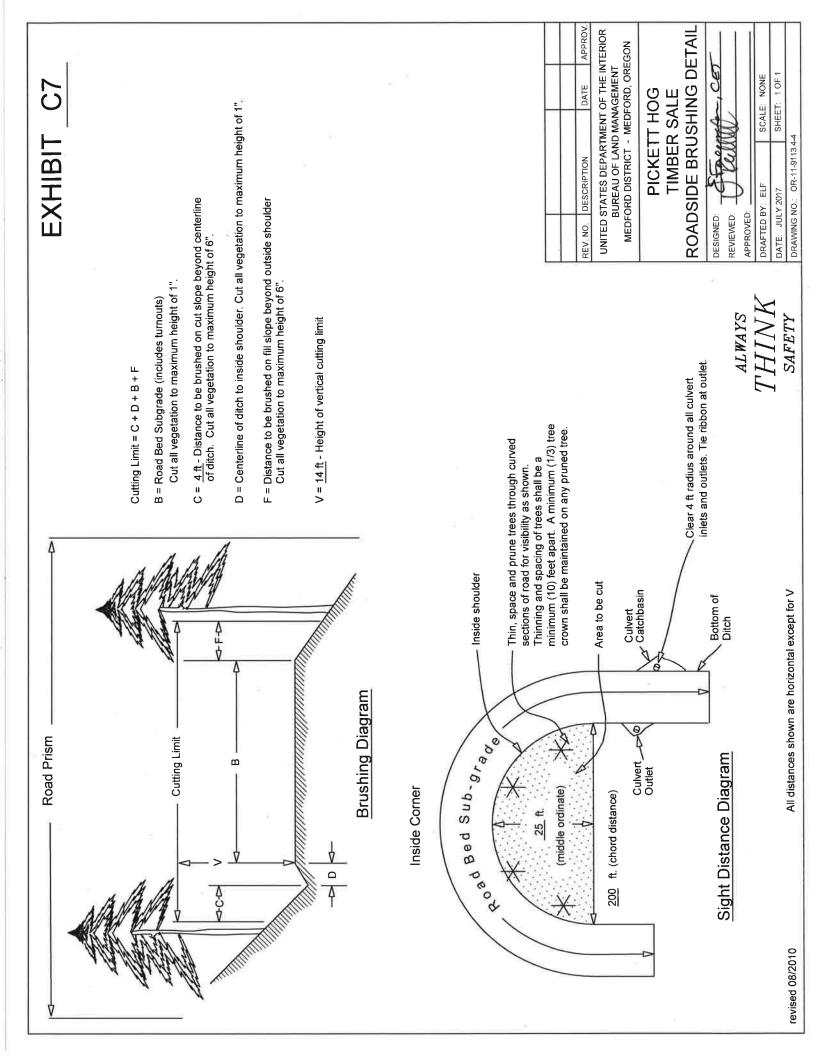
EXHIBIT C4-3	SURFACING <sup>3</sup>	SURFACE COURSE	WIDTH WIDTH COMPACTIC DEPTH DEPTH TYPE <sup>2</sup> GRADING REMARKS															¢		REV NO DESCRIPTION DATE APPROV UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON	PICKETT HOG TIMBER SALE	SPECIFICATION SHEET	DESIGNED: REVENTED COT	REVIEWED: T. KOWWY APPROVED: APPROVED: CALE: NONE	-11-9113.4-1
	SURF	IRSE	GBADING		_		-					_	_	_	_	_								S	X X
		BASE COURSE	DEPTH																					ALWAYS HIN	SAFETY
2.63			MINIMUM MINIMUM																		퓓	ART	4	THINK	SA
	IDTH	EXISTING ROAD(S)	Я							5											KADE N ON	FT. AP			
	<b>BRUSHING WIDTH</b>		ب		_		_							-		_					UB-GF PLANS SHOW	N 750 I		D ROA	
	RUSHI	BEYOND			_			_		_	_	_	_	_	_	_	_			RIAL	TO SI THE F	THAN		G, ANI BE SUI	
	B	-	TOP CUT	_	_	_	_		-		-	-		+	+	+	-			MATE ATERI TERIA IL	N ON	MORE		JENIN	
	GRADIENT		MAXIMUM ADVERSE		4	10%	16%	ġ	6%	8%	18%	20%	а.						ŝ	CK D ROCK NOCK MA DCK MA DCK MA	S SHOW	NOT		RVE WID RONS SH	H N 2100
	GRA		MAXIMUM FAVORABLE		6%	18%	18%	18%	8%	3	18%	•	%6						2. SURFACING TYPES	PIT RUN ROCK GRID ROLLED ROCK MATERIAL SCREENED ROCK MATERIAL CRUSHED ROCK MATERIAL CRUSHED ROCK MATERIAL NATURAL/NATIVE SOIL NOUTS	WIDTH 10 FT, IN ADDITION TO SUB-GRADE WIDTH, OR AS SHOWN ON THE PLANS. I OCATED APPROXIMATELY, AS SHOWN ON THE	ROAD PLANS. INVISIBIE AND NOT MORE THAN 750 FT. APART.		4. SURFACING TURNOUTS, CURVE WIDENING, AND ROAD APPROACH APRONS SHALL BE SURFACED.	5. CLEARING WIDTH SEE SUBSECTION 2100
	DTH <sup>1-3</sup>		DITCH		3	10	•	1	8	9	(E)	6	9						. SURFA(	A. PIT RUN B. GRID RC C. SCREEN D. CRUSHE D. CRUSHE E. NATURA 3. TURNOUTS				TURNC APPRC	. CLEARI SEE SL
<u>'a</u>	ROAD WIDTH		PROPOSED SUBGRADE		14'	14'	14'	14'	14'	14'	14'	14'	14'						21	n				41	μ
	ALIGNMENT		MAXIMUM DEGREE OF CURVE																	φ. Υ ώ					
	4		TYPICAL STATION TYPE		e	в	3	e	ε	e	ю	e	с							FOR FILLS IR 6 FEET URVES A FE EQUALS		BL			repose
			LENGTH (MILES)		0.04	0.52	0.37	0.08	0.36	0.21	0.92	0.07	0.03						8	1 FOOT F ILLS OVE OF ALL C OF CURV		FILL SLOPE	1 1/2 : 1	1 1/2 : 1	angle of repose
			TO I (STA)		2+05	27+20	19+35	4+35	19+20	11+30	48+80	3+50	1+70						DTHS	DER, ADC IET FOR F IOULDER DEGREE	ЧH	OPE			
			FROM (STA)	UTES	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0	00+0						RADE WII	1 FILL SHOULDE EET AND 2 FEET HE INSIDE SHOU S WHEN THE DE 7-21 ADD 1 FT. 22-35 ADD 2 FT. 36-48 ADD 3 FT.	49-64 ADD 4 FT 65-96 ADD 5 FT	CUT SLOPE	1/2 : 1	1/2 : 1	1/2 : 1
			ROAD NUMBER	TEMPORARY ROUTES	Tmp Rte 7-1C	Tmp Rte 7-2	Tmp Rte 29-1CD	Tmp Rte 29-1NB	Tmp Rte 11-5	Tmp Rte 29-4	Tmp Rte 31-4/30-2	Tmp Rte 30-2B	Tmp Rte 3-4					NOTES	1. EXTRA SUB-GRADE WIDTHS	TO EACH FILL SHOULDER, ADD 1 FOOT FOR FILLS OF 1-6 FEET AND 2 FEET FOR FILLS OVER 6 FEET. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS WHEN THE DEGREE OF CURVE EQUALS: 7-21 ADD 1 FT. 22-35 ADD 2 FT. 36-48 ADD 3 FT.	49-6 65-9(	MATERIALS	COMMON	SOFT ROCK & SHALE	SOLID ROCK











# Exhibit C8

Sale Name: Pickett Hog T.S. Page **1** of **10** 

## **Roads Work List**

#### **Definitions:**

ABC = Aggregate Base Course ASC = Aggregate Surface Course BST = Bituminous CL = Center Line CMP = Corrugated Metal Pipe CY = Cubic Yard GRR = Grid Rolled Rock Jct = Junction/Intersection MP = Mile Post NAT = Natural or Native Surface PRR= Pit Run Rock Pvt = Private Seg = Segment

## **Existing Road Renovation**

The existing road renovation work list consists of work to be performed to the road <u>prior</u> to timber hauling. All work shall comply with the contract special provisions, specifications, and drawings.

#### McKnabe Creek Area – See Exhibit C2-1 & C2-2 for Maps:

34-7-2.0 Road Seg A -- ASC

- MPDescription0.00Jct w/ Lower Grave Creek Road (County). Begin road renovation which includes reshaping<br/>road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all<br/>culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and<br/>roadside brushing and chipping.
- 0.55 Existing bridge at Grave Creek crossing. This creek crossing is noted for essential fish habitat (*Coho*). Contractor shall ensure all erosion and sediment control measures (BMP's) are in place per contract specifications and inspected/accepted by the Contracting Officer or Project Engineer prior to log haul. See Exhibit C6-2 for details.
- 0.58 Jct w/ 34-7-3.0 Road on right. End road renovation.

#### 34-7-3.0 Road Seg A1-A2 -- ASC

#### <u>MP</u> <u>Description</u>

- 0.00 Jct w/ 34-7-2.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
   0.11 Existing culvert at Butte Creek crossing. This creek crossing is noted for essential fish
- habitat (*Coho*). Contractor shall ensure all erosion and sediment control measures (BMP's) are in place per contract specifications and inspected/accepted by the Contracting Officer or Project Engineer prior to log haul. See Exhibit C6-2 for details.
- 0.62 Jct w/ Pvt Road on left.
- 0.66 Jct w/ Pvt Road on right.
- 0.99 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 1.16 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 1.23 Jct w/ 34-7-3.2 Road on right.
- 1.41 Jct w/ 34-7-3.3 Road on left.
- 1.55 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 2.07 Jct w/ 34-7-3.1 Road on right. End road renovation.

#### 34-7-3.1 Road Seg A-F -- ASC

- MP Description
- 0.00 Jct w/ 34-7-3.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.82 Jct w/ 34-7-4.3 Road on right. Waste disposal site at end of road. Place slump material on stable area well off of road surface and outside of turnout/turn around area so not to impede maneuverability of traffic.
- 1.59 Jct w/ 34-7-4.5 Road on right.
- 1.71 Jct w/ old Pvt Road on left.
- 2.35 Jct w/ 34-7-4.0 Road on left.
- 2.57 Jct w/ Pvt Road on right.
- 2.76 Jct w/ old Pvt Road on left.
- 2.94 Jct w/ 34-7-4.1 Road on right.
- 3.79 Jct w/ 34-7-5.0 Road on left.
- 4.31 Jct w/ 34-7-5.1 Road on right.
- 4.32 Jct w/ 34-7-5.2 Road on left.
- 4.91 Jct w/ 34-7-5.3 Road on right.
- 5.29 Jct w/ 34-7-5.4 Road on left.
- 5.54 Jct w/ 34-7-7.2 Road on left.
- 5.70 Jct w/ 34-7-7.0 Road and Temp Route 7-1C on right. Unit boundary on right. See Exhibit C2-2 for Temp Route map and specifications. See Temp Route 7-1C work list data for work continuation.
- 5.74 Unit boundary on right.
- 6.20 Jct w/ 34.7-7.1 Road on right.
- 6.21 Jct w/ Temp Route 7-2 on left. End road renovation. See Exhibit C2-2 for Temp Route map and specifications. See Temp Route 7-2 work list data for work continuation.

#### 34-7-7.1 Road -- GRR

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 34-7-3.1 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.55 Unit boundary on right.
- 0.68 Unit boundary on right.
- 0.70 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 0.72 Unit boundary on right.
- 0.74 Unit boundary on right.
- 0.78 Reconstruct truck turnaround.
- 0.82 Unit boundary on right.
- 0.84 Unit boundary on right. End road renovation.

#### Hog Creek Area – See Exhibit C2-3 thru C2-5 for Maps:

34-7-22.0 Road Seg A-B -- ASC

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 35-7-11.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets

# Exhibit C8

Sale Name: Pickett Hog T.S. Page **3** of **10** 

and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.

0.27 Jct w/ 34-7-21.6 Road on left. End road renovation.

#### 34-7-21.6 Road Seg A-C -- ASC

MP	Description
----	-------------

- 0.00 Jct w/ 34-7-22.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.39 Jct w/ private road on left.
- 0.45 Jct w/ private road on right.
- 1.02 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 1.03 Jct w/ private road on left.
- 1.31 Waste disposal site on left. Place slump material on stable area well off of road surface and outside of turnout area so not to impede passing ability of traffic.
- 1.75 Jct w/ 34-7-29.2 Road on left.
- 2.49 Jct w/ Temp route 29-1CD on left. See Exhibit C2-4 for Temp Route map and specifications. See Temp Route 29-1CD and 29-1NB work list data for work continuation.
- 2.61 Unit boundary on right.
- 2.63 Unit boundary on left.
- 2.70 Unit boundary on left and right.
- 2.78 Unit boundary on right.
- 1.48 Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnout area so not to impede passing ability of traffic.
- 2.86 Reconstruct truck turnaround. End road renovation.

#### 35-7-11.1 Road Seg A -- ASC

<u>MP</u> <u>Description</u>

- 0.00 Jct w/35-7-11.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.15 Begin scarification of existing road running surface to remove rilling from uncontrolled runoff. Reshape and compact road to specifications.
- 0.32 Existing culvert at Hog Creek crossing. This creek crossing is noted for essential fish habitat (*Coho*). Contractor shall ensure all erosion and sediment control measures (BMP's) are in place per contract specifications and inspected/accepted by the Contracting Officer or Project Engineer prior to log haul. See Exhibit C6-2 for details.
- 0.57 End scarification of existing road running surface.
- 0.64 Jct w/ decommissioned road on right.
- 0.645 Cut bank slump. Reestablish ditch line and lead out ditch to drainage crossing area at beginning of the decommissioned road. Remove approx. 3 CY's of waste material to the waste disposal site listed on this road system.
- 1.14 Cut bank slump. Remove approx. 5 CY's of waste material to the waste disposal site listed on this road system.
- 1.17 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 1.23 Waste disposal site on left. Place slump material on stable area well off of road surface and outside of turnout area so not to impede passing ability of traffic.

Sale Name: Pickett Hog T.S. Page **4** of **10** 

- 1.39 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 1.42 Cut bank slump. Remove approx. 5 CY's of waste material to the waste disposal site listed on this road system.
- 1.48 Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnout area so not to impede passing ability of traffic.
- 1.49 Begin scarification of existing road running surface to remove rilling from uncontrolled runoff. Reshape and compact road to specifications.
- 1.64 Reestablish ditch line. Remove waste material to the waste disposal site listed on this road system.
- 1.66 Jct w/ 35-7-1.0 Road on right. End road renovation.

### <u>35-7-1.0 Road Seg A – NAT (with a thin aggregate traction course)</u>

## <u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-11.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Continue scarification of existing road running surface to remove rilling from uncontrolled run-off.
- 0.22 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 0.26 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 0.29 End scarification of existing road running surface.
- 0.45 Waste disposal site on right. Place material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.
- 0.46 Jct w/ 35-7-1.6 Road on right. End road renovation.

### <u>35-7-1.6 Road – NAT</u>

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-1.0 Road. Begin heavy road renovation which includes clearing and grubbing; reshaping road surface (blading, watering, and rolling); cleaning and reshaping water dips and lead-out ditches; and heavy roadside brushing and chipping.
- 0.04 Reconstruct existing water dip and lead-out ditch.
- 0.10 Reconstruct existing water dip and lead-out ditch.
- 0.26 Reconstruct existing water dip and lead-out ditch.
- 0.33 Reconstruct truck turn around area in saddle. Waste disposal site. Place any slump material on stable area well off of road surface and outside of turnaround area so not to impede drivability of traffic.
- 0.36 Jct w/ Temp Route 11-5. End road renovation. See Exhibit C2-5 for Temp Route map and specifications. See Temp Route 11-5 work list data for work continuation.

# Pickett Creek Area – See Exhibit C2-6 thru C2-9 for Maps:

### 35-7-27.3 Road Seg A-B - GRR/NAT

# <u>MP</u> <u>Description</u>

0.00 Jct w/ W. Pickett Creek Road (County) and 35-7-27.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.

Sale Name: Pickett Hog T.S. Page **5** of **10** 

- 0.06 Jct w/ 35-7-27.5 Road on right.
- 0.42 Jct w/ old spur road on left. End ASC surface and begin NAT surface. Begin heavy road renovation which includes heavy blading to reshape road surface; heavy blading to reconstruct ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; reconstructing existing water dips; and roadside brushing and chipping.
- 0.72 Jct w/ old spur roads on left and right.
- 0.73 Non-functional gate. Only gate posts remain.
- 1.24 Unit boundary on right.
- 1.45 Unit boundary on right.
- 1.52 Jct w/ 35-7-22.0 Road on right. End road renovation.

### 35-7-22.0 Road - NAT

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-27.3 Road. Begin heavy road renovation which includes clearing and grubbing; reshaping road surface (blading, watering, and rolling); and heavy roadside brushing and chipping. Remove earthen berm at entrance.
- 0.03 Jct w/ tractor swing route to Unit 22-3. Reconstruct turnaround/landing area. End road renovations.

### <u>35-7-27.2 Road Seg A – PRR</u>

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-27.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.38 Unit boundary on left.
- 0.40 Jct w/ 35-7-27.7 Road on left. End road renovation.

### <u>35-7-27.7 Road Seg A – GRR</u>

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-27.2 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.02 Jct w/ private driveway on left. Unit boundary on left.
- 0.13 Unit boundary on right.
- 0.15 Existing open gate. Keep gate open unless utilizing for equipment protection.
- 0.23 Unit boundary on right and left.
- 0.30 Jct w/ old spur road on left.
- 0.31 Unit boundary on right and left.
- 0.38 Jct w/ Operator Spur on left.
- 0.45 Unit boundary on right.
- 0.59 Unit boundary on left.
- 0.66 Regrade large landing area for truck turnaround. End road renovation.

### <u>35-7-27.0 Road Seg C-F – ASC-w/ portions of *Highly Damaged Chipseal*</u>

### <u>MP</u> <u>Description</u>

1.50 End BLM renovations at BST road surface. Begin Purchaser road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.

Sale Name: Pickett Hog T.S. Page 6 of 10

- 2.52 Jct w/ 35-7-33.4 Road on right.
- 2.62 Jct w/ 35-7-33.1 Road on left.
- 3.45 Unit boundary on left.
- 3.51 Unit boundary on left.
- 3.57 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 3.87 Jct w/ 35-7-29.0 Road on right.
- 4.29 Hydrologic point of concern at existing stream crossing. Install check dams or other approved BMP's per Exhibit C6-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
- 4.42 Jct w/ old spur road on right.
- 4.63 Jct w/ old spur road on left.
- 4.66 Private Gate to Ranch. Keep gate locked.
- 5.38 Jct w/ old spur road on left.
- 5.55 Jct w/ Temp Route 31-4/30-2 on right. End road renovation. See Exhibit C2-9 & C2-10 for Temp Route map and specifications. See Temp Route 31-4/30-2 work list data for work continuation.

### 35-7-29.0 Road Seg A - ASC-w/ portions of Highly Damaged Chipseal

### MP Description

- 0.00 Jct w/ 35-7-27.0 Road. Begin road renovation which includes cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.07 Waste disposal site on right. Place waste material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.
- 0.26 Waste disposal site on right. Place waste material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.
- 0.82 Jct w/ Pvt Road on right.
- 0.95 Jct w/ 35-7-28.0 Road on left. End road renovation.

### <u>35-7-28.0 Road Seg A-B – ASC</u>

### <u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-29.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.17 Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.
- 0.33 Unit boundary on right and left.
- 0.52 Unit boundary on left.
- 0.63 Jct w/ 35-7-29.6 Road on left.
- 0.67 Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.
- 0.68 Jct w/ Temp Route 29-4 on left.
- 0.70 Jct w/ 35-7-29.1 Road on right.
- 0.90 Unit boundary on left.
- 0.93 Unit boundary on left.
- 1.04 Unit boundary on left.
- 1.05 Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.
- 1.23 Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.

Sale Name: Pickett Hog T.S. Page **7** of **10** 

- 1.35 Jct w/ 35-7-20.0 Road on right and Pvt Barricaded Road on left. Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnout area so not to impede drivability of traffic.
- 1.38 Unit boundary on right.
- 1.52 Unit boundary on left.
- 1.60 Reconstruct turnaround/landing area. End road renovations. Waste disposal site at end of road. Place waste material on stable area well off of road surface and outside of turnaround/landing area so not to impede drivability of traffic.

### <u>35-7-29.6 Road – NAT</u>

- <u>MP</u> <u>Description</u>
- 0.00 Jct w/ 35-7-28.0 Road. Begin heavy road renovation which includes clearing and grubbing; reshaping road surface (blading, watering, and rolling); and heavy roadside brushing and chipping.
- 0.03 Unit boundary on left.
- 0.09 Reconstruct turnaround area. End road renovations. Waste disposal site on left. Place waste material on stable area well off of road surface and outside of turnaround area so not to impede drivability of traffic.

### <u>35-7-29.1 Road – PRR</u>

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-28.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
- 0.25 Unit boundary on right. Reconstruct turnaround/landing area. End road renovations. Waste disposal site on right. Place waste material on stable area well off of road surface and outside of turnaround/landing area so not to impede drivability of traffic.

### <u>35-7-20.0 Road - GRR</u>

<u>MP</u> <u>Description</u>

- 0.00 Jct w/ 35-7-28.0 Road. Begin road renovation which includes reshaping road surface (blading, watering, and rolling) and roadside brushing and chipping.
- 0.02 Unit boundary on left.
- 0.17 Unit boundary on left.
- 0.34 Waste disposal site on right. Place waste material on stable area well off of road surface and outside of turnaround/landing area so not to impede drivability of traffic.
- 0.38 Unit boundary on left.
- 0.41 Jct w/ Operator Spur on left.
- 0.45 Jct w/ Operator Spur on left.
- 0.54 Jct w/ tractor swing route to Unit 20-2. Reconstruct turnaround area. End road renovations. Waste disposal site on right. Place waste material on stable area well off of road surface and outside of turnaround area so not to impede drivability of traffic.

# **Exhibit C8** Sale Name: Pickett Hog T.S.

Page 8 of 10

# **Temporary Routes**

All Temporary Routes are NAT surface, unless noted otherwise. Upon completion of timber operations, all Temporary Routes associated with each Unit are to be decommissioned. **Decommissioning** consists of ripping the subgrade (for new construction temps only), installation of water bars, placing of native seed and mulch or slash, and constructing earthen berm or log barricade at the entrance to deter future public vehicular use.

# McKnabe Creek Area – See Exhibit C2-2 for Map:

Temp Ro	ute 7-1C
<u>STA</u>	Description
0+00	Jct w/ 34-7-3.1 Road. Begin temporary route new construction. See Exhibit C2-2 for
	additional temp route specifications.
0+25	Construct earthen berm or place log barricade upon completion of timber operations and
	decommissioning requirements per specifications and details on Exhibit C6-2.
2.05	

2+05 Construct truck turnaround area. End temp route construction.

## Temp Route 7-2

- STA Description
- 0+00 Jct w/ 34-7-3.1 Road. Begin temporary route reconstruction within existing footprint area. See Exhibit C2-2 for additional temp route specifications.
- 0+25 Construct earthen berm or place log barricade upon completion of timber operations and decommissioning requirements per specifications and details on Exhibit C6-2.
- 5+00 End reconstruction and begin new temp route construction.
- 5+20 High point in CL grade.
- 7+00 Construct sag in temp route for natural drainage path.
- 9+25 Unit 7-2 boundary line.
- 18+85 Construct truck turnaround area in saddle.
- 27+20 Construct truck turnaround area. End temp route construction.

# Hog Creek Area – See Exhibit C2-4 for Map:

# Temp Route 29-1CD

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ 34-7-21.6 Road. Begin temporary route reconstruction within existing footprint area. See Exhibit C2-4 for additional temp route specifications.
- 0+25 Construct earthen berm or place log barricade upon completion of timber operations and decommissioning requirements per specifications and details on Exhibit C6-2.
- 4+35 Jct w/ Temp Route 29-1NB on right.
- 6+50 Unit 29-1C boundary line.
- 12+95 Unit 29-1C boundary line.
- 14+55 Unit 29-1D boundary line.
- 10+85 End reconstruction and begin new temp route construction.
- 19+35 Construct truck turnaround area. End temp route construction.

### Temp Route 29-1NB

- <u>STA</u> <u>Description</u>
- 0+00 Jct w/ Temp Route 29-1CD. Begin temporary route reconstruction within existing footprint area. See Exhibit C2-4 for additional temp route specifications.
- 1+40 End reconstruction and begin new temp route construction.
- 2+60 Unit 29-1NB boundary line.
- 4+35 Construct truck turnaround area. End temp route construction.

### Hog Creek Area – See Exhibit C2-5 for Map:

Temp Route 11-5

<u>STA</u> <u>Description</u>

- 0+00 End of the 35-7-1.6 Road. Begin temporary route reconstruction within existing footprint area. See Exhibit C2-5 for additional temp route specifications.
- 0+25 Construct earthen berm or place log barricade upon completion of timber operations and decommissioning requirements per specifications and details on Exhibit C6-2.
- 12+80 Construct truck turnaround area.
- 13+30 Unit 11-5 boundary line.
- 19+20 Construct truck turnaround area. End temp route reconstruction.

### Pickett Creek Area – See Exhibit C2-8 for Map:

### Temp Route 29-4

STA	Descri	ption

- 0+00 Jct w/ 35-7-28.0 Road. Begin temporary route reconstruction. See Exhibit C2-8 for additional temp route specifications.
- 0+25 Remove existing berm and reconstruct earthen berm or place log barricade upon completion of timber operations and decommissioning requirements per specifications and details on Exhibit C6-2.
- 0+30 Unit boundary on left and right.
- 6+65 Unit boundary on left and right.
- 7+25 Install 18" temporary culvert and regrade road surface with existing road material. Remove temporary culvert and regrade to open up swale upon completion of timber harvest as a requirement of road decommissioning.
- 7+90 Unit boundary on right.
- 11+30 Construct truck turnaround area. End temp route reconstruction.

### Pickett Creek Area – See Exhibit C2-9 & C2-10 for Maps:

Temp Rou	ute 31-4/30-2
<u>STA</u>	Description
0+00	Jct w/ 35-7-27.0 Road and large landing/end haul area. Begin temporary route
	reconstruction. See Exhibit C2-9 & C2-10 for additional temp route specifications.
	Upon completion of timber operations and temporary route decommissioning requirements,
	reconstruct water dips, remove newly constructed entrance, and construct earthen berm or
	place log barricade to deter future public vehicular use.
0+50	Begin CL regrading. Existing CL grades vary from +22% to +11%. Regrade CL for an overall +17% CL grade.
4+10	End CL regrading. Unit boundary on right.
4+60	Unit boundary on left.
11 + 00	Construct truck turnaround area.
11 + 40	Unit boundary on left and right. Begin CL regrading upon completion of drill and shoot
	operations. Existing CL grades vary from +30% to the high point, then down -5% to the low
	point. Regrade CL for an overall +17% CL grade.
12 + 55	Estimated location to begin drill and shoot.
13+95	High point in CL elevation. Estimated a 20 LF vertical drop to regrade existing CL grades to
	an overall +17% CL grade. All unsuitable blasted material and debris will be end hauled to
	the large landing/end haul area called out on Exhibit C2-10.
14 + 15	Unit boundary on left and right.
15+00	Estimated location to end drill and shoot.
16+00	End CL regrading upon completion of drill and shoot operations.

15+50 Low pint in CL elevation.

Sale Name: Pickett Hog T.S. Page **10** of **10** 

- 19+25 Unit boundary on left and right (Unit 31-4).
- 24+70 High point in saddle area. Utilize for turnaround area.
- 47+25 Unit boundary on right (Unit 30-2)
- 47+80 Jct w/ Temp Route 30-2B on right.
- 48+80 Construct truck turnaround area. End temp route reconstruction.

### Temp Route 30-2B

- STA Description
- 0+00 Jct w/ Temp Route 31-4/30-2. Begin temporary route new construction. See Exhibit C2-9 for additional temp route specifications.
- 0+25 Construct earthen berm or place log barricade upon completion of timber operations and decommissioning requirements per specifications and details on Exhibit C6-2.
- 3+50 End temp route construction.

### Rogue River Loop Area – See Exhibit C2-11 for Map:

Temp Route 3-4

<u>STA</u> <u>Description</u>

- 0+00 Jct w/ Rogue River Loop Road (County). Begin temporary route new construction. See Exhibit C2-11 for additional temp route specifications.
- 0+10 Install 18" temporary culvert in existing roadside ditch line at flow-line grade. Remove temporary culvert and any road bed material from ditch line. Regrade ditch line upon completion of timber harvest as a requirement of road decommissioning.
- 1+70 Construct truck turnaround area. End temp route reconstruction.

Sale Name: Pickett Hog T.S. Page 1 of 14

# **ROAD SPECIFICATIONS**

### <u>GENERAL – 100</u>

#### 101 - Prework Conference(s):

A prework conference will be held prior to the start of any work or harvesting operations. The Purchaser shall request the conference at least 48 hours prior to the time it is to be held. The conference will be attended by the Purchaser and/or his representative(s), subcontractor(s) and/or his or their representative(s) and the Authorized Officer and/or his representative(s).

The purpose will be to review the required work, exhibits and specifications, and to establish a work schedule and a list of the Purchaser's representatives and subcontractor(s).

#### 102 - Definitions:

<u>AASHTO</u> - American Association of State Highway and Transportation Officials. Current editions of tests and specifications.

Abrasion Resistance - The ability of a fabric surface to resist wear by friction.

ACI - American Concrete Institute

<u>Apparent Opening Size (AOS)</u> - Number of the U.S. Bureau of Standard sieve (or its opening size in millimeters or inches) having openings closest in size to the diameter of uniform particles which will allow 5 percent by weight to pass through the geotextile material when shaken in a prescribed manner. This is also referred to as Equivalent Opening Size (EOS).

<u>ASTM</u> - American Society for Testing and Materials.

<u>Base Course</u> - Surfacing structure consisting of crushed gravel or stone, crushed sandstone, pitrun rock, bank or river-run gravels, etc., to provide support and, in the event no surface course is placed, the running surface for traffic load.

BLM - Bureau of Land Management

Borrow - Excavated material required for embankments and other portions of the work.

<u>Burst Strength</u> - The resistance of a geotextile material to rupture from pressure applied at right angles to the plane of the geotextile material under specified conditions, usually expressed as the amount of pressure causing failure. Rupture or burst results from tensile failure of the geotextile material.

<u>Culvert</u> - A pipe, pipe-arch, arch, or box structure constructed of metal, concrete, plastic or wood which provides an opening under the roadway primarily for the conveyance of liquids, pedestrians or livestock.

<u>Curve Widening</u> - Widening required on inside of curves to accommodate long log and equipment hauling trucks.

<u>Embankment</u> - A structure of soil, aggregate, or rock material placed on a prepared ground surface and constructed to subgrade.

## Exhibit C9 Sale Name: Pickett Hog T.S. Page 2 of 14

<u>End Haul</u> - Excavated material moved, other than by dozer, to an embankment or waste area to prevent sidecasting material outside of the road prism.

Excess Excavation - Material from the roadway in excess of that needed for construction of the designed roadway (waste).

<u>Grab Tensile Strength</u> - A modified tensile strength of a geotextile material. The strength of a specific width of geotextile material together with the additional strength contributed by adjacent areas. Typically, grab strength is determined on a 12-inch-wide strip of geotextile material, with the tensile load applied at the midpoint of the geotextile material width through 1-inch-wide jaw faces.

<u>Grading</u> - Leveling to grade, shaping and smoothing of a road subgrade; the shaping of roadside ditches as to grade and contour. In some instances includes smoothing of the cut bank.

<u>Nonwoven Geotextile Material</u> - A textile structure produced by bonding or interlocking of fibers, or both, accomplished by mechanical or chemical means.

<u>Overhaul</u> - Distance excavated material is transported in excess of the distance included in the cost for excavation.

<u>Penetration Resistance</u> - The geotextile material property determined by the force required to penetrate a geotextile material with a sharp pointed object. Initial penetration is by separating the fibers. Further penetration is essentially a tearing process.

<u>Percent Open Area</u> - The net area of a geotextile material that is not occupied by geotextile material filaments, normally determinable only for woven and nonwoven geotextile material having distinct, visible, and measurable openings that continue directly through the geotextile material.

<u>Permeability</u> - The geotextile material property which permits water to be transmitted in the longitudinal or transverse planes of the geotextile material.

Pioneer Road - Temporary construction access built along the route of the project.

<u>Piping</u> - The process by which soil particles are washed in or through pore spaces in drains and filters or poorly compacted fill/backfill material.

<u>Plans</u> - The approved drawings, or exact reproductions thereof which show the locations, character, dimensions, and details of the work to be done.

<u>Pore Size</u> - The size of an opening between geotextile material filaments; apparent opening size (AOS) is used to quantify this geotextile material property.

<u>Puncture Resistance</u> - The geotextile material property determined by the force required to penetrate a geotextile material with a blunt object. Failure results in a tearing of the geotextile material.

<u>Purchaser</u> - The individual, partnership, joint venture, or corporation contracting with the Government under the terms of a Timber Sale Contract and acting independently or through their, or its agents, employees, or contractors.

<u>Reasonably Close Conformity</u> - Compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified.

Reinforcement - Strengthening of concrete with iron bars or mesh: geotextile with geotextile material

## Exhibit C9 Sale Name: Pickett Hog T.S. Page 3 of 14

inclusion: subgrade with aggregate: etc.

<u>Roadbed</u> - The graded portion of the road within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

Road Centerline - The longitudinal center of a roadbed.

<u>Road Improvement</u> - Work done to an existing road which improves it over its original design standard.

Road Renovation - Work done to an existing road which restores it to its original design.

<u>Roadway</u> - The portion of a road within limits of construction. Usually from the toe of the fill slope to a point where the cut slope intersects natural ground line. Synonym - road prism.

<u>Scale</u> - In quarrying, consists of the removal of loose or overhanging rock adhering to the solid face after a shot or a round of shots has been fired.

<u>Scarification</u> - The process of loosening or breaking up of the surface layer of soil or road, usually to a specified depth.

<u>Separation</u> - Function of geotextile material as a partition between adjacent materials to prevent mixing of those materials.

<u>Shoulder</u> - The portion of the roadbed contiguous with the traveled way designed for accommodation of stopped vehicles, safety, and lateral support of base and surface courses.

Spalls - Flakes or chips of stone.

<u>Specifications</u> - A general term applied to all directions, provisions, and requirements pertaining to performance of the work.

<u>Specific Gravity</u> - The ratio of the density of a material to the density of water obtained by weighing known volumes of both items in air. A specific gravity less than one implies that the material will float.

<u>Structures</u> - Bridges, culverts, catch basins, retaining walls, underdrains, flumes, splash pads, downspouts, and other project features which may be involved in the work and not otherwise classified in these specifications.

<u>Subbase</u> - Reinforcement of the subgrade with large particles of pitrun rock or crushed stone. Usually confined to roads having wet subgrades or subgrades with weak support characteristics.

<u>Surface Course</u> - Top layer of a road structure consisting of finely crushed gravels or asphalt designed to provide a smooth running surface for traffic load.

Subgrade - The top surface of a roadbed upon which the traveled way and shoulders are constructed.

<u>Tensile Strength</u> - The strength shown by a geotextile material subjected to tension as distinct from torsion, compression, or shear.

<u>Tensile Stress - Strain Modulus</u> - A measure of the resistance to elongation under stress. The ratio of the change in tensile stress to the corresponding change in strain.

## Exhibit C9 Sale Name: Pickett Hog T.S. Page 4 of 14

<u>Tensile Test</u> - A test which subjects geotextile material to tensile forces and measures resultant stresses and strains.

Timber - Standing trees, downed trees, or logs which can be measured in board feet.

<u>Traveled Way</u> - The portion of the roadbed used for the movement of vehicles, exclusive of shoulders.

<u>Typical Cross Sections</u> - Cross-sectional plane of a typical roadway; showing natural ground line and designed roadway in relation to cut and fill, through cut, and through fill.

<u>Turnout</u> - Extra widening of the roadbed at appropriate intervals on single-lane roads for passing purposes.

<u>Ultraviolet (UV) Radiation Stability</u> - The ability of geotextile material to resist deterioration from exposure to sunlight.

Unaged Cloth - Cloth in condition received from the manufacturer or distributor.

<u>Woven Geotextile Material</u> - A textile structure comprising two or more sets of filaments of yarns interlaced in such a way that the elements pass each other at essentially right angles with one set of elements parallel to the geotextile material axis.

102a - Tests Used in These Specifications:

AASHTO T 11	Quantity of rock finer than No. 200 sieve.
AASHTO T 27	Sieve analysis of fine and coarse aggregate using sieves with square openings; gradation.
AASHTO T 89	Liquid limit of material passing the No. 40 sieve. Water content at which the soil passes from a plastic to a liquid state.
<u>AASHTO T 90</u>	<ul><li>Plastic limits and plasticity index of soil.</li><li>a. Plastic limit - lowest water content at which the soil remains plastic.</li><li>b. Plasticity index - range of water content, within which the material is in a plastic state. Numerical difference between the liquid and plastic limits of the soil.</li></ul>
<u>AASHTO T 96</u>	Resistance to abrasion of small size coarse aggregate by use of the Los Angeles machine.
<u>AASHTO T 99</u>	Relationship between soil moisture and maximum density of soil. Method A - 4" mold, soil passing a No. 4 Sieve. 25 blows/layer & 3 layers. Method D - 6" mold, soil passing a 19.00mm (3/4 inches) sieve. 56 blows/layer & 5 layers.
<u>AASHTO T 176</u>	Shows relative portions of fine dust or claylike materials in soil or graded aggregate.
<u>AASHTO T 180</u>	(OSHD 106-71) moisture density relationship of soil same as AASHTO T 99

Sale Name: Pickett Hog T.S. Page **5** of **14** 

proctor but uses a 10-lb rammer & 18-inch drop.

- AASHTO T 191 Sand Cone. Density of soil in place: For subgrade use 6-inch or 12-inch cone. For rock surfacing for 1-1/2-inch minus to 3-inch minus use 12-inch cone.
- AASHTO T 205 Rubber balloon. Density of soil in place. Use for compacted or firmly bonded soil.
- AASHTO T 210 Durability of aggregates based on resistance to produce fines.
- AASHTO T 224 Correction for coarse particles in the soil.
- AASHTO T 310 Determination of density of soil and soil-aggregates in place by nuclear methods.
- <u>AASHTO T 248</u> Reducing field samples of aggregate to testing size by mechanical splitter, quartering, or miniature stockpile sampling.
- <u>ASTM D 4564</u> Determination of relative density of cohensionless soils.

<u>DMSO (dimethyl sulfide</u>) - Determines volume of expanding clays in aggregates. Usually associated with marine basalts.

- 103 Compaction equipment shall meet the following requirements:
- 103f <u>Vibratory roller</u>. The drum diameter shall be not less than 48 inches, the drum width not less than 58 inches, and have a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 vibrations per minute (VPM), corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 RPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled or drawn by a vehicle of sufficient horsepower to enable the unit to travel through a loose layer of material at a speed ranging from 0.9 mile to 1.8 miles per hour, as directed by the Authorized Officer.

The towing vehicle and roller or self-propelled unit meeting the above requirements shall be considered a vibratory roller unit.

- 103g <u>Vibratory compactor</u>. Vibratory compactors shall consist of multiple or gang-type compacting units or pads with a minimum variable width of 2 feet. It shall be self-contained and capable of compacting material as required.
- 103i <u>Other.</u> Compaction equipment approved by the Authorized Officer.

### **CLEARING AND GRUBBING - 200**

- 201 This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions within the clearing limits in accordance with these specifications and conforming to the lines, grades, dimensions and typical cross sections shown on the plans.
- 202 Where clearing limits have not been posted, established by these specifications or shown on the plans, the limits shall extend 5 feet back of the top of the cut slope and 5 feet out from the toe of the fill slope.
- 202a Where clearing limits for structures have not been staked, the limits shall extend 10 feet out from the outside edge of the structure.

## **Exhibit C9** Sale Name: Pickett Hog T.S. Page **6** of **14**

- 203 Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsections 202 and 202a.
- 203b Standing trees and snags to be cleared shall be felled within the limits established for clearing, unless otherwise authorized.
- 203c Disposal of logs from private timber cleared within the limits established shall consist of decking at a location designated by the Authorized Officer.
- 204 Grubbing shall consist of the removal and disposal of stumps, roots, and other wood material embedded in the ground and protruding obstacles remaining as a result of the clearing operation in accordance with Subsections 204c and 204e. Undisturbed stumps, roots and other solid objects which will be a minimum of 3 feet below subgrades or slope surfaces or embankments are excluded.
- 204c On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.
- 204e Roots and embedded wood material shall be removed to a depth not less than 1 foot below embankment subgrades or slope surfaces.
- 205 Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections. Such debris will, however, be permitted to remain under waste material from full-bench construction on steep side slopes.
- 206 Clearing and grubbing debris shall be disposed of by scattering in accordance with Subsection 210 and as shown on the plans.
- 206a Notwithstanding Subsections 204 and 205, clearing and grubbing debris resulting from landing construction as shown on Exhibit A, shall be placed at disposal sites and shall not be covered with excavated material. Location of disposal sites are shown and listed on the plans and/or determined by the Authorized Officer.
- 208 Trees and limbs 4 inches in diameter and smaller, and rotten logs and similarly decomposed, degradable vegetation shall be broken down into pieces not larger than 4 inches in diameter and 3 feet in length, and shall be distributed in thin layers throughout those embankment portions which are 3 feet or more below subgrade elevation. The debris shall be placed in a manner to prevent bunching or nesting and be clear of culvert pipe and structures.
- 210 Disposal of clearing and grubbing debris shall be by scattering over government owned lands outside of established clearing limits in a manner acceptable to the Authorized Officer. The areas for such scattering shall have the prior approval of the Authorized Officer.
- 210a Disposal of clearing and grubbing debris on non-government property by scattering and/or piling this material outside of clearing limits will be permitted provided the Purchaser obtains a written permit from the property owner on whose property the disposal is to be made. The Purchaser shall furnish the Authorized Officer a certified copy of the permit and a written release from the property owner absolving the Government from responsibilities in connection with the disposal of debris on said property.

# Exhibit C9 Sale Name: Pickett Hog T.S. Page 7 of 14

- 212 No grading will be permitted prior to completion and approval by the Authorized Officer of the required clearing and grubbing work, except that stump grubbing may proceed with the excavation of the road prism.
- 213 No clearing or grubbing debris shall be left lodged against standing trees.

## **EXCAVATION AND EMBANKMENT - 300**

- 301 This work shall consist of excavating; overhaul, placement of embankments, backfilling, leveling, ditching, grading, insloping, outsloping, crowning and scarification of the subgrade, compaction, disposal of excess and unsuitable materials, and other earth-moving work in accordance with these specifications and conforming to the typical cross sections shown on the plans.
- 302 Excavation shall also consist of the excavation of road, temporary route, turnaround area, and landing cut sections, backfilling, leveling, grading, compaction, and other earth moving work necessary for the construction of the roadway and temporary route in accordance with these specifications and conforming to the typical cross sections shown on the plans.
- 303 Suitable material removed from the excavation shall be used in the formation of embankment subgrade, shoulders, slopes, bedding, backfill for structures, and for other purposes as shown on the plans.
- 305 Embankment construction shall consist of the placement of excavated materials, backfilling, leveling, grading, compaction, and other earth-moving work necessary for the construction of the roadway, temporary routes, turnaround areas, and landings in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 305a Material used in the construction of embankment sections shall be free of stumps, cull logs, brush, muck, sod, roots, frozen material, and other deleterious materials and shall be placed and compacted as specified.
- 305b Embankment materials shall be placed in successive parallel layers on areas cleared of stumps, cull logs, brush, sod, and other vegetative and deleterious materials, except as provided under Subsection 204. Roadway and temporary route embankments of earth material shall be placed in horizontal layers not exceeding 8 inches in depth for each lift.
- 305c Embankments formed of material containing less than 25 percent rock not larger than 8 inches in the greatest dimension shall be placed in 12-inch layers. Material containing more than 25 percent rock not larger than 12 inches in the greatest dimension shall be placed in successive layers not exceeding 18 inches in thickness. Individual rocks and boulders greater than 12 inches in diameter may be used to construct embankment layers, provided they are carefully distributed, with interstices filled with fine material to form a dense and compact mass.
- 306a Minimum compaction for each layer of temporary route embankment and selected excavation material placed at optimum moisture shall be 1 hour of continuous compacting for each 4 stations of road, or fraction thereof.

# Exhibit C9 Sale Name: Pickett Hog T.S. Page 8 of 14

- 306c Compacted roadway materials shall have a uniform density of not less than 85 percent of the maximum density as determined by AASHTO T 99, Method A or Method D.
- 306e The final roadway subgrade and turnaround areas shall be compacted to full width with compacting equipment conforming to the requirements of Subsections 103f, 103g, and 103i. Minimum compaction shall be 1 hour of continuous compacting for each 6 stations of road or a fraction of as measured along the center line of the constructed road.
- 306g All fill slopes shall be compacted to 85% of maximum density, either by walking with cat/excavator or by pressing with excavator bucket, to prevent surface erosion and raveling.
- 309 The top of cut slopes shall be rounded by blending into the adjacent terrain for a distance not less than 1 foot and not more than 3 feet beyond the top of the cut. Rounding shall be performed in soils that can be shaped without ripping or blasting.
- 314 When heavy clays, muck, clay shale, or other deleterious material for forming the temporary route roadbed is encountered in cuts at subgrade, it shall be excavated to a minimum depth of 2 feet below the subgrade elevation and the excavated area backfilled with a selected excavated material approved by the Authorized Officer. The backfill material shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density in accordance with the requirements of Subsection 306g. Unsuitable material shall be disposed of as directed by the Authorized Officer.
- 320 Ditches shall conform to the slope, grade, dimensions, and shape of the required cross section shown on the plans. Roots, stumps, rocks, and other projections shall be removed to form smooth, even slopes.
- 321 Excess excavated, unsuitable, or slide materials shall not be disposed of on areas where the material will encroach on a stream course or other body of water. Such materials shall be end dumped and disposed of as directed by the Authorized Officer.
- 321c End-dumping will be permitted for the placement of excess materials under Subsection 321 in designated disposal areas or within areas approved by the Authorized Officer. Watering, rolling, and placement in layers are not required. Materials placed shall be sloped, shaped, and otherwise brought to a visible condition acceptable to the Authorized Officer.
- 324 Excavated material shall not be allowed to cover boles of standing trees to a depth in excess of 2 feet on the uphill side.
- 328 The Purchaser shall adopt methods and procedures in using explosives, which will prevent damage to adjacent landscape features, and which will minimize scattering rocks and other debris outside the road prism.
- 328a The Purchaser shall establish and be responsible for blasting techniques and shall furnish the Authorized Officer, prior to starting drilling operations, a blasting plan specifying drill-hole diameter, drill-hole spacing, depth of drilling, type of explosive to be used, loading pattern, sequence of firing, the location where the plan is to be used, and other relevant data. Acceptance of the drilling and blasting plan does not relieve the Purchaser of responsibility

Exhibit C9 Sale Name: Pickett Hog T.S. Page 9 of 14

or liability for the results of the blasting.

### **PIPE CULVERTS – 400**

- 401 This work shall consist of furnishing and installing <u>temporary</u> pipe culverts in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 402 The <u>temporary</u> pipe culverts shall be installed on the following temp routes and locations:

Temp Route No.	STA
Temp Route 29-4	7+25
Temp Route 3-4	0+10

- 403 Grade temporary culverts to match existing flow lines and ditch lines.
- 405e High-density-polyethylene or poly pipe for temporary culverts 12-inch through 36-inch diameter shall meet the requirements of AASHTO M 294.
- 408 Temporary pipe culverts shall be placed on the pipe bed starting at the downstream end with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points. Connect temporary poly pipe so as to provide the circumferential and longitudinal strength necessary to preserve the pipe alignment, prevent separation of the pipe sections, and minimize infiltration of fill material.
- 410 Temporary pipe shall be unloaded and handled with reasonable care. If the Authorized Officer determines any structure is damaged to the extent that it is unsuitable for use in the road construction, it shall be replaced at the Purchaser's expense.
- 412 Where ledge rock, boulders, soft, or spongy soils are encountered, they shall be excavated a minimum of 12 inches below the invert grade for a width of at least one pipe diameter or span on each side of the pipe and shall be backfilled with selected granular or fine readily compactable soil material.
- 416 Side-fill material for pipe culverts shall be placed within 1 pipe diameter, or a minimum of 2 feet, of the sides of the pipe barrel, and to 1 foot over the pipe with fine, readily compactable soil or granular fill material free of excess moisture, muck, frozen material, roots, sod, or other deleterious or caustic material and devoid of rocks or stones of sizes which may impinge upon and damage the pipe or otherwise interfere with proper compaction.
- 417 For pipe culverts, side-fill material conforming to the requirements of Subsection 416 shall be placed and compacted under the haunches of the pipe, and shall be brought up evenly and simultaneously on both sides of the pipe to 1 foot above the pipe, in layers not exceeding 6 inches in depth and 1 pipe diameter/span, or a minimum of 2 feet in width each side of, and adjacent to, the full length of the

# **Exhibit C9** Sale Name: Pickett Hog T.S. Page **10** of **14**

pipe barrel. Each layer shall be moistened or dried to a uniform moisture content suitable for maximum compaction and immediately compacted by approved hand or pneumatic tampers until a uniform density of 85 percent of the maximum density.

- 418 Side fills beyond the compaction limits specified under Subsection 417 shall be compacted as specified under Section 300.
- 419 The pipe culverts after being bedded and backfilled as required by these specifications shall be protected by a 2-foot cover of fill before heavy equipment is permitted to cross the drainage structures. Removal of the protection fill shall be as directed by the Authorized Officer.
- 428 The Purchaser shall be responsible for removal and disposal of the temporary culverts in a legal manner, and for any fees required. The Purchaser shall remove the temporary culverts from the project site upon completion of timber extraction and prior to acceptance of road decommissioning.
- 429 Dewatering: Keep excavation site dewatered so that installation of culverts are completed under dry conditions. Dispose of excess water by using pumping or natural drainage ways near the site and in a manner that will avoid damage to adjacent property. Provide for downstream water flow with no more that 10% increase in natural stream turbidity due to transport of excavated material or sediment during construction.

## **RENOVATION OF EXISTING ROADS - 500**

- 501 This work shall consist of reconditioning and preparing the roadbed and shoulders, minor excavation and/or embankment, cleaning and shaping drainage ditches, trimming vegetation from cut and embankment slopes, and cleaning and repairing drainage structures of existing roads in accordance with these specifications. This work shall include the removal and disposal of slide material in accordance with these specifications.
- 502 The existing road surface shall be scarified to its full width and to a depth of 6 inches, or more where necessary, to eliminate surface irregularities, bladed, shaped, watered, and rolled to the lines, grades, dimensions, and typical cross sections shown on the plans at the following location(s):

Road No.	From M.P.	To M.P.
35-7-11.1(A)	0.15	0.57
	1.49	1.66
35-7-1.0(A)	0.00	0.29
35-7-1.6	0.00	0.36
35-7-27.3(B)	0.42	1.52
35-7-22.0	0.00	0.03
35-7-29.6	0.00	0.09

# **Exhibit C9** Sale Name: Pickett Hog T.S. Page **11** of **14**

- 502b Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.
- 503 Debris from slides/slumps shall be disposed of at approved locations as directed by the Authorized Officer.
- 504 Existing road surfaces shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width with equipment conforming to requirements of Subsections 103f, 103g, and 103i.
- 504a Minimum compaction required shall be 1 hour of continuous rolling for each 4 stations of road, or fraction thereof, as measured along the centerline per layer of material.
- 506 The inlet end of all existing drainage structures shall be cleared of vegetative debris and boulders that obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of all pipe structures shall be cleared of rock and vegetative obstructions which will impede the structure's designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.
- 508 Vegetation within the drainage ditches of existing roads shall be removed by cutting and disposed of in accordance with Subsection 2100 of these specifications.
- 509 The finished grading shall be approved in writing by the Authorized Officer 2 days prior to surfacing operations. The Purchaser shall give the Authorized Officer 3 days' notice prior to final inspection of the grading operations.

### WATERING - 600

- 601 This work shall consist of furnishing and applying water required for the compaction of roadbeds, backfills, surface courses, finishing and reconditioning of existing roadbeds, laying dust, or for other uses in accordance with these specifications.
- 602 Water, when needed for compaction or laying dust, shall be applied at the locations, in the amounts, and during the hours as directed by the Authorized Officer. Amounts of water to be provided will be the minimum needed to properly execute the compaction requirements in conformance with these specifications, and for laying dust during work periods.
- 603 Water trucks used in this work shall be equipped with a distributing device of ample capacity and of such design as to ensure uniform application of water on the road bed.
- 605 The Purchaser shall secure the necessary water permits and pay all required water fees for use of water sources selected by the Purchaser and approved by the Authorized Officer.

### **EROSION CONTROL – 1700**

1701 - This work shall consist of measures to control soil erosion or water pollution during the construction operation through the use of berms, dikes, dams, sediment basins, fiber mats, netting, gravel,

# **Exhibit C9** Sale Name: Pickett Hog T.S. Page **12** of **14**

mulches, grasses, slope drains, and other erosion control devices or methods in accordance with these specifications and conforming to the lines, grades, dimensions and typical details shown on the plans.

- 1708a Road segments not completed during dry weather periods shall be winterized, by providing a welldrained roadway using water bars, maintaining drainage, and performing additional measures necessary to minimize erosion and other damage to the roadway, as directed by the Authorized Officer. Portions of roads not having surface rock in place will be blocked or barricaded to prevent vehicular traffic.
- 1711 The Purchaser shall construct sediment check dams or other approved erosion control devices conforming to the requirements, locations, and details shown on the respective exhibits and on the plans.

### SOIL STABILIZATION - 1800

- 1801 This work shall consist of seeding and mulching on designated cut, fill, disposal, and special areas in accordance with these specifications and as shown on the plans. This work is required for road acceptance under Section 18 of this contract.
- 1802a Soil stabilization work consisting of seeding and mulching shall be performed on new road construction, temporary route construction, road renovation, disturbed areas, and disposal sites in accordance with these specifications.
- 1803 Soil stabilization work as specified under Subsection 1802a shall be performed during the following seasonal periods:

From: September 15 <sup>th</sup>	To: November 15 <sup>th</sup>
----------------------------------	-------------------------------

If soil stabilization of disturbed areas is not completed by the specified fall date, the Purchaser shall treat disturbed areas and then complete the requirements of Soil Stabilization 1800 the next construction season.

The Authorized Officer may modify the above seasonal dates to conform to existing weather conditions and changes in the construction schedule.

- 1803a The Purchaser shall begin soil stabilization work within 10 days of the starting work date when notified by the Authorized Officer.
- 1804 The BLM shall provide native grass/forb seed or other plant materials (plugs, waddles, bulbs, etc.) for this project.
- 1806a Additional soil stabilization work consisting of seeding and mulching may be required at the option of the Authorized Officer. Providing the additional stabilization is not due to Purchaser negligence as specified in Section 12 of the contract, a reduction in the total purchased price shall be made to offset the cost of furnishing and applying such additional stabilization material. Cost shall be based upon the unit price set forth in the current BLM Timber Appraisal Cost Schedule.

- 1808 Mulch materials conforming to the requirements of Subsection 1808a shall be furnished by the Purchaser in the amounts specified under Subsection 1811 and applied in accordance with Subsection 1812.
- 1808a Straw mulch shall be certified weed free from commercial grain fields and native grass fields. Straw mulch shall be from oats, wheat, rye, or other approved grain crops and shall be free from, mold, or other objectionable material. Straw mulch shall be in an air-dry condition and suitable for placement.
- 1809 Mulch material shall be delivered to the work area in a dry state. Material found to be wet will not be accepted. Material to be used in the mulching operation may be stockpiled along the road designated for treatment provided that it is maintained in a dry state and has the approval of the Authorized Officer.
- 1811 The Purchaser shall apply to the areas designated for treatment as specified under Subsections 1802a and 1806a, Government furnished native grass seed and Purchaser furnished mulch material at the following "Two Stage Dry" rate of application:

Native Grass Seed	10 lbs./acre
Mulch (weed free)	2,000 lbs./acre

The above proportion and application rate are subject to adjustment by the Authorized Officer during the application operation.

1812 - The Purchaser shall furnish and apply to the area designated for treatment as shown on the plans and as specified under Subsections 1802a and 1806a, native grass seed and mulch material at the application rate to be determined by the Authorized Officer based on visual observation of trial applications.

Mulches shall be spread/placed in treatment areas to a depth of 2 inches to allow seed germination or as directed by the Authorized Officer. Treatment area will be covered evenly and completely. Mulch can be broadcast onto the soil surface by hand or with hand/mechanical operated spreaders.

- 1814 The Purchaser may reduce the application rate on partially covered slopes and refrain from application on areas already well stocked with grass or on rock surfaces as determined by the Authorized Officer.
- 1815 The seed and mulch materials shall be placed by the dry method in accordance with the requirements set forth in Subsection 1815b.
- 1815b Dry Method Blowers, mechanical seeders, seed drills, landscape seeders, cultipaker seeders, or other approved mechanical seeding equipment may be used when seed are to be applied in dry form.
- 1819 The Purchaser shall notify the Authorized Officer at least 3 days in advance of date he intends to commence the specified soil stabilization work.

# **Exhibit C9** Sale Name: Pickett Hog T.S. Page **14** of **14**

- 1821 Mulch that collects at the end of culverts or accumulates to excessive depths on the slopes shall be evenly spread by hand methods, as directed by the Authorized Officer.
- 1824 Twine, rope, sacks, and other debris resulting from the soil-stabilization operations shall be picked up and disposed of to the satisfaction of the Authorized Officer.

## **ROADSIDE BRUSHING - 2100**

- 2101 This work shall consist of the removal of vegetation from the road prism variable distance, and inside curves in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the Roadside Brushing Detail Sheet of this exhibit, at designated locations as shown in the plans.
- 2102 Roadside brushing shall be performed manually with hand tools, including chain saws.
- 2103 Vegetation cut less than 6 inches in diameter when measured at DBH shall be cut to a maximum height of 1 inch above the ground surface or above obstructions such as rocks or stumps on cut and fill sloped and all limbs below the 1 inch area will be severed from the trunk.
- 2103a Vegetation shall be cut and removed from the road bed between the outside shoulders and the ditch centerline and such vegetation shall be cut to a maximum height of 1 inch above the ground and running surface. Limbs below the 1 inch area will be severed from the trunk. Sharp pointed ends will not be permitted within road surface, including shoulders and turnout areas. Cuts shall be parallel to the ground line or running surface.
- 2104 Trees in excess of 6 inches in diameter at DBH shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of 14 feet above the running surface of the roadway on cut and fill slopes, within the road prism-variable distance. Limbs shall be cut to within 1 inch of the trunk to produce a smooth vertical face. Removal of trees larger than 6 inches in diameter for sight distance or safety may be directed by the Authorized Officer.
- 2105 Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within 14 feet in elevation above the running surface shall be cut, to within 1 inch of the trunk to produce a smooth vertical face.
- 2106 Vegetative growth capable of growing 1 foot in height or higher shall be cut, within the road prismvariable distance or as directed by the Authorized Officer.
- 2107 Inside curves shall be brushed out for a sight distance of 200 feet chord distance or a middle ordinate distance of 25 feet, whichever is achieved first. Overhanging limbs and vegetation in excess of 1 foot in height, shall be cut within these areas.
- 2110 Vegetation 6 inches and smaller in diameter shall be chipped. Chips are to be scattered downslope from the roadway. **Chips are never allowed on the road surface.**
- 2117 Traffic warning signs shall be required at each end of the work area. Signs shall meet the requirements of the current version of the Manual on Uniform Traffic Devices.

# SPECIAL PROVISIONS

- 1. Before the initial start of road renovation, construction, reconstruction, or surfacing operations, or after a shutdown of 7 or more days, the Purchaser, or the Purchasers Representative, shall notify the Authorized Officer 48 hours in advance of the date they plan to begin operations. The Purchaser shall also notify the Authorized Officer if they intend to cease operations for any period of 30 or more days.
- 2. The Purchasers Representative/Contractor shall protect, and is responsible for, any damage to existing telephone lines, transmission lines, fiber optic lines, fences, ditches, and other existing improvements as required in Section 14. Damage to utilities and existing improvements shall be promptly paid for or repaired to a condition which is, in the opinion of the Authorized Officer and the governing utility company, as good or better condition than just prior to such damage occurring.
- 3. All disturbed soil shall be seeded and mulched. The Purchasers Representative/Contractor shall apply native grass seed and Certified Weed Free straw mulch for soil stabilization operations. BLM will furnish native grass seed, **if available**. Acquiring certified weed free straw mulch is the responsibility of the Purchasers Representative.
- All stream channel culverts and inlets shall be cleared and cleaned between June 15<sup>th</sup> and September 15<sup>th</sup> in accordance with Oregon Department of Fish and Wildlife (ODFW) in-stream work period guidelines.
- 5. Ensure that all large wood is retained in the stream channel during culvert cleaning activities by moving logs which had accumulated on the upstream side of a culvert to the downstream side of the culvert.
- 6. Roadside brushing cutting limits beneath or adjacent to bridges shall extend <u>8 feet</u> horizontally from each side of the outermost projected line of the bridge including abutments, curbs, rails or decks. Cut brush and trees shall be removed from beneath the bridge and from the stream channel.
- 7. While roadside brushing, there shall be no scarring or any other damage of the tree trunk or bole allowed. All debris resulting from roadside brushing activities shall be scattered downslope. Use of Excavators for brush removal will be at the discretion of the Authorized Officer. All culvert inlets and outlets shall be brushed for a radius of 4 feet.
- 8. While roadside brushing through private industry lands, conifer trees at the edges of the cleared area (see cutting limit, Exhibit C7) shall have the branches pruned rather than being felled.
- 9. All stumps, designated by the Authorized Officer, which would interfere with normal blading and road renovation operations (including turnouts), shall be removed in such a way as to not cause damage to the drainage ditch or the road bed. Stumps that are ground-down, shall be ground to a minimum of 3 inches below existing grade.

Exhibit D1 Sale Name: Pickett Hog T.S. Page 1 of 8

# **ROAD MAINTENANCE SPECIFICATIONS**

General road maintenance specifications are designated by numeric symbols according to the type of work performed as follows:

SECTION	DESCRIPTION
3000	General
3100	Operational Maintenance
3200	Seasonal Maintenance
3300	Final Maintenance
3400	Other Maintenance
3500	Decommissioning

Exhibit D1 Sale Name: Pickett Hog T.S. Page 2 of 8

# **GENERAL - 3000**

- 3001 The Purchaser shall be required to maintain all roads listed and/or as shown in Exhibit D of this contract in accordance with Sections 3000, 3100, 3200, 3300, 3400, and 3500 of this exhibit.
- 3003 The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.
- 3004 The Purchaser shall be responsible for providing timely maintenance and cleanup on any road(s) with logging units substantially completed prior to moving operations to other roads. The maximum length of non-maintained or non-cleanup of the road prism shall not exceed the sum of one (1) mile at any time. Release of maintenance requirements may be granted, upon written request, when the conditions specified in Sections 3300 and 3400 are met satisfactorily.

# **OPERATIONAL MAINTENANCE - 3100**

- 3101 The Purchaser shall blade and shape the road surface and shoulders with a motor grader. Banks shall not be undercut. Back blading with tractors or similar equipment will be allowed only around landings and other areas when approved by the Authorized Officer.
- 3104 The purchaser shall perform other road cleanup including removal of debris, fallen timber, bank slough, and slides which can practicably be accomplished by a motor grader, rubber tired front end bucket loader, rubber tired backhoe or comparable equipment, and by the use of hand tools.
- 3104a Removal of bank slough and slide material includes placement of material at the nearest designated, suitable disposal site where material cannot erode into streams, lakes, or reservoirs or cause undue damage to road fill slopes which have been planted or mulched to control soil erosion as directed by the Authorized Officer.
- 3105 The Purchaser shall be responsible for maintaining normal flow in drainage structures. This includes cleaning out drainage ditches, catch basins, clearing pipe inverts of sediment and other debris lodged in the barrel of the pipe, and maintaining water dips and water-bars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.
- 3106 The Purchaser shall be responsible for repair and replacement of all materials eroded from road shoulders and fill slopes, up to fifteen station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the Purchaser. Prior to repair and replacement of eroded material exceeding fifteen station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, borrow source and method of repair. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work based upon current BLM Road Cost Guide. Adjustments in purchase price for completed work shall be made as necessary and no less than once per

Exhibit D1 Sale Name: Pickett Hog T.S. Page **3** of **8** 

year when actual work is ongoing.

3107 - The Purchaser shall cut or trim trees and brush which obstructs vision or prevents the safe passage of traffic along the traveled way when directed by the Authorized Officer.

The Purchaser shall also cut trees or brush encroaching on the road prism that are a result of his activities or winter damage during the contract period. Disposal of such vegetative material shall be in accordance with Section 2100 of Exhibit C.

- 3108 The Purchaser shall avoid fouling gravel or bituminous surfaces. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway. Skidding of logs on the roadway in or outside designated logging units is not authorized without prior written approval by the Authorized Officer. Repair required caused by such skidding activity is not considered maintenance and shall be repaired at the Purchaser's expense.
- 3108a The Purchaser shall perform logging operations on gravel roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. The Purchaser shall furnish gravel for necessary repairs at designated locations. Repair of the road(s) is not considered maintenance and shall be repaired at the Purchaser's expense.

# **SEASONAL MAINTENANCE - 3200**

- 3201 The Purchaser shall perform preventative maintenance at the end of Purchaser's hauling each season and during non-hauling periods which occur between other operations on the contract area. This includes requirements specified in Section 3100.
- 3202 The purchaser shall perform and complete maintenance specified in Sections 3000, 3100, and 3200 on all roads maintained by him, prior to October 1<sup>st</sup> of each year, except as specified in Subsection 3203, after initial commencement of construction or logging operations. Thereafter, all roads shall have continuous preventive maintenance and road cleanup until suspension of seasonal operations. This includes all roads used and not used during the proceeding operating seasons.
- 3203 The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any roads located in an area separate from the area where logging activities will resume.
- 3204 The Purchaser shall be responsible for performing post storm inspections and maintenance during the winter season to minimize erosion and potential road or watershed damage.

# FINAL MAINTENANCE - 3300

3301 - The Purchaser shall complete final maintenance and/or damage repairs on all roads used under terms of their contract within thirty 30 calendar days following the completion of hauling and in accordance with Section 16(b) of this contract. This work shall include any maintenance and/or damage repairs specified in Sections 3000, 3100, and 3200 necessary to meet the conditions specified in Subsection 3002 and shall be executed in accordance with Subsection 3302 of this section.

# Exhibit D1 Sale Name: Pickett Hog T.S. Page **4** of **8**

The Authorized Officer may grant acceptance of Purchaser's maintenance responsibility in part where certain individual roads or road segments are no longer of any use to the Purchaser's remaining removal operations; providing that all contract requirements as specified under Section 16(b), Special Provisions, and Sections 3000, 3100, 3200 and 3300 of the maintenance specifications have been completed and a relinquishment of cutting and removal rights on cutting units tributary to these roads is signed by the Purchaser. Request for partial acceptance must be submitted in writing by the Purchaser.

3302 - The Purchaser shall perform final road maintenance only when weather or soil moisture conditions are suitable for normal maintenance equipment operations as determined by the Authorized Officer.

If final maintenance is delayed after the date required in Subsection 3301 of this contract by adverse soil moisture or unsuitable equipment operating conditions, the Purchaser will be notified by the Authorized Officer when soil moisture and equipment operating conditions are suitable. The Purchaser shall then be required to complete final maintenance within 30 days.

# **OTHER MAINTENANCE - 3400**

- 3401 The Purchaser shall repair any damage to road surfaces that was specified under Subsection 3108 and 3108a. This repair includes restoring the roadway to the designed standard and replacement of surfacing with approved surface material. This repair is not limited to use of equipment specified in Subsection 3104.
- 3403 The Purchaser shall be required to furnish and apply non-saline water during dry hauling periods, when directed by the Authorized Officer, for the purpose of laying dust and to prevent loss of surface material. The first application of water shall be made at the rate of one- half gallon per yd<sup>2</sup> of road surface traveled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds<sup>3</sup> of rock hauled. Subsequent watering may be done at a rate less than one-half gallon per yd<sup>2</sup> when a specified lesser rate is approved by the Authorized Officer.

The Purchaser shall secure any necessary water permits and pay all required water fees for use of the water sources approved by the Authorized Officer.

- 3404 The Purchaser may at his option and expense substitute lignin sulfonate or magnesium chloride for water on any or all road segments listed in the contract provided that written approval is received from the Authorized Officer. Such authorization shall include the approval of product specifications for the application of the product to be used. Multiple applications may be required to maintain the conditions specified in Subsection 3403.
- 3405a Additional lignin sulfonate or magnesium chloride dust palliative may be required at the option of the Authorized Officer when the functional qualities of the dust palliative have been reduced or become ineffective due to third party damage, rain, or other events not under the control of the purchaser.

# Exhibit D1 Sale Name: Pickett Hog T.S. Page **5** of **8**

If additional dust palliative is required due to events controlled by the Purchaser, such as split hauling season, the Purchaser shall furnish and place such material at his own expense.

- 3405b The Purchaser shall notify affected residents along the roads to be treated of the planned application of lignin sulfonate or magnesium chloride dust palliatives at least 3 days prior to the work by posting warning signs at key intersections to alert users that the road is being treated. All signs shall be removed by the Purchaser within thirty days of treatment.
- 3406 Prior to the application of lignin sulfonate or magnesium chloride dust palliative, the roadbed shall be bladed and shaped to remove surface irregularities and excess loose material. The prepared surface must be visibly moist and drying.
- 3406b A light application of water to promote penetration shall be made in advance of the application of the specified dust palliative to allow the drying process to begin and to eliminate any saturated surface conditions.
- 3406c The prepared roadbed shall be approved by the Authorized Officer prior to application of the specified dust palliative.
- 3407 The Purchaser shall furnish in duplicate, commercial certification signed by vendor of compliance with the lignin sulfonate or magnesium chloride dust palliative material requirements specified under Subsection 3412b and 3412c. Commercial certification includes the date, identification number of truck or trailer, net mass, and brand name with each shipment. Also provide the net volume and specific gravity at 60°F, percent solids by mass, and PH.
- 3408 Dust palliatives shall be applied with standard commercial distribution equipment operated in a manner that the material is uniformly applied on variable widths of surface at controlled rates.
- 3409 The Purchaser shall notify the Authorized Officer a minimum of 3 days in advance of application of required dust palliative.
- 3410 The Purchaser shall submit an application schedule for all dust palliative work to the Authorized Officer for approval. All work shall be in accordance with the approved plan.
- 3411 Required lignin sulfonate or magnesium chloride dust palliative shall only be applied when the atmospheric temperature is 45°F and steady or rising and when the weather is not foggy or rainy. Do not apply dust palliative if rain is anticipated within 24 hours of application or when the ground is frozen.
- 3412 The Purchaser shall apply to the prepared roadbed, a lignin sulfonate or magnesium chloride dust palliative conforming to the material requirements of Subsection 3412b and 3412c. The rate of application shall be 0.5 gallons per yd<sup>2</sup> surface. A second application at the rate of 0.3 gallons per yd<sup>2</sup> shall be applied at a time designated by the Authorized Officer.

Applied materials not penetrating the road surface shall be blade mixed with additional water into the top 1 to  $1\frac{1}{2}$  inches of the surfacing at the Contractor's expense.

## Exhibit D1 Sale Name: Pickett Hog T.S. Page 6 of 8

3412a - If required, the lignin sulfonate or magnesium chloride shall be field diluted within the application vehicle and be circulated at least 5 minutes to assure mixing. An air gap shall be provided between any water source and the materials being diluted. Accidental spills shall be contained to prevent entry in water courses or ponded water. The surface of adjacent structures and trees shall be protected from spattering or marring.

A wetting agent may be used in addition to the certified compound or mixed with the road surface preparation watering. A mix of less than 1:6000 is recommended.

Water used to dilute lignin sulfonate or magnesium chloride concentrate shall be clean and free of oil, salt, acid, alkali, vegetable matter, or any other substance that contaminates the finished product.

3412b - Specifications for Lignin Sulfonate:

Lignin sulfonate shall be the chemical residue produced as a byproduct of the acid sulfite pulping process and supplied as a water solution. The base cation shall be ammonia, calcium, or sodium. The product shall be water soluble to allow field dilution. Dilute with water until the mixture contains a minimum 48 percent concentration with the following properties:

Solids	50%
Specific gravity	1.25
PH, AASHTO T289	4.5 min.

Ensure that the material does not exceed the following chemical constituents:

	$\mathcal{O}$
phosphorous	25.00 ppm
cyanide	0.20 ppm
arsenic	5.00 ppm
copper	0.20 ppm
lead	1.00 ppm
mercury	0.05 ppm
chromium	0.50 ppm
cadium	0.20 ppm
barium	10.00 ppm
selenium	5.00 ppm
zinc	10.00 ppm
	11

Apply when the ambient air temperature is 45° F or above.

3412c - Specifications for Magnesium Chloride:

The material shall consist of a brine containing 29 to 35 percent magnesium chloride by weight and 62 to 72 percent water by weight. Ensure that the material does not exceed the following chemical constituents:

phosphorous	25.00 ppm
cyanide	0.20 ppm
arsenic	5.00 ppm
copper	0.20 ppm

## Exhibit D1 Sale Name: Pickett Hog T.S. Page 7 of 8

lead	1.00 ppm
mercury	0.05 ppm
chromium	0.50 ppm
cadmium	0.20 ppm
barium	10.00 ppm
selenium	5.00 ppm
zinc	10.00 ppm
sulfate	4.3 percent maximum
nitrate	5.0 percent maximum.

Concentration specifications for Magnesium chloride:

Magnesium chloride by mass	28% minimum
Water by mass	72% maximum
Specific gravity, AASHTO T 227	1.290 to 1.330

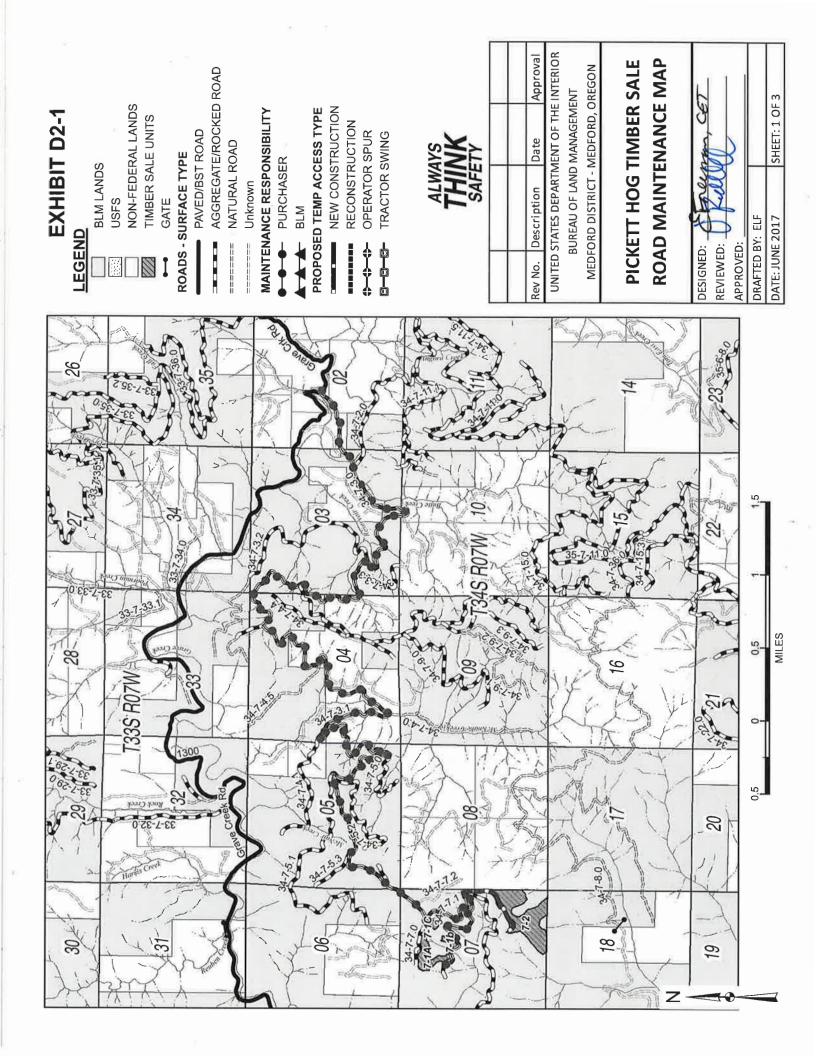
Apply when the ambient air temperature is  $45^{\circ}$  F or above.

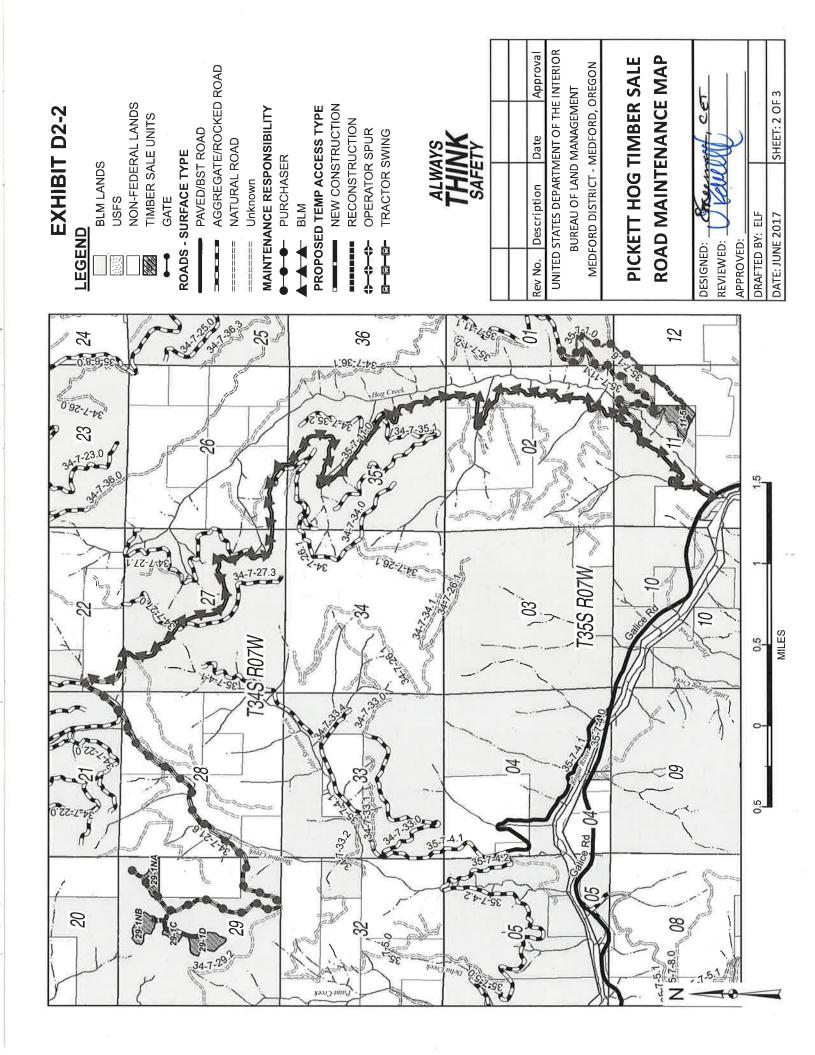
# **DECOMMISSIONING - 3500**

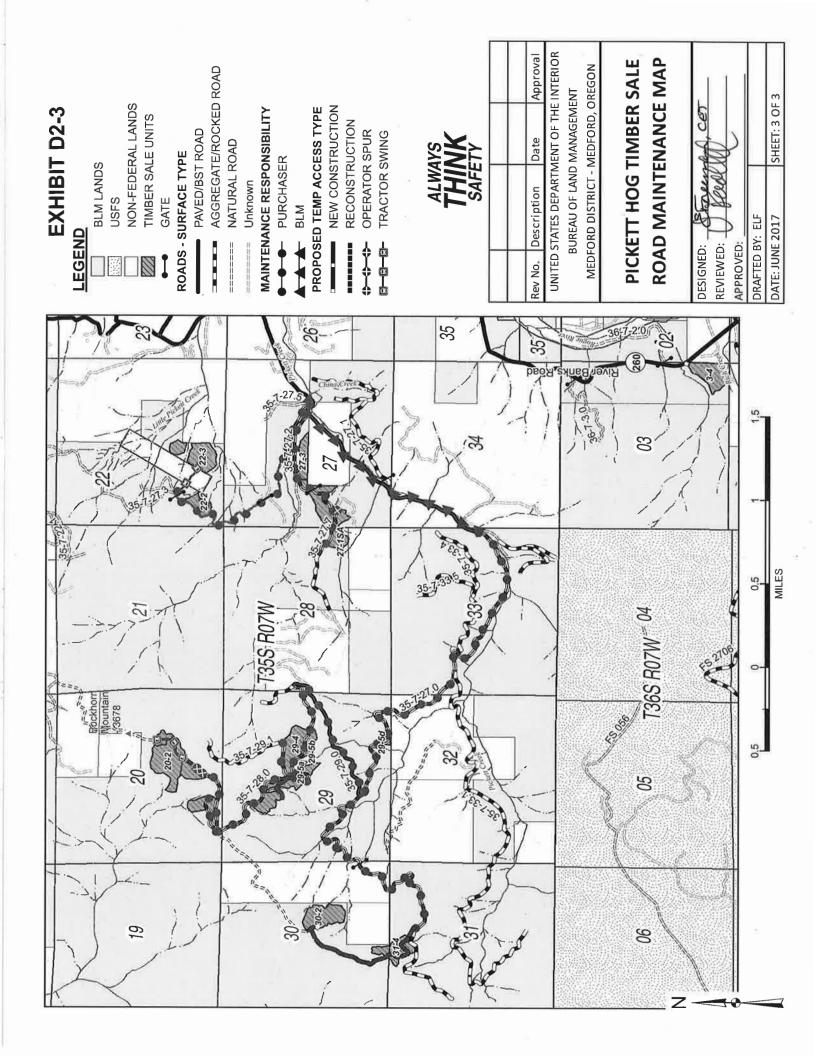
- 3501 Decommissioning shall consist of removing draw crossings by excavating fill material and placing in locations to form partially recontoured roadway sections. Work includes ripping, installing water bars, placement of slash and placement of soil stabilization material, and blocking road from access by vehicles. This work is required for road acceptance under Section 18 of this contract.
- 3503 Decommissioning shall be performed on all temporary routes in accordance with these specifications.
- 3504 Decommissioning work shall be completed after timber extraction, logging activities, and after road use.
- 3505- Where draw crossing fill material is to be excavated and removed, the finished bottom of draw profile shall be re-established to its original channel grade and resulting adjacent banks shall be re-established to their original backslope ratios.
- 3506 Stockpiled slash shall be used to protect exposed areas created by the Purchaser's decommissioning operations described in these sections. Slash shall be uniformly spread and placed without bunching. The operation shall produce a dense, uniform mat. All slash stockpiles created by the purchaser shall be utilized for decommissioning operations. Where slash is not available or no longer remaining, exposed soil areas shall be stabilized in accordance with section 1800 Soil Stabilization.
- 3508 Protect areas mulched and treated with slash placement from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.
- 3509 Access shall be blocked with barricades as shown on the typical detail sheet and at locations listed on Exhibit C14.

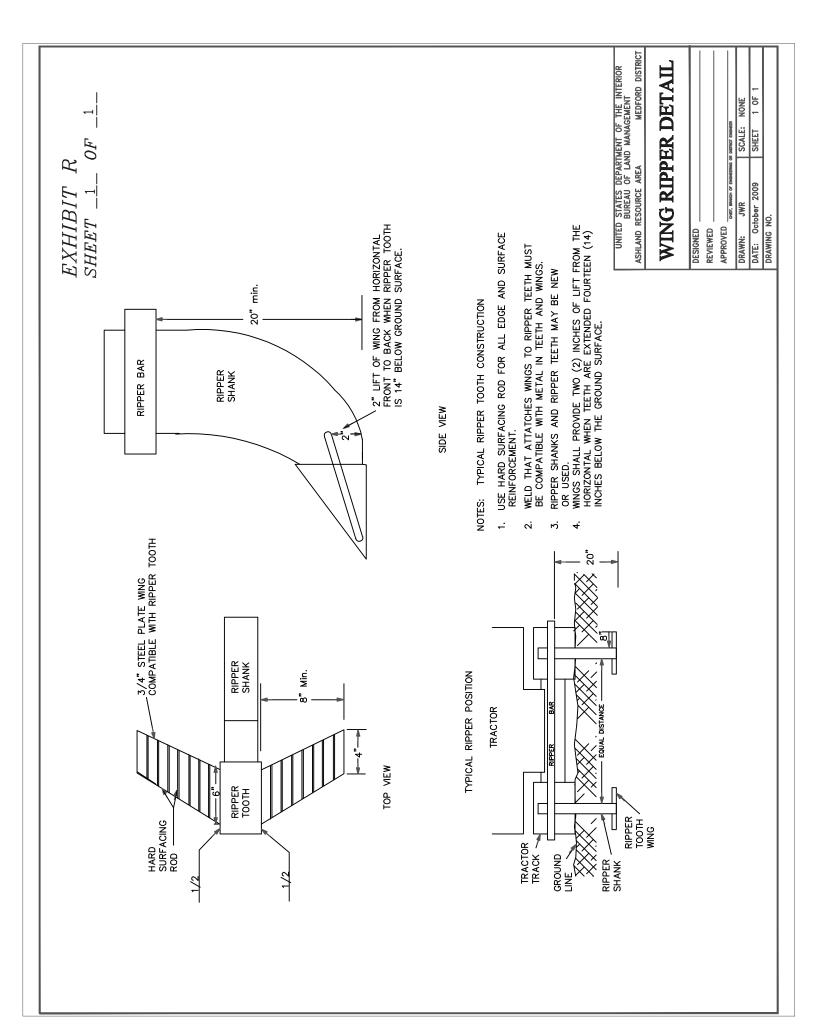
# Exhibit D1 Sale Name: Pickett Hog T.S. Page 8 of 8

- 3511 Ripping and water barring shall be done on all temporary routes, disturbed areas, and landings.
- 3512 Draw crossing fill material shall be excavated and placed in designated locations for use in accomplishing partial recontouring. Placement of materials shall produce well-drained, uniform recontoured terrain. The finished draw excavation shall meet requirements of section 2605.
- 3513 Water bars shall be installed across full width of temporary routes. Water bars shall be constructed as shown on Exhibit C8.
- 3514 Protection of exposed surfaces shall be accomplished by placement of soil stabilization material in accordance with section 1800 and placement of slash described in section 2606 on temporary routes, disturbed areas, landings, cut banks, fill slopes and other areas disturbed by the purchaser's decommissioning operations in accordance with these specifications and as shown in the plans.



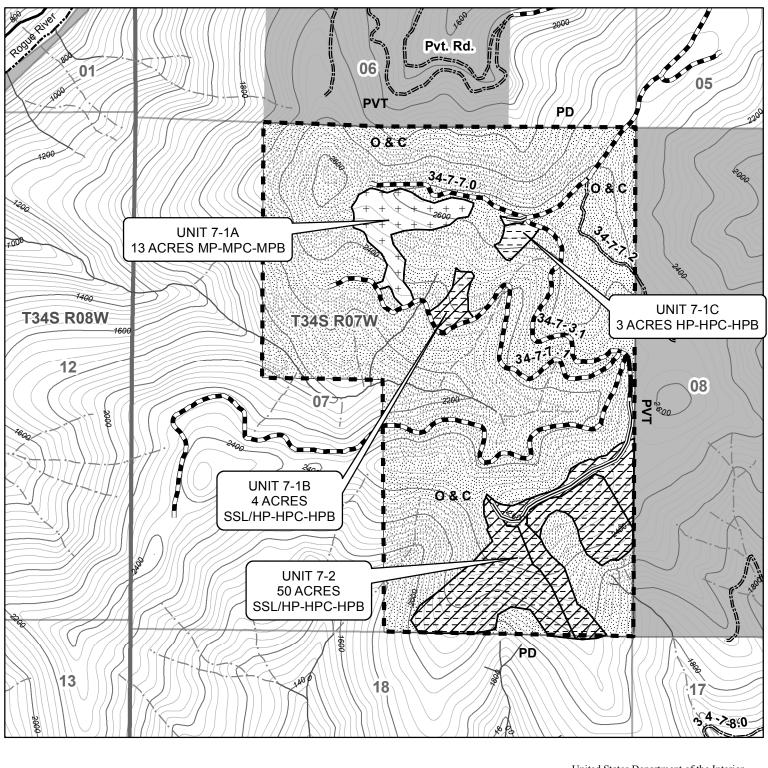


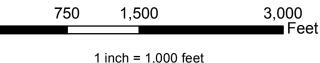




### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 34 S., R. 7 W., SEC. 7 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 1 OF 12





United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

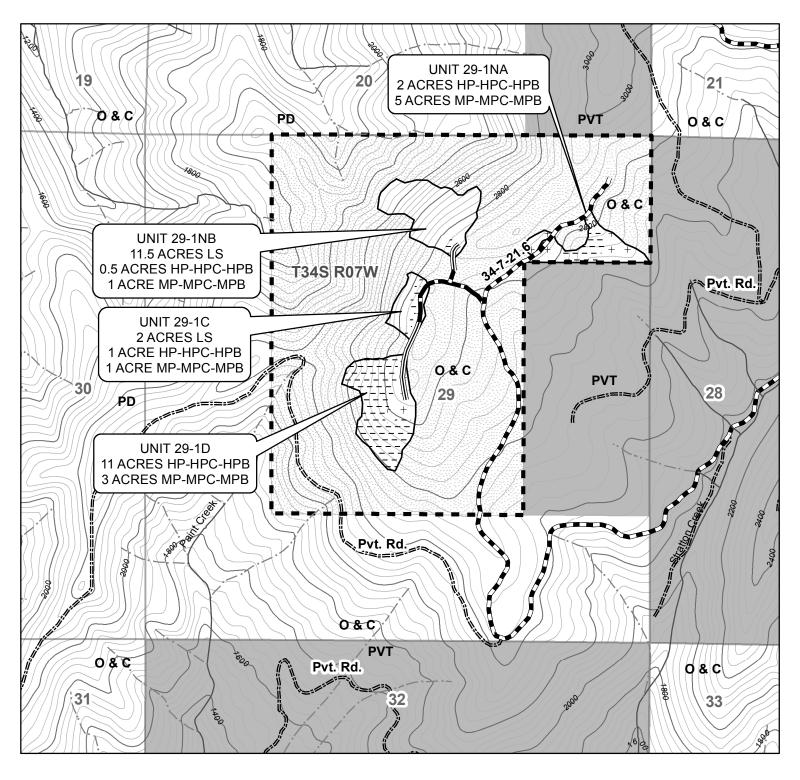
0

40 FOOT CONTOUR INTERVAL



#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 34 S., R. 7 W., SEC. 29 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 2 OF 12







40 FOOT CONTOUR INTERVAL

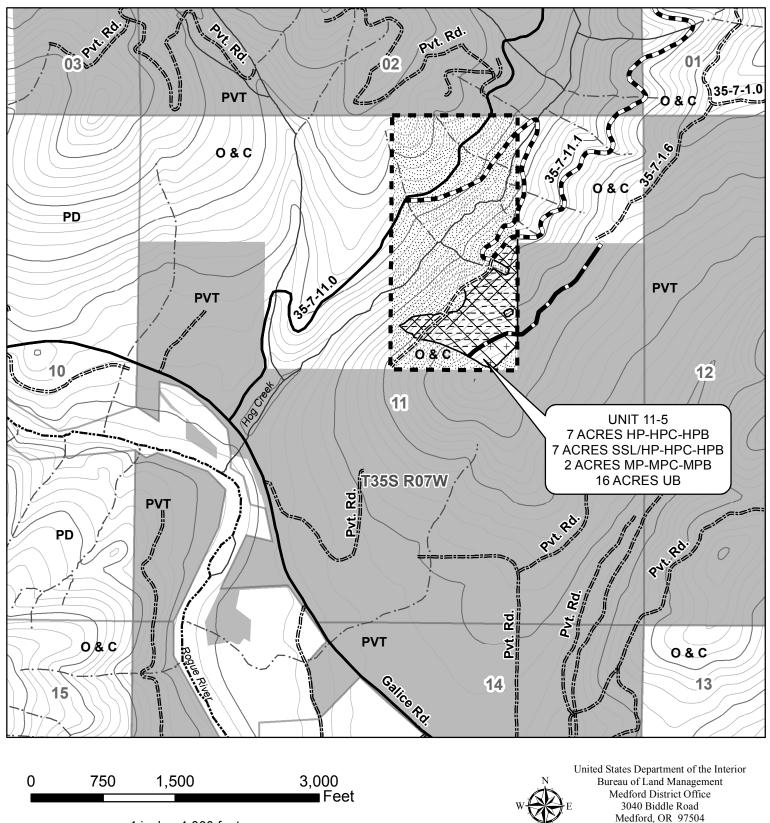
United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 11 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 3 OF 12



1 inch = 1,000 feet

40 FOOT CONTOUR INTERVAL

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

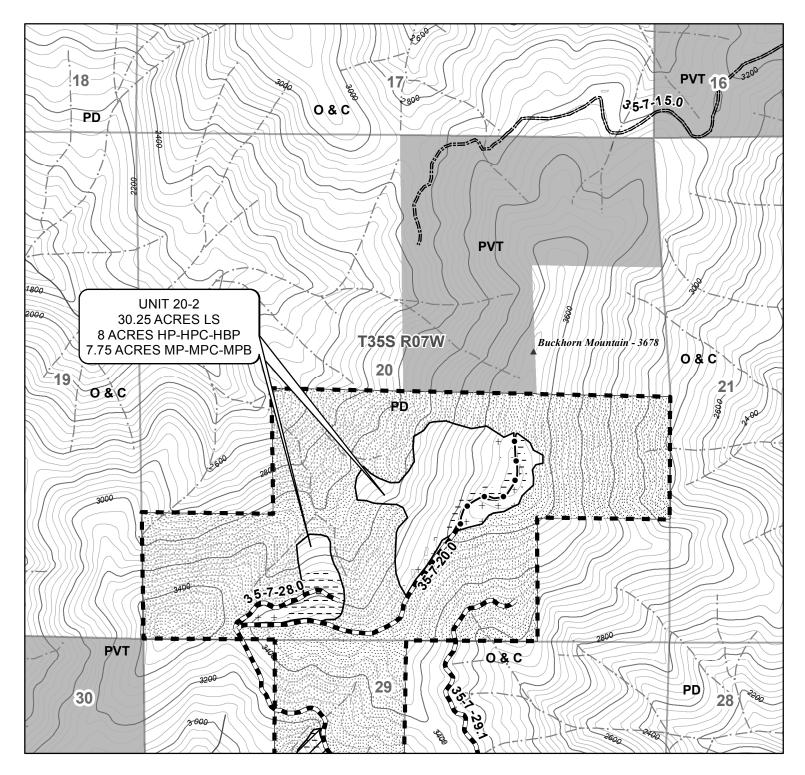
Map created by SDT 7/14/2016



(541) 618-2200

#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 20 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 4 OF 12





1 inch = 1,000 feet

United States Department of the Interior Bureau of Land Management Medford District Office 3040 Biddle Road Medford, OR 97504 (541) 618-2200

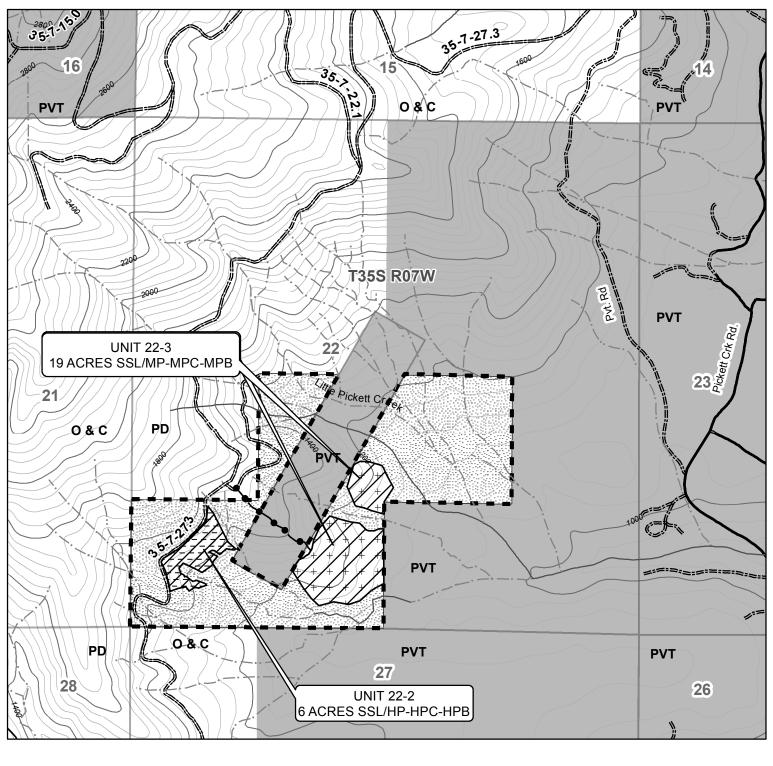
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

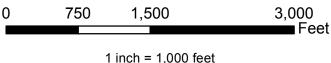
40 FOOT CONTOUR INTERVAL



#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 22 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 5 OF 12





United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

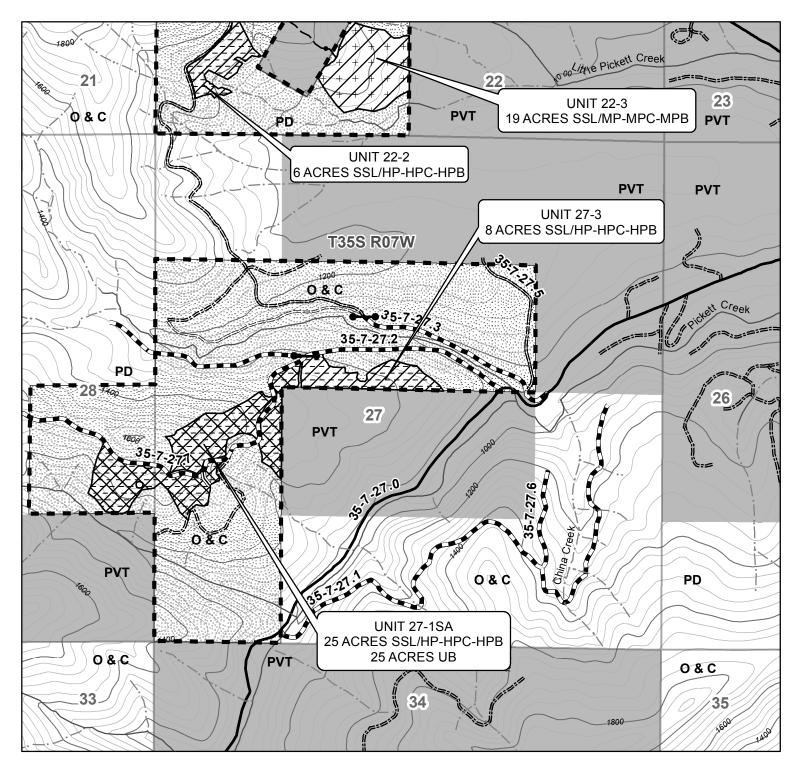
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

40 FOOT CONTOUR INTERVAL



### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 27 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 6 OF 12



750 1,500 3,000 Feet

1 inch = 1,000 feet

E Bureau of Land Management Medford District Office 3040 Biddle Road Medford, OR 97504 (541) 618-2200

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

0

40 FOOT CONTOUR INTERVAL

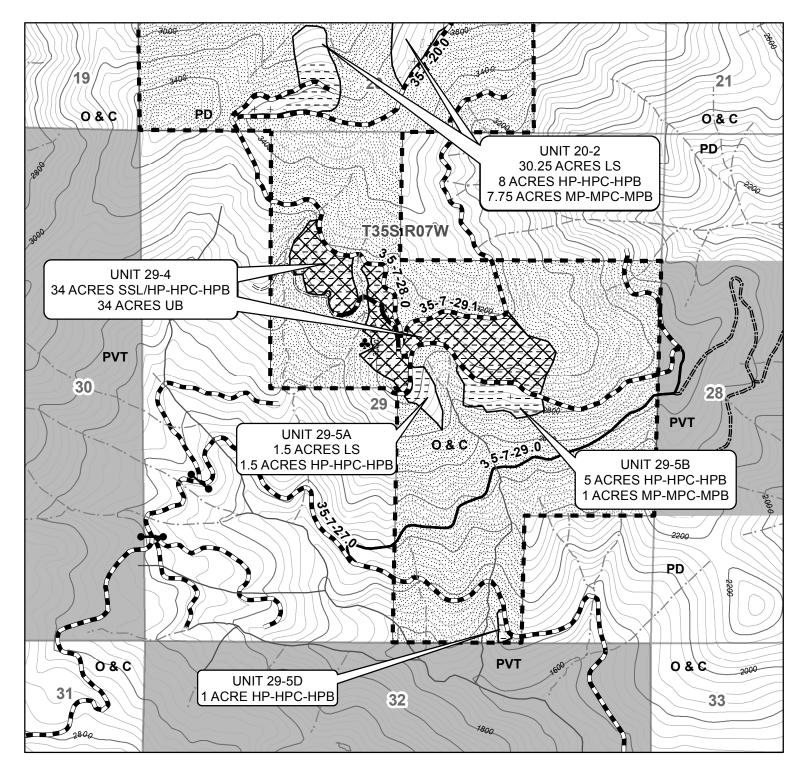
Map created by SDT 7/14/2016

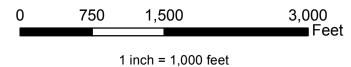


United States Department of the Interior

#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 29 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 7 OF 12





United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

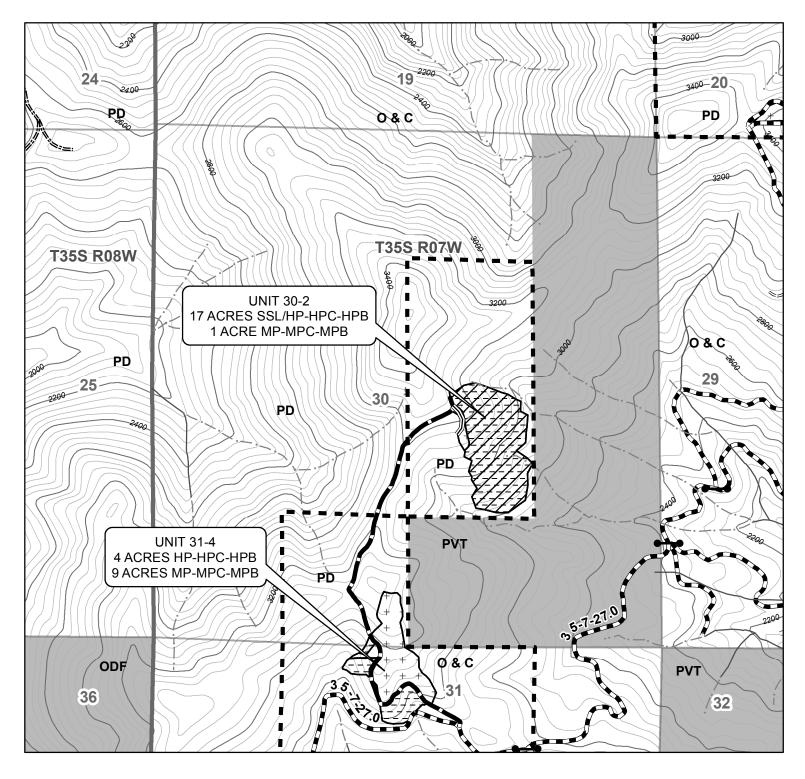
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

40 FOOT CONTOUR INTERVAL



#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 30 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 8 OF 12





1 inch = 1,000 feet

United States Department of the Interior Bureau of Land Management Medford District Office 3040 Biddle Road Medford, OR 97504 (541) 618-2200

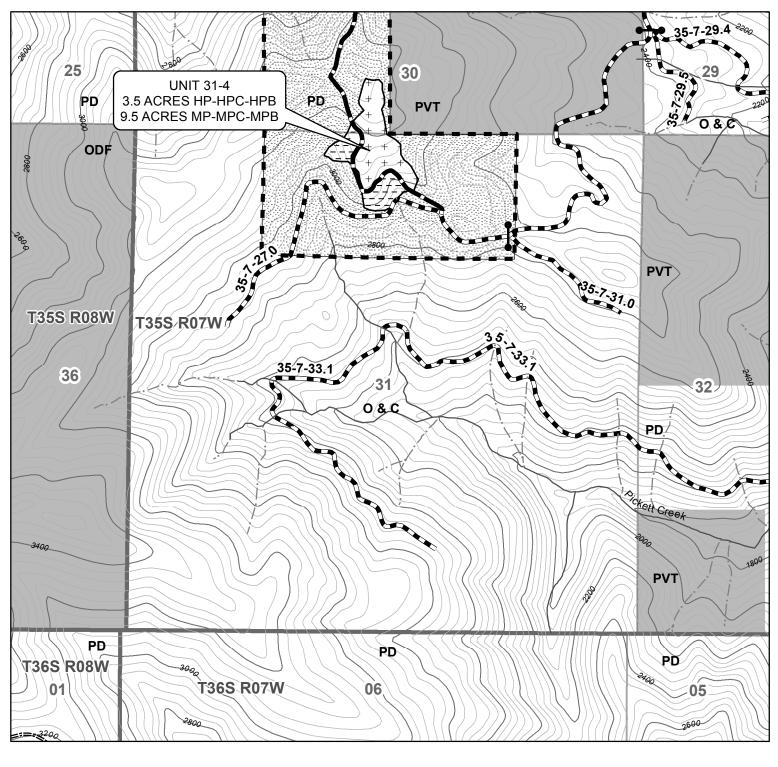
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

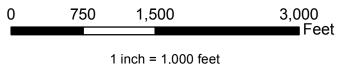
40 FOOT CONTOUR INTERVAL



#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 35 S., R. 7 W., SEC. 31 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 9 OF 12





United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

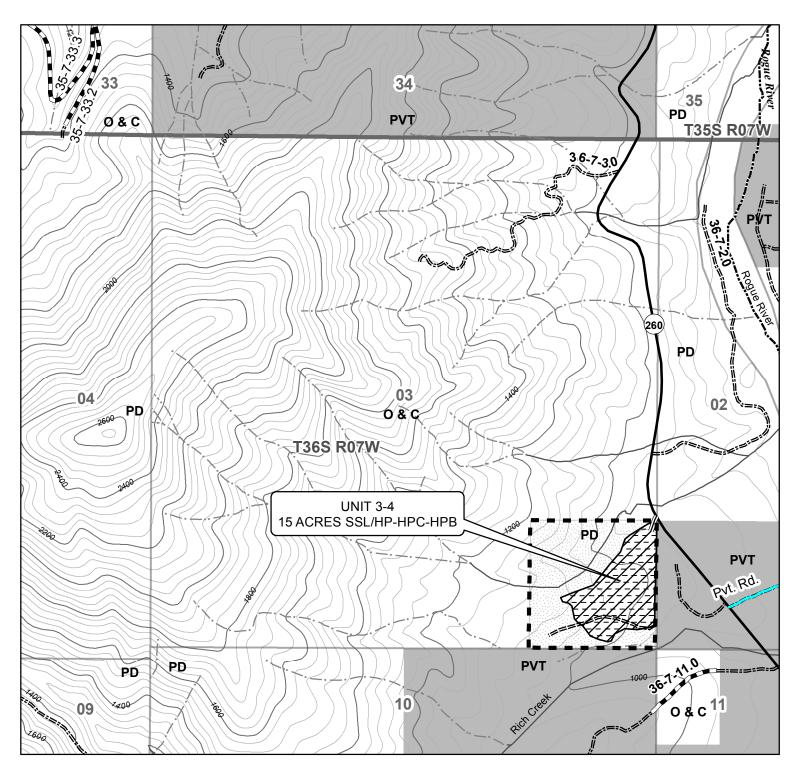
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

40 FOOT CONTOUR INTERVAL

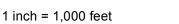


#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 T. 36 S., R. 7 W., SEC. 03 WILL. MER. PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 10 OF 12







United States Department of the Interior Bureau of Land Management Medford District Office E 3040 Biddle Road Medford, OR 97504 (541) 618-2200

No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

40 FOOT CONTOUR INTERVAL



### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

#### TIMBER SALE CONTRACT MAP EXHIBIT S PAGE 11 OF 12

Legend							
Pickett Hog Fuels Treatments	Road	Contours					
Lop and Scatter	SurfaceType	Index 200-ft					
Handpile-Handpile Cover-Handpile Burn	Rocked	Intermediate 40-ft					
+ + Machine Pile-Machine Pile Cover-Machine Pile Burn	Paved	Reserve Area					
Selective Slashing	===== Natural Surface	Contract Area Boundary					
Underburn	<ul> <li>Mountain Peaks</li> </ul>	Sections					
Temporary Routes	Botany Buffer	Township and Range					
Construction Type	Rogue River	Ownership					
New construction	Streams	O&C BLM O & C Lands					
Operator Spur	·—·—· Intermittent	PD BLM Public Domain Lands					
Reconstruction	Perennial	PVT Private Lands					
●—●—● Tractor Swing		OR - STATE State Lands					

#### SUMMARY

LS	LOP AND SCATTER (UNITS 20-2, 29-1NB, 29-1C, 29-5A)	45.25 ACRES
MP-MPC-MPB	MACHINE PILE-MACHINE PILE COVER-MACHINE PILE BURN (UNITS 7-1A, 11-5, 20-2, 22-3, 29-1NA, 29-1NB, 29-1C, 29-1D, 29-5B, 30-2, 31-4)	
НР-НРС-НРВ	HAND PILE-HAND PILE COVER-HAND PILE BURN WHOLE UNIT (UNITS 3-4, 7-1B, 7-1C, 7-2, 22-2, 27-1SA, 27-3, 29-4, 29-5D)	146.00 ACRES
HP-HPC-HPB	HAND PILE-HAND PILE COVER-HAND PILE BURN CABLE PORTION OF UNIT (UNITS 11-5, 29-1NA, 29-1D, 29-5B, 30-2, 31-4)	53.00 ACRES
НР-НРС-НРВ	HAND PILE-HAND PILE COVER-HAND PILE BURN 100 FEET FROM TEMP. ROUTES	
НР-НРС-НРВ	HAND PILE-HAND PILE COVER-HAND PILE BURN 200 FEET FROM ROADS (UNIT 29-5A)	1.5 ACRES
HP-HPC-HPB	HAND PILE-HAND PILE COVER-HAND PILE BURN 100 FEET & 200 FEET FROM ROADS AND TRACTOR SWING ROUTE (UNIT 20-2)	8.0 ACRES
SSL	SELECTIVE SLASH (UNITS 3-4, 7-1B, 7-2, 11-5, 22-2, 22-3, 27-1SA, 27-3, 29-4, 30-2)	185.00 ACRES
UB	UNDERBURN	
TOTAL SLASH DISPOSAL TREATMENT AREA		318 ACRES
	RESERVE AREA	1288.1
	TOTAL CONTRACT AREA	1606.1

#### U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-17-07 PICKETT HOG TIMBER SALE JOSEPHINE COUNTY

LEGEND									
UNIT	ACRES	FUELS TREATMENT	SELECTIVE SLASHING RX AREA	LOP & SCATTER RX AREA	HAND PILE RX AREA	MACHINE PILE RX AREA	UNDERBUR N RX AREA		
3-4	15	SSL/HP-HPC-HPB	WHOLE UNIT	N/A	WHOLE UNIT	N/A	N/A		
7-1A	13	MP-MPC-MPB	N/A	N/A	N/A	WHOLE UNIT	N/A		
7-1B	4	SSL/HP-HPC-HPB	WHOLE UNIT	N/A	WHOLE UNIT	N/A	N/A		
7-1C	3	HP-HPC-HPB	N/A	N/A	WHOLE UNIT	N/A	N/A		
7-2	50	SSL/HP-HPC-HPB	WHOLE UNIT	N/A	WHOLE UNIT	N/A	N/A		
11-5	16	SSL/HP-HPC-HPB/ MP-MPC-MPB/UB	AS SHOWN	N/A	CABLE AREA	GB AREA	WHOLE UNIT		
20-2	46	LS/HP-HPC-HPB/ MP-MPC-MPB	N/A	OUTSIDE HP & MP AREAS	100 & 200 FT. FROM ROADS & TRACTOR SWING	GB AREA	N/A		
22-2	6	SSL/HP-HPC-HPB	WHOLE UNIT	N/A	WHOLE UNIT	N/A	N/A		
22-3	19	SSL/MP-MPC-MPB	WHOLE UNIT	N/A	N/A	WHOLE UNIT	N/A		
27-1SA	25	SSL/HP-HPC-HPB/UB	WHOLE UNIT	N/A	WHOLE UNIT	N/A	WHOLE UNIT		
27-3	8	SSL/HP-HPC-HPB	WHOLE UNIT	N/A	WHOLE UNIT	N/A	N/A		
29-1C	4	LS/HP-HPC-HPB/ MP-MPC-MPB	N/A	OUTSIDE HP & MP AREAS	100 FT. FROM TEMP. ROUTE	GB AREA	N/A		
29-1D	14	HP-HPC-HPB/MP-MPC-MPB	N/A	N/A	CABLE AREA	GB AREA	N/A		
29-1NA	7	HP-HPC-HPB/MP-MPC-MPB	N/A	N/A	CABLE AREA	GB AREA	N/A		
29-1NB	13	LS/HP-HPC-HPB/ MP-MPC-MPB	N/A	OUTSIDE HP & MP AREAS	100 FT. FROM TEMP. ROUTE	GB AREA	N/A		
29-4	34	SSL/HP-HPC-HPB/UB	WHOLE UNIT	N/A	WHOLE UNIT	N/A	WHOLE UNIT		
29-5A	3	LS/HP-HPC-HPB	N/A	OUTSIDE HP AREAS	100 FT. FROM ROADS	N/A	N/A		
29-5B	6	HP-HPC-HPB/MP-MPC-MPB	N/A	N/A	CABLE AREA	GB AREA	N/A		
29-5D	1	HP-HPC-HPB	N/A	N/A	WHOLE UNIT	N/A	N/A		
30-2	18	SSL/HP-HPC-HPB/ MP-MPC-MPB	CABLE AREA	N/A	CABLE AREA	GB AREA	N/A		
31-4	13	HP-HPC-HPB/MP-MPC-MPB	N/A	N/A	CABLE AREA	GB AREA	N/A		
TOTAL	318								

LEGEND

\* ALL ACRES COMPUTED BY GPS TRAVERSE

\* BOUNDARIES OF HARVEST UNITS ARE POSTED AND PAINTED IN ORANGE

UB = UNDERBURN

LS = LOP AND SCATTER

SSL = SELECTIVE SLASH

HP-HPC-HPB = HAND PILE, HAND PILE COVER, HAND PILE BURN

MP-MPC-MPB = MACHINE PILE, MACHINE PILE COVER, MACHINE PILE BURN

N/A = NOT APPLICABLE

GB = GROUND BASED YARD AREA SHOWN ON EXHIBIT A

CABLE = CABLE YARD AREA SHOWN ON EXHIBIT A



# United States Department of the Interior Bureau of Land Management

**Timber Appraisal** 

Sale Name:Pickett HogBLM District:Medford DOContract #:ORM07-TS-2017.0007Sale Type:Advertised

Sale Date:Thursday, September 14, 2017Unit of Measure:16' MBFContract Term:36 monthsContract Mechanism:5450-25<br/>Sale of Timber and other Wood Products - Lump Sum

#### Content

Timber Appraisal Summary Stumpage Summary Unit Summary Stump to Truck Transportation Engineering Allowances Other Allowances

Prepared By: Cannon, Grant P Approved By: Rentz, George C

Land Status	County	Township	Range	Section	Subdivision	Meridian
PD	Josephine	355	7W	28	NE1/4SE1/4	Willamette
0&C	Josephine	34S	7W	7	NE1/4, E1/2NW1/4, SE1/4	Willamette
O&C	Josephine	34S	7W	29	N1/2NE1/4, SW1/4NE1/4, E1/2NW1/4, NE1/4SW1/4, NW1/4SE1/4	Willamette
0&C	Josephine	355	7W	11	W1/2NE1/4	Willamette
PD	Josephine	355	7W	20	NE1/4SW1/4, S1/2SW1/4, N1/2SE1/4, SW1/4SE1/4	Willamette
PD	Josephine	355	7W	22	NE1/4SW1/4, S1/2SW1/4, NW1/4SE1/4	Willamette
O&C	Josephine	355	7W	27	SW1/4NE1/4, S1/2NW1/4, W1/2SW1/4	Willamette
O&C	Josephine	355	7W	29	S1/2NE1/4, E1/2NW1/4, N1/2SE1/4, SW1/4SE1/4	Willamette
PD	Josephine	355	7W	30	SW1/4NE1/4, SE1/4SW1/4, NW1/4SE1/4	Willamette
0&C	Josephine	355	7W	31	NW1/4NE1/4, NE1/4NW1/4	Willamette
PD	Josephine	36S	7W	3	Lot 16	Willamette

### Legal Description of Contract Area

# Species Totals

Species	Net	Gross Merch	Gross	# of Merch Logs	# of Cull Logs	# of Trees
Douglas Fir	3,441.0	3,776.0	3,979.0	60,498	3,700	17,427
Ponderosa Pine	118.0	125.0	133.0	1,800	258	610
Sugar Pine	16.0	16.0	18.0	478	36	207
Incense-cedar	5.0	5.0	5.0	203	7	128
Totals	3,580.0	3,922.0	4,135.0	62,979	4,001	18,372

### **Cutting Area Acres**

<b>Regeneration Harvest Acres</b>	Partial Cut Acres	Right of Way Acres	Total Acres	Net Volume per Acre	
0.0	318.0	0.0	318.0	11.3	

### Logging Costs

Stump to Truck	\$792,290.02
Transportation	\$160,488.24
Road Construction	\$179,727.51
Maintenance/Rockwear	\$34,277.61
Road Use	\$0.00
Other Allowances	\$225,582.15
Total:	\$1,392,365.53
Total Logging Cost per MBF:	\$388.93

#### **Utilization Centers**

Location	Distance	% of Net Volume
Glendale, OR	28.1 miles	100 %

#### Profit & Risk

 Total Profit & Risk	<u>1 %</u>
Basic Profit & Risk Additional Risk	10 % 1 %

#### **Tract Features**

Quadratic Mean DBH	15.6 in
Average GM Log	62 bf
Average Volume per Acre	11.3 mbf
Recovery	87 %
<u>Net MBF volume:</u>	
Green	3,580.0 mbf
Salvage	0 mbf
Export	0 mbf
Ground Base Logging:	
Percent of Sale Volume	45 %
Average Yarding Slope	25 %
Average Yarding Distance	483 ft
Cable Logging:	
Percent of Sale Volume	55 %
Average Yarding Slope	55 %
Average Yarding Distance	500 ft
Aerial Logging:	
Percent of Sale Volume	0 %
Average Yarding Slope	0 %
Average Yarding Distance	0 ft

#### Cruise

Cruise Completed	June 2017
Cruised By	Caulfield/Cannon
Cruise Method	
3P for Douglas Fir and BLM 1	.00% for minor species.

4 of 17

Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Appraised Price/MBF		Appraised Value
Douglas Fir	17,427	3,441.0	\$586.85	\$64.55	\$388.93	\$0.69	\$134.10		\$461,438.10
Ponderosa Pine	610	118.0	\$288.57	\$31.74	\$388.93	\$0.00	\$28.90	*	\$3,410.20
Sugar Pine	207	16.0	\$287.62	\$31.64	\$388.93	\$0.00	\$28.80	*	\$460.80
Incense- cedar	128	5.0	\$505.60	\$55.62	\$388.93	\$0.00	\$61.10		\$305.50
Totals	18,372	3,580.0							\$465,614.60

### Stumpage Computation

\* Minimum Stumpage values were used to compute the Appraised Price/MBF (10% of Pond Value)

#### **Other Wood Products**

Product	Unit of Measure	# of Units	\$/Unit	Appraised Value
Biomass	Green Tons	1	\$0.01	\$0.01
Totals				\$0.01

# Total Appraised Value: \$465,614.61

### Percent of Volume By Log Grade

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine				22.0 %	59.0 %	19.0 %	
Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar				2.0 %	56.0 %	42.0 %	
Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine				57.0 %	38.0 %	5.0 %	
Species	No. 1 & 2 Peeler	No. 3 Peeler	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
Douglas Fir			1.0 %	54.0 %	40.0 %	5.0 %	

### Marginal Log Volume By Grade

Species	Utility Cull	Peeler Cull
Douglas Fir	0	17.60

# Pickett Hog

# Unit Summary

# Unit: 3-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	133.0	146.0	154.0	937
Ponderosa Pine	6.0	6.0	6.0	62
Sugar Pine	1.0	1.0	1.0	20
Totals:	140.0	153.0	161.0	1,019

### Unit: 7-1A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	166.0	182.0	192.0	1,047
Ponderosa Pine	2.0	2.0	2.0	13
Totals:	168.0	184.0	194.0	1,060

### Unit: 7-1B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	26.0	29.0	30.0	158
Totals:	26.0	29.0	30.0	158

### Unit: 7-1C

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	27.0	30.0	31.0	142
Totals:	27.0	30.0	31.0	142

### Unit: 7-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	763.0	836.0	883.0	3,581
Ponderosa Pine	37.0	40.0	41.0	149
Sugar Pine	2.0	2.0	2.0	17
Totals:	802.0	878.0	926.0	3,747

### ORM07-TS-2017.0007

# Net Volume/Acre: 9.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	15.0
Right of Way	0.0
Total Acres:	15.0

### Net Volume/Acre: 12.9 MBF

Regeneration Harvest	0.0
Partial Cut	13.0
Right of Way	0.0
Total Acres:	13.0

### Net Volume/Acre: 6.5 MBF

Regeneration Harvest	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

### Net Volume/Acre: 9.0 MBF

Regeneration Harvest	0.0
Partial Cut	3.0
Right of Way	0.0
Total Acres:	3.0

# Net Volume/Acre: 16.0 MBF

Regeneration Harvest	0.0
Partial Cut	50.0
Right of Way	0.0
Total Acres:	50.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	127.0	139.0	146.0	860
Sugar Pine	5.0	5.0	5.0	82
Totals:	132.0	144.0	151.0	942

### Unit: 20-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	489.0	537.0	566.0	1,924
Ponderosa Pine	15.0	16.0	18.0	51
Sugar Pine	1.0	1.0	1.0	2
Totals:	505.0	554.0	585.0	1,977

### Unit: 22-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	45.0	49.0	52.0	228
Sugar Pine	1.0	1.0	1.0	10
Totals:	46.0	50.0	53.0	238

### Unit: 22-3

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	148.0	162.0	171.0	802
Ponderosa Pine	4.0	5.0	5.0	72
Sugar Pine	2.0	2.0	2.0	26
Totals:	154.0	169.0	178.0	900

# Net Volume/Acre: 8.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	16.0
Right of Way	0.0
Total Acres:	16.0

### Net Volume/Acre: 11.0 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	46.0
Right of Way	0.0
Total Acres:	46.0

### Net Volume/Acre: 7.7 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	6.0
Right of Way	0.0
Total Acres:	6.0

# Net Volume/Acre: 8.1 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	19.0
Right of Way	0.0
Total Acres:	19.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	273.0	300.0	316.0	1,533
Sugar Pine	2.0	2.0	2.0	33
Ponderosa Pine	1.0	1.0	1.0	13
Totals:	276.0	303.0	319.0	1,579

#### Unit: 27-3

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	83.0	91.0	96.0	487
Totals:	83.0	91.0	96.0	487

### Unit: 29-1C

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	55.0	60.0	63.0	254
Sugar Pine	1.0	1.0	2.0	4
Totals:	56.0	61.0	65.0	258

### Unit: 29-1D

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	86.0	94.0	99.0	545
Ponderosa Pine	10.0	10.0	12.0	85
Totals:	96.0	104.0	111.0	630

### Unit: 29-1NA

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	60.0	66.0	70.0	411
Ponderosa Pine	1.0	1.0	1.0	8
Totals:	61.0	67.0	71.0	419

### Net Volume/Acre: 11.0 MBF

Regeneration Harvest	0.0
Partial Cut	25.0
Right of Way	0.0
Total Acres:	25.0

# Net Volume/Acre: 10.4 MBF

Regeneration Harvest	0.0
Partial Cut	8.0
Right of Way	0.0
Total Acres:	8.0

## Net Volume/Acre: 14.0 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	4.0

### Net Volume/Acre: 6.9 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	14.0
Right of Way	0.0
Total Acres:	14.0

### Net Volume/Acre: 8.7 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	7.0
Right of Way	0.0
Total Acres:	7.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	125.0	137.0	144.0	625
Totals:	125.0	137.0	144.0	625

### Unit: 29-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	397.0	436.0	459.0	1,989
Ponderosa Pine	36.0	38.0	40.0	108
Incense-cedar	3.0	3.0	3.0	68
Totals:	436.0	477.0	502.0	2,165

#### Unit: 29-5A

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	25.0	28.0	29.0	115
Totals:	25.0	28.0	29.0	115

### Unit: 29-5B

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	63.0	69.0	72.0	402
Ponderosa Pine	4.0	4.0	5.0	35
Incense-cedar	1.0	1.0	1.0	21
Totals:	68.0	74.0	78.0	458

### Unit: 29-5D

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	8.0	9.0	10.0	37
Totals:	8.0	9.0	10.0	37

# Net Volume/Acre: 9.6 MBF

Regeneration Harvest	0.0
Partial Cut	13.0
Right of Way	0.0
Total Acres:	13.0

# Net Volume/Acre: 12.8 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	34.0
Right of Way	0.0
Total Acres:	34.0

# Net Volume/Acre: 8.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	3.0
Right of Way	0.0
Total Acres:	3.0

# Net Volume/Acre: 11.3 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	6.0
Right of Way	0.0
Total Acres:	6.0

# Net Volume/Acre: 8.0 MBF

Regeneration Harvest	0.0
Partial Cut	1.0
Right of Way	0.0
Total Acres:	1.0

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	154.0	169.0	178.0	605
Incense-cedar	1.0	1.0	1.0	39
Totals:	155.0	170.0	179.0	644

## Unit: 31-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	188.0	207.0	218.0	745
Ponderosa Pine	2.0	2.0	2.0	14
Sugar Pine	1.0	1.0	2.0	13
Totals:	191.0	210.0	222.0	772

# Net Volume/Acre: 8.6 MBF

<b>Regeneration Harvest</b>	0.0
Partial Cut	18.0
Right of Way	0.0
Total Acres:	18.0

# Net Volume/Acre: 14.7 MBF

Regeneration Harvest	0.0
Partial Cut	13.0
Right of Way	0.0
Total Acres:	13.0

# Stump to Truck Costs

Total Stump To Truck	Net Volume	\$/MBF
\$792,290.02	3,580.0	\$221.31

### Stump to Truck: Falling, Bucking, Yarding, & Loading

Yarding System	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Cable: Medium Yarder	GM MBF	2,150.0	\$203.96	\$438,514.00	
Track Skidder	GM MBF	1,772.0	\$155.38	\$275,333.36	
Subtotal				\$713,847.36	

### **Additional Costs**

ltem	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Deadman Anchor	Each	36.0	\$450.00	\$16,200.00	All Anchors
Intermediate Support	Each	14.0	\$250.00	\$3,500.00	Corridors with more than one Support
Lift Tree	Each	4.0	\$150.00	\$600.00	Trees over 30 feet
Landing Construction	Hour	52.0	\$100.00	\$5,200.00	Landing Construction
Temp Spur Construction	Hour	8.0	\$75.00	\$600.00	Unit 20-2 and 27-1SA
Skid Construction	Hour	8.0	\$75.00	\$600.00	Tractor Swing Route unit 22-3
Tractor Swing	GM MBF	518.0	\$47.42	\$24,563.56	Additional Cat Time
Directional Falling	MBF	358.0	\$11.45	\$4,099.10	10% of net volume
Subtotal				\$55,362.66	

### **Additional Moves**

Equipment	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Track Skidder	Total	1.0	\$6,600.00	\$6,600.00	3 Tractors, 5 moves
Loader	Total	1.0	\$6,000.00	\$6,000.00	2 Loaders, 5 moves
Delimber	Total	1.0	\$4,400.00	\$4,400.00	2 Delimbers, 5 moves
Track Skidder	Total	1.0	\$3,080.00	\$3,080.00	Additional for Tractor Swing
Cable: Medium Yarder	Total	1.0	\$3,000.00	\$3,000.00	5 moves
Subtotal				\$23,080.00	

**Pickett Hog** 

# Transportation

# ORM07-TS-2017.0007

Total	Net Volume	\$/MBF
\$160,488.24	3,580.0	\$44.83

Utilization Center	One Way Mileage	Description	Unit of Measure	# of Units	\$/Unit of Measure	Total Cost	% of Sale Volume
Glendale, OR	28.1	all species	GM MBF	3,922.0	\$40.92	\$160,488.24	100 %

### Comments:

Appraised to Swanson Group in Glendale, OR.

# **Engineering Allowances**

Total	Net Volume	\$/MBF
\$214,005.12	3,580.0	\$59.78

Cost Item	Total Cost
Road Construction:	\$179,727.51
Road Maintenance/Rockwear:	\$34,277.61
Road Use Fees:	\$0.00

Pickett Hog	Other A	ORM07-TS-2017.0007			
	Total	Net Volume	\$/MBF		
	\$225,582.15	3,580.0	\$63.01		

### **Environmental Protection**

Cost item	Total Cost
Stream and Culvert Cleaning	\$640.00
Waterbar Corridors	\$729.20
Waterbar Skids	\$600.00
Barricades	\$1,500.00
Equipment Washing-Small	\$1,050.00
Equipment Washing-Large	\$600.00
Seeding and Mulching	\$10,200.00
Ripping	\$14,110.00
Subtotal	\$29,429.20

Logging

Cost item	Total Cost
Skid Location	\$729.20
Subtotal	\$729.20

### Slash Disposal & Site Prep

Cost item	Total Cost
Fire Line Construction	\$9,200.00
Machine Pile Burn and Mop-up	\$1,764.00
Fuels Pullback	\$3,000.00
Lop and Scatter	\$1,890.00
Handpile Burn and Mop-up	\$8,778.00
Cover and Burn Landing Decks	\$1,400.00
Landing Clean up	\$5,200.00
Underburning	\$16,875.00
Fuels Adjustment	\$266.75
Selective Slashing	\$55,500.00
Handpile and Cover	\$67,925.00
Maching Pile and Cover	\$23,625.00
Subtotal	\$195,423.75

### Comments:

-Ripping: Skids, Landings, and Temp Routes -Fuels Adjustment for rounding fuels treatment acres

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Sale: Pickett Hog TS Sale Date: 09/14/17 Prep. By : EFreeman Tract No: 17-07

#### ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

#### Summary of Costs

1.1) Road Use - Amortization:

<u>\$0.00/3580 MBF = \$0.00</u>/MBF

Road Maintenance Obligation:

(2.1) BLM Maintenance	\$4,151.56
(2.2) BLM Rockwear	\$60.84
(5.1) Purchaser Maintenance Rockwear	\$10,042.22
Total Rockwear Payable to BLM $\ldots$ $\ldots$ $\ldots$ $\ldots$ $\ldots$	\$10,103.06
(3.1) 3rd Party Maintenance	\$0.00
(3.2) 3rd Party Rockwear	\$208.88
(4.1) Other Maintenance Payments	\$0.00
Total Maintenance Fee Obligation (2.1-5.1)	\$14,463.51

Purchaser Maintenance Allowances:

(5.2A) Move In	\$2,878.47
(5.2B) Culverts, Catch Basins, Downspouts	\$4,389.84
(5.2C) Grading, Ditching	\$8,762.91
(5.2D) Slide Removal and Slump Repair	\$0.00
(5.2E) Dust Palliative (Water)	\$3,782.88
(5.2F) Surface Repair (Aggregate)	\$0.00
(5.2G) Other	\$0.00
Total Purchaser Maintenance Allowances (5.2A-5.2G)	\$19,814.10
(2.1-5.2G) Cost (\$14,463.51 + \$19,814.10) = \$34,277.61 Cost/MBF \$34,277.61 / 3580 MBF = \$9.57/MBF	<u>\$9.57/MBF</u>
(5.2H) Decommissioning	\$0.00
(5.2H) Cost/MBF \$0.00/3580 MBF =	\$0.00/MBF
(2.1-5.2H) Cost (\$14,463.51 + \$19,814.10 + \$0.00) = \$34,277.61	

Total Cost/MBF (Excluding Road Use) \$34,277.61/3580 MBF = \$9.57/MBF

#### 1) Road Use Fees - Amortization

Details				
R/W		Rd Use	Vol	Road Use
Number	Road Number	Fee x	MBF =	Obligation

Subtotal by agreement number

# (1.1) Subtotal \$0.002) BLM Maintenance - Timber Haul

MAINTENANCE (2.1)					ROCKWEAR (2.2)								
Road Number	А	Surf		Ma	int	Vol							
and Segment	Ν	Туре	Mi	x Fe	ee x	MBF	=	Mai	nt	F	ee x	MBF =	Rkwear
35-7-11.0(A)	А	BST	0.26	0	.92	338		\$80.	85	0	.00	338	\$0.00
35-7-11.0(B)	А	BST	3.56	0	.92	338		\$1,107.	02	0	.00	338	\$0.00
35-7-11.0(C1)	А	BST	1.97	0	.92	338		\$612.	59	0	.00	338	\$0.00
35-7-11.0(C2)	А	ASC	0.30	0	.75	338		\$76.	05	0	.60	338	\$60.84
35-7-27.0(A)	А	BST	0.68	0	.92	1388		\$868.	33	0	.00	1388	\$0.00
35-7-27.0(B)	А	BST	0.70	0	.92	1388		\$893.	87	0	.00	1388	\$0.00
35-7-11.0(A)	А	BST	0.74	0	.92	470		\$319.	98	0	.00	470	\$0.00
35-7-27.0(A)	А	BST	0.12	0	.92	1747		\$192.	87	0	.00	1747	\$0.00
(2.1) Subtotal <u>\$4,151.56</u>					(2.2	) S	ubtotal	\$	60.	84			

#### 3) Third Party Maintenance and Rockwear

MAINTENANCE (3.1)				ROCKWE	EAR (3.2)				
Agrmnt	Surface	Road							
Number	Туре	Number	Mi 2	C	Fee x MBF =	Maint	Fee x MBF	= Rkwea	ır
M-2000EA	ASC	34-7-26.1(	A) 1.0	)3			0.60 338	\$208.8	38
		enance fees ear fees by			ement number: nt number:			\$208.88	}
(3.1) Suk	ototal					\$0.00			
(3.2) Sub	ototal					<u>.</u>		<u>\$208.88</u>	}

#### 4) Other Maintenance Payments - USFS or Others Perform Maintenance

		Miles	Vol	Fee	
Agency	Road Number	(Log) x	(mbf)	x MBF/MI =	Cost

(4.1) Subtotal \$0.00

#### 5) Purchaser Maintenance - Rock Wear

#### TIMBER HAUL (5.1)

Road No	А		RkWea	r Vol	Total
and Segment	Ν	Mi z	k Fee z	x MBF	' = RkWear
34-7-2.0(A)	А	0.58	0.60	1023	\$356.00
34-7-3.0(A1-A2	2)A	2.0	7 0.60	1023	\$\$1,270.57
34-7-3.1(A-E)	А	5.70	0.60	1023	\$3,498.66
34-7-7.1	А	0.84	0.60	194	\$97.78
34-7-22.0(A-B)	А	0.27	0.60	338	\$54.76
34-7-21.6(B)	А	0.79	0.60	338	\$160.21
35-7-11.1(A)	А	1.66	0.60	132	\$131.47
35-7-1.0(A)	А	0.46	0.00	136	\$0.00
35-7-1.6	А	0.36	0.00	132	\$0.00
35-7-27.3(A)	А	0.42	0.60	200	\$50.40
35-7-27.3(B)	А	1.10	0.00	200	\$0.00
35-7-22.0	А	0.03	0.00	154	\$0.00
35-7-27.2(A)	А	0.40	0.60	359	\$86.16
35-7-27.7(A)	А	0.66	0.60	276	\$109.30
35-7-27.0(E-F)	А	1.68	0.60	346	\$348.77
35-7-29.0(A)	А	0.95	0.60	1034	\$589.38
35-7-28.0(A)	А	0.70	0.60	1034	\$434.28
35-7-29.6	А	0.09	0.00	25	\$0.00
35-7-29.1	А	0.25	0.60	36	\$5.40
35-7-20.0	А	0.54	0.60	396	\$128.30
34-7-3.1(F)	А	0.51	0.60	996	\$304.78
34-7-21.6(C)	А	0.67	0.60	338	\$135.88
34-7-21.6(C)	А	0.37	0.60	61	\$13.54
35-7-28.0(B)	А	0.30	0.60	617	\$111.06
35-7-28.0(B)	А	0.60	0.60	505	\$181.80
35-7-27.0(C-D)	А	2.37	0.60	1388	\$1,973.74

(5.1) Subtotal <u>\$10,042.22</u>

### Purchaser Operational Maintenance

#### Move In

	No	o Mo	ve Cost	:/ Dist	Sub-
Equipment	Units x	in x	50 Mi x	Factor =	total
Motor Grader	: 1	3	\$410.00	0.63	\$774.90
Back Hoe:	1	3	\$305.00	0.63	\$576.45
Loader:			\$410.00	0.63	\$0.00
Water Truck:	1	3	\$95.00	0.63	\$179.55
Dump Truck:	1	1	\$89.00	0.63	\$56.07
Excavator:	1	2	\$410.00	0.63	\$516.60
Roller:	1	3	\$410.00	0.63	\$774.90

(5.2A) Total \$2,878.47

#### Culvert Maintenance - Including Catch basins and Downpipes

Miles	х	Cost/Mi	=	Subtotal
12		\$365.82		\$4,389.84

(5.2B) Total <u>\$4,389.84</u>

#### Grading (Includes Ditches and Shoulders)

Miles	х	Cost/M:	i x Freq	= Subtotal		
Blade	w/	Ditch:	12.00	\$694.50	1	\$8,334.00
Blade	w/o	Ditch:	1.00	\$428.91	1	\$428.91

#### Slide and Slough removal, Slump Repair (15 sta-yds. ea.)

Туре	No Slides	Но	urs	Εc	quip		
Equipment	/Slumps	х	Each	x	Cost	=	Subtotal
Grade	r: 0			0	\$140	.96	5 \$0.00
Loader:	0		0	\$1	L01.17		\$0.00
Backhoe:	0		0	\$	\$85.84		\$0.00

(5.2D) Total <u>\$0.00</u>

#### Dust Palliative (Water)

Spreading Hours

1 5	No	Freq		Truck						
	Miles	/ MPH	=	Hours	x	Days	х	/Day	=	Hours
	4.00	5		0.8		30		2		48
Load & Haul =				0.0		0		0		0
Total Hours =				48						

Truck Cost: \$78.81/Hr. x 48.0 Hours = \$3,782.88

(5.2E) Total <u>\$3,782.88</u>

#### Surface Repair (Aggregate)

Production Cost:	0.0 CY x \$0.00/CY	=	\$0.00
Haul to Stockpile:	0.0 CY x ((\$1.75/CY x 0.00 Mi) + \$0.58)	=	\$0.00
Stockpile:	0.0 CY x \$1.07/CY	=	\$0.00
Load from Stockpile:	0.0 CY x \$1.05/CY	=	\$0.00
Haul from Stockpile:	0.0 CY x ((\$1.75/CY x 0.00 Mi) + \$0.58)	=	\$0.00
Process with Grader:	0.0 CY x \$0.88/CY	=	\$0.00
Compaction:	0.0 CY x \$1.08/CY	=	\$0.00

(5.2F) Total <u>\$0.00</u>

Other Fallen Timber Cutting: Brush Cutting/Tree Trimming: Oil/Asphalt Materials: Signing for Dust Palliatives:	0.0 Hours x \$0.00/Hour 0.0 Hours x \$0.00/Hour Lump Sum Lump Sum Lump Sum Lump Sum	=\$0.00 =\$0.00 =\$0.00 =\$0.00 =\$0.00 =\$0.00
	-	
	Lump Sum Lump Sum	=\$0.00 =\$0.00

(5.2G) Total <u>\$0.00</u>

#### Decommissioning

(5.2H) Decommissioning Total \$0.00

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

	Version: 5.2.0.99 Updated: 6/14/2017 Sale Date: 09/14/17 7/31/2017 3:51:26 PM
Construction: 0.00 sta Improve: 0.00 sta Renov: 1341.13 sta Decom: 0.00 sta Temp:	137.45 sta
200 Clearing and Grubbing: 6.3 acres	\$20,482.52
300 Excavation: 13,465 cy Haul < 500 ft: 0 sta-yds Haul > 500 ft: 0 yd-mi	\$49,178.90
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 80 lf (Temporary)	\$3,440.80
500 Renovation: Blading 26.53 mi Slide Removal 13 cy	\$43,906.79
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 6.8 acres Includes Small Quantity Factor of 1.19	\$5,131.03
2100 RoadSide Brushing: Manual Brushing: 24.6 acres	\$38,736.20
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$10,426.89
Mobilization: Const. \$8,424.38 Surf. \$0.00	\$8,424.38
Quarry Development:	\$0.00
Total: 3,580 mbf @ \$50.20	3/mbf = \$179,727.51
Notes:	

Quantities shown are estimates only and not pay items. Surfacing Quantities are loose cubic yards.

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 34-7-2.0(A) Road Name:	
Road Renovation: 0.58 mi 16 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.58 mi	\$895.18
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.6 acres	\$964.69
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$91.84
Mobilization: Const. \$95.98 Surf. \$0.00	\$95.98
Quarry Development:	\$0.00
Notes: Total:	\$2,047.69
Quantities shown are estimates only and not pay items.	

Road Construction Worksheet Road Number: 34-7-2.0(A) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 0.58 mi = \$402.81 Compaction: \$325.47/mi x 0.58 mi = \$188.77 Clean Culverts: \$365.82/mi x 0.58 mi = \$212.18 Water for Compaction Water Truck 3000 Gal 1.16 hr x \$78.81/hr = \$91.42 Subtotal: \$895.18 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated in T&E Cost RoadSide Brushing Heavy: \$1326.72/acre x 0.60 acres = \$796.03 Chipping for Roadside Brushing Brush Chipper 2 hr x \$84.33/hr = \$168.66 Subtotal: \$964.69 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Installation of BMP @ Stream General Laborer 1 hr x 34.09/hr = 34.09Crew Cab or 3/4 Ton Pickup 1 hr x \$57.75/hr = \$57.75 Subtotal: \$91.84 Mobilization: Construction - 1.14% of total Costs = \$95.98 surfacing = 0% \$0.00 Subtotal: \$95.98 Quarry Development: Subtotal: \$0.00 Total: \$2,047.69

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 34-7-21.6(A-C) Road Name:	
Road Renovation: 2.86 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 2.86 mi	\$4,414.15
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):2.8 acres	\$4,684.61
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$453.60
Mobilization: Const. \$469.77 Surf. \$0.00	\$469.77
Quarry Development:	\$0.00
Notes: Total:	\$10,022.13

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet Road Number: 34-7-21.6(A-C) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 2.86 mi = \$1,986.27 Compaction: \$325.47/mi x 2.86 mi = \$930.84 Clean Culverts: \$365.82/mi x 2.86 mi = \$1,046.25 Water for Compaction Water Truck 3000 Gal 5.72 hr x \$78.81/hr = \$450.79 Subtotal: \$4,414.15 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 2.80 acres = \$3,714.82 Chipping for Roadside Brushing Brush Chipper 11.5 hr x \$84.33/hr = \$969.80 Subtotal: \$4,684.61 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Reconstruct Truck Turnaround Motor Grader 14M 2 hr x \$140.96/hr = \$281.92 Backhoe 2 hr x \$85.84/hr = \$171.68 Subtotal: \$453.60 Mobilization: Construction - 5.58% of total Costs = \$469.77surfacing = 0% \$0.00 Subtotal: \$469.77 Quarry Development: Subtotal: \$0.00 Total: \$10,022.13

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17	
<b>Road Number: 34-7-22.0(A-B)</b> Road Name: Road Renovation: 0.27 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
	<b>~ 0 • 0 0</b>
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.27 mi	\$416.72
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.3 acres	\$482.35
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$44.21 Surf. \$0.00	\$44.21
Quarry Development:	\$0.00
Total:	\$943.28
Notes:	
Quantities shown are estimates only and not pay items.	

Road Construction Worksheet		
Road Number: 34-7-22.0(A-B) Road Name:		
Section 200 Clearing and Grubbing:	Subtotal:	\$0.00
Section 300 Excavation:	Subtotal:	\$0.00
Section 400 Drainage:	Subtotal:	\$0.00
<pre>Section 500 Renovation: Blading: \$694.50/mi x 0.27 mi = \$187.52 Compaction: \$325.47/mi x 0.27 mi = \$87.88 Clean Culverts: \$365.82/mi x 0.27 mi = \$98.77 Water for Compaction</pre>		
Water Truck 3000 Gal 0.54 hr x \$78.81/hr = \$42.56	Subtotal:	\$416.72
Section 700-1200 Surfacing: Surfacing:	Subtotal:	\$0.00
Section 1400 Slope Protection:	Subtotal:	\$0.00
Section 1800 Soil Stabilization:	Subtotal:	\$0.00
<pre>Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&amp;E RoadSide Brushing Heavy: \$1326.72/acre x 0.30 acres = \$398.02 Chipping for Roadside Brushing Brush Chipper 1 hr x \$84.33/hr = \$84.33</pre>		
Brush Chipper I hi x 904.55/hi - 904.55	Subtotal:	\$482.35
Section 2300 Engineering:	Subtotal:	\$0.00
Section 2400 Minor Concrete:	Subtotal:	\$0.00
Section 8000 Miscellaneous:	Subtotal:	\$0.00
Mobilization: Construction - 0.52% of total Costs = \$44.21 surfacing = 0% \$0.00	Subtotal:	\$44.21
Quarry Development:	Subtotal:	\$0.00
	Total:	\$943.28

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 34-7-3.0(A1-A2) Road Name:	
Road Renovation: 2.07 mi 16 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 2.07 mi	\$3,194.86
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):2.0 acres	\$3,328.08
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$91.84
Mobilization: Const. \$325.30 Surf. \$0.00	\$325.30
Quarry Development:	\$0.00
Total:	\$6,940.08
Notes: Quantities shown are estimates only and not pay items.	
And the prominent of continues only and not bay themp.	

Road Construction Worksheet Road Number: 34-7-3.0(A1-A2) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 2.07 mi = \$1,437.62 Compaction: \$325.47/mi x 2.07 mi = \$673.72 Clean Culverts: \$365.82/mi x 2.07 mi = \$757.25 Water for Compaction Water Truck 3000 Gal 4.14 hr x \$78.81/hr = \$326.27 Subtotal: \$3,194.86 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 2.00 acres = \$2,653.44 Chipping for Roadside Brushing Brush Chipper 8 hr x \$84.33/hr = \$674.64 Subtotal: \$3,328.08 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Installation of BMP @ Stream General Laborer 1 hr x 34.09/hr = 34.09Crew Cab or 3/4 Ton Pickup 1 hr x \$57.75/hr = \$57.75 Subtotal: \$91.84 Mobilization: Construction - 3.86% of total Costs = \$325.30 surfacing = 0% \$0.00 Subtotal: \$325.30 Quarry Development: Subtotal: \$0.00 Total: \$6,940.08

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 34-7-3.1(A-F) Road Name:	
Road Renovation: 6.21 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 6.21 mi	\$9,584.58
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):6.0 acres	\$10,068.57
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$966.51 Surf. \$0.00	\$966.51
Quarry Development:	\$0.00
Notes:	\$20,619.65

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet		
Road Number: 34-7-3.1(A-F) Road Name:		
Section 200 Clearing and Grubbing:	Subtotal:	\$0.00
Section 300 Excavation:	Subtotal:	\$0.00
Section 400 Drainage:	Subtotal:	\$0.00
<pre>Section 500 Renovation: Blading: \$694.50/mi x 6.21 mi = \$4,312.85 Compaction: \$325.47/mi x 6.21 mi = \$2,021.17 Clean Culverts: \$365.82/mi x 6.21 mi = \$2,271.74 Water for Compaction Water Truck 2000 Cal 12.42 hr x 678 81/hr = \$078 82</pre>		
Water Truck 3000 Gal 12.42 hr x \$78.81/hr = \$978.82	Subtotal:	\$9,584.58
Section 700-1200 Surfacing: Surfacing:		
	Subtotal:	\$0.00
Section 1400 Slope Protection:	Subtotal:	\$0.00
Section 1800 Soil Stabilization:	Subtotal:	\$0.00
<pre>Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&amp;E RoadSide Brushing Heavy: \$1326.72/acre x 6.00 acres = \$7,960.32 Chipping for Roadside Brushing Brush Chipper 25 hr x \$84.33/hr = \$2,108.25</pre>		
	Subtotal:	\$10,068.57
Section 2300 Engineering:	Subtotal:	\$0.00
Section 2400 Minor Concrete:	Subtotal:	\$0.00
Section 8000 Miscellaneous:	Subtotal:	\$0.00
Mobilization: Construction - 11.47% of total Costs = \$966.51 surfacing = 0% \$0.00	Subtotal:	\$966.51
Quarry Development:	Subcocar.	~~~·~
Anni' Peretobuenc.	Subtotal:	\$0.00
	Total:	\$20,619.65

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 34-7-7.1 Road Name:	
Road Renovation: 0.84 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.84 mi	\$1,296.46
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.8 acres	\$1,314.37
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$453.60
Mobilization: Const. \$150.70 Surf. \$0.00	\$150.70
Quarry Development:	\$0.00
Notes:	\$3,215.13
Quantities shown are estimates only and not pay items.	

Road Construction Worksheet Road Number: 34-7-7.1 Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 0.84 mi = \$583.38 Compaction: \$325.47/mi x 0.84 mi = \$273.39 Clean Culverts: \$365.82/mi x 0.84 mi = \$307.29 Water for Compaction Water Truck 3000 Gal 1.68 hr x \$78.81/hr = \$132.40 Subtotal: \$1,296.46 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 0.80 acres = \$1,061.38 Chipping for Roadside Brushing Brush Chipper 3 hr x \$84.33/hr = \$252.99 Subtotal: \$1,314.37 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Reconstruct Truck Turnaround Motor Grader 14M 2 hr x \$140.96/hr = \$281.92 Backhoe 2 hr x \$85.84/hr = \$171.68 Subtotal: \$453.60 Mobilization: Construction - 1.79% of total Costs = \$150.70 surfacing = 0% \$0.00 Subtotal: \$150.70 Quarry Development: Subtotal: \$0.00 Total: \$3,215.13

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-1.0(A) Road Name:	
Road Renovation: 0.46 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.46 mi	\$965.04
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.4 acres	\$699.35
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$81.85 Surf. \$0.00	\$81.85
Quarry Development:	\$0.00
Total:	\$1,746.24
Notes: Quantities shown are estimates only and not pay items.	
Argueteres shown are estimates only and not bay rems.	

Road Construction Worksheet Road Number: 35-7-1.0(A) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 0.46 mi = \$319.47 Scarification: \$857.82/mi x 0.29 mi = \$248.77 Compaction: \$325.47/mi x 0.46 mi = \$149.72 Clean Culverts: \$365.82/mi x 0.46 mi = \$168.28 Water Road for Compaction Water Truck 3000 Gal 1 hr x \$78.81/hr = \$78.81 Subtotal: \$965.04 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 0.40 acres = \$530.69 Chipping for Roadside Brushing Brush Chipper 2 hr x \$84.33/hr = \$168.66 Subtotal: \$699.35 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Subtotal: \$0.00 Mobilization: Construction - 0.97% of total Costs = \$81.85 surfacing = 0% \$0.00 Subtotal: \$81.85 Quarry Development: Subtotal: \$0.00 Total: \$1,746.24

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-1.6 Road Name:	
Road Renovation: 0.36 mi 12 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.9 acres	\$2,567.49
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.36 mi	\$1,149.59
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres Includes Small Quantity Factor of 1.19	\$268.79
2100 RoadSide Brushing (Manual):0.3 acres	\$524.51
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$1,203.60
Mobilization: Const. \$281.00 Surf. \$0.00	\$281.00
Quarry Development:	\$0.00
Notes: Total:	\$5,994.99
Overtities show one estimates and and and show	

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards.

```
Road Construction Worksheet
Road Number: 35-7-1.6 Road Name:
Section 200 Clearing and Grubbing:
  Clearing - Medium (Clearing): Adjustment Factor (1.67)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 1.67 + 0 + 1.28 + 0.25 = 3.20
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.20 x Total Acres: 0.9 = $2,567.49
                                                                  Subtotal: $2,567.49
Section 300 Excavation:
                                                                  Subtotal:
                                                                                $0.00
Section 400 Drainage:
                                                                  Subtotal:
                                                                               $0.00
Section 500 Renovation:
  Scarification: $857.82/mi x 0.36 mi = $308.82
 Blading w/o Ditches: $428.91/mi x 0.36 mi = $154.41
 Compaction: $325.47/mi x 0.36 mi = $117.17
 Heavy Road Renovation
  Tractor: D7 with rippers 3.6 hr x $158.11/hr = $569.20
                                                                  Subtotal: $1,149.59
Section 700-1200 Surfacing:
Surfacing:
                                                                  Subtotal:
                                                                                $0.00
Section 1400 Slope Protection:
                                                                  Subtotal: $0.00
Section 1800 Soil Stabilization:
 Comment: Mulch areas outside running surface within clearing limits
 Dry Method with Mulch: $443.98/acre \times 0.30 acres = $133.19
        Includes Small Quantity Factor of 1.19
        + Seed Cost: $132.00/acre x 0.30 acres = $39.60
        + Mulch Cost: $320.00/acre x 0.30 acres = $96.00
                                                                  Subtotal: $268.79
Section 2100 Roadside Brushing:
Manual Brushing
 Comment: Chipping estimated under T&E
 RoadSide Brushing Heavy: $1326.72/acre x 0.30 acres = $398.02
 Chipping for Roadside Brushing
  Brush Chipper 1.5 hr x $84.33/hr = $126.50
                                                                  Subtotal: $524.51
Section 2300 Engineering:
                                                                  Subtotal:
                                                                                 $0.00
Section 2400 Minor Concrete:
                                                                  Subtotal:
                                                                                 $0.00
```

Road Number: 35-7-1.6 Continued		
Section 8000 Miscellaneous: Reconstruct WaterDip-Leadout Tractor: D7 with rippers 3 EA x \$250.00/EA = \$750.00 Reconstruct Truck Turnaround Motor Grader 14M 2 hr x \$140.96/hr = \$281.92 Backhoe 2 hr x \$85.84/hr = \$171.68		
	Subtotal:	\$1,203.60
Mobilization: Construction - 3.34% of total Costs = \$281.00 surfacing = 0% \$0.00		
	Subtotal:	\$281.00
Quarry Development:		
	Subtotal:	\$0.00
	Total:	\$5,994.99

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-11.1(A) Road Name:	
Road Renovation: 1.66 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation: Blading 1.66 mi Slide Removal 13 cy	\$3,603.61
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres Includes Small Quantity Factor of 1.19	\$133.19
2100 RoadSide Brushing (Manual):1.6 acres	\$2,713.06
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$91.84
Mobilization: Const. \$321.71 Surf. \$0.00	\$321.71
Quarry Development:	\$0.00
Notes:	\$6,863.42

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: 35-7-11.1(A) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Slide Removal 13 cy Front End Loader \$101.17/hr x 3.00 hr = \$303.51 Dump Truck: \$74.45/hr x 3.00 hr = \$223.35 Blading: \$694.50/mi x 1.66 mi = \$1,152.87 Scarification: \$857.82/mi x 0.60 mi = \$514.69 Compaction: \$325.47/mi x 1.66 mi = \$540.28 Clean Culverts: \$365.82/mi x 1.66 mi = \$607.26 Water Roads for Compaction Water Truck 3000 Gal 3.32 hr x \$78.81/hr = \$261.65 Subtotal: \$3,603.61 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Comment: Estimated 0.1 Acres for each slump area Dry Method with Mulch:  $$443.98/acre \times 0.30 acres = $133.19$ Includes Small Quantity Factor of 1.19 Subtotal: \$133.19 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 1.60 acres = \$2,122.75 Chipping for Roadside Brushing Brush Chipper 7 hr x \$84.33/hr = \$590.31 Subtotal: \$2,713.06 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Installation of BMP @ Stream General Laborer 1 hr x \$34.09/hr = \$34.09Crew Cab or 3/4 Ton Pickup 1 hr x \$57.75/hr = \$57.75 Subtotal: \$91.84 Road Number: 35-7-11.1(A) Continued
Mobilization:
 Construction - 3.82% of total Costs = \$321.71
 surfacing = 0% \$0.00
 Subtotal: \$321.71
Quarry Development:

- Subtotal: \$0.00
- Total: \$6,863.42

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-20.0 Road Name:	
Road Renovation: 0.54 mi 16 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.54 mi	\$486.18
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.5 acres	\$832.02
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$453.60
Mobilization: Const. \$87.13 Surf. \$0.00	\$87.13
Quarry Development:	\$0.00
Total:	\$1,858.93
Notes: Quantities shown are estimates only and not pay items.	

Road Construction Worksheet		
Road Number: 35-7-20.0 Road Name:		
Section 200 Clearing and Grubbing:	Subtotal:	\$0.00
Section 300 Excavation:	Subtotal:	\$0.00
Section 400 Drainage:	Subtotal:	\$0.00
<pre>Section 500 Renovation: Blading w/o Ditches: \$428.91/mi x 0.54 mi = \$231.61 Compaction: \$325.47/mi x 0.54 mi = \$175.75 Water for Compaction Water Truck 3000 Gal 1 hr x \$78.81/hr = \$78.81</pre>	Subtotal:	\$486.18
Section 700-1200 Surfacing:		
Surfacing:	Subtotal:	\$0.00
Section 1400 Slope Protection:	Subtotal:	\$0.00
Section 1800 Soil Stabilization:	Subtotal:	\$0.00
<pre>Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&amp;E RoadSide Brushing Heavy: \$1326.72/acre x 0.50 acres = \$663.36 Chipping for Roadside Brushing Brush Chipper 2 hr x \$84.33/hr = \$168.66</pre>		
Castien 2200 Engineering:	Subtotal:	\$832.02
Section 2300 Engineering:	Subtotal:	\$0.00
Section 2400 Minor Concrete:	Subtotal:	\$0.00
Section 8000 Miscellaneous: Reconstruct Truck Turnaround Motor Grader 14M 2 hr x \$140.96/hr = \$281.92 Backhoe 2 hr x \$85.84/hr = \$171.68	Subtotal:	\$453.60
Mobilization: Construction - 1.03% of total Costs = \$87.13 surfacing = 0% \$0.00	Subtotal:	\$87.13
Quarry Development:	Subtotal:	\$0.00
	Total:	\$1,858.93

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-22.0 Road Name:	
Road Renovation: 0.03 mi 16 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.1 acres	\$285.28
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.03 mi	\$22.63
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.1 acres Includes Small Quantity Factor of 1.19	\$76.40
2100 RoadSide Brushing (Manual):0.1 acres	\$174.84
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$753.60
Mobilization: Const. \$64.56 Surf. \$0.00	\$64.56
Quarry Development:	\$0.00
Notes: Total:	\$1,377.30

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards.

```
Road Construction Worksheet
Road Number: 35-7-22.0 Road Name:
Section 200 Clearing and Grubbing:
  Clearing - Medium (Clearing): Adjustment Factor (1.67)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 1.67 + 0 + 1.28 + 0.25 = 3.20
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.20 x Total Acres: 0.1 = $285.28
                                                                 Subtotal: $285.28
Section 300 Excavation:
                                                                  Subtotal:
                                                                                $0.00
Section 400 Drainage:
                                                                 Subtotal:
                                                                               $0.00
Section 500 Renovation:
 Blading w/o Ditches: $428.91/mi x 0.03 mi = $12.87
 Compaction: $325.47/mi x 0.03 mi = $9.76
                                                                 Subtotal:
                                                                                $22.63
Section 700-1200 Surfacing:
Surfacing:
                                                                  Subtotal:
                                                                                $0.00
Section 1400 Slope Protection:
                                                                  Subtotal:
                                                                                $0.00
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 0.10 acres = $44.40
        Includes Small Quantity Factor of 1.19
        + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                 Subtotal:
                                                                               $76.40
Section 2100 Roadside Brushing:
Manual Brushing
 Comment: Chipping estimated under T&E
 RoadSide Brushing Heavy: $1326.72/acre x 0.10 acres = $132.67
  Chipping for Roadside Brushing
  Brush Chipper 0.5 hr x $84.33/hr = $42.17
                                                                  Subtotal: $174.84
Section 8000 Miscellaneous:
 Remove and Replace Barricade
  Tractor: D7 with rippers 1 EA x $300.00/EA = $300.00
 Reconstruct Truck Turnaround
  Motor Grader 14M 2 hr x $140.96/hr = $281.92
  Backhoe 2 hr x $85.84/hr = $171.68
                                                                  Subtotal: $753.60
Mobilization:
  Construction - 0.77% of total Costs = $64.56
  surfacing = 0% $0.00
                                                                  Subtotal:
                                                                               $64.56
Quarry Development:
                                                                 Subtotal:
                                                                                 $0.00
                                                                 Total:
                                                                             $1,377.30
```

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-27.0(C-F) Road Name:	
Road Renovation: 4.05 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 4.05 mi	\$6,242.93
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):3.9 acres	\$3,936.38
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$500.60 Surf. \$0.00	\$500.60
Quarry Development:	\$0.00
Notes: Total:	\$10,679.91

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet		
Road Number: 35-7-27.0(C-F) Road Name:		
Section 200 Clearing and Grubbing:	Subtotal:	\$0.00
Section 300 Excavation:	Subtotal:	\$0.00
Section 400 Drainage:	Subtotal:	\$0.00
<pre>Section 500 Renovation: Blading: \$694.50/mi x 4.05 mi = \$2,812.73 Compaction: \$325.47/mi x 4.05 mi = \$1,318.15 Clean Culverts: \$365.82/mi x 4.05 mi = \$1,481.57 Water for Compaction Water Truck 3000 Gal 8 hr x \$78.81/hr = \$630.48</pre>		
Waler Iruck 3000 Gar 8 Hr x \$78.81/Hr = \$630.48	Subtotal:	\$6,242.93
Section 700-1200 Surfacing: Surfacing:		
	Subtotal:	\$0.00
Section 1400 Slope Protection:	Subtotal:	\$0.00
Section 1800 Soil Stabilization:	Subtotal:	\$0.00
<pre>Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&amp;E RoadSide Brushing Medium: \$663.36/acre x 3.90 acres = \$2,587.10 Chipping for Roadside Brushing Brush Chipper 16 hr x \$84.33/hr = \$1,349.28</pre>		
	Subtotal:	\$3,936.38
Section 2300 Engineering:	Subtotal:	\$0.00
Section 2400 Minor Concrete:	Subtotal:	\$0.00
Section 8000 Miscellaneous:	Subtotal:	\$0.00
Mobilization: Construction - 5.94% of total Costs = \$500.60 surfacing = 0% \$0.00	Subtotal:	\$500.60
Quarry Development:	20200001	T 2 0 0 . 0 0
Zuniti Devetopmente	Subtotal:	\$0.00
	Total:	\$10,679.91

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-27.2(A) Road Name:	
Road Renovation: 0.40 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.40 mi	\$633.13
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.4 acres	\$699.35
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$65.53 Surf. \$0.00	\$65.53
Quarry Development:	\$0.00
Total:	\$1,398.00
Notes: Quantities shown are estimates only and not pay items.	

Road Construction Worksheet		
Road Number: 35-7-27.2(A) Road Name:		
Section 200 Clearing and Grubbing:	Subtotal:	\$0.00
Section 300 Excavation:	Subtotal:	\$0.00
Section 400 Drainage:	Subtotal:	\$0.00
<pre>Section 500 Renovation: Blading: \$694.50/mi x 0.40 mi = \$277.80 Compaction: \$325.47/mi x 0.40 mi = \$130.19 Clean Culverts: \$365.82/mi x 0.40 mi = \$146.33 Water for Compaction Water Truck 3000 Gal 1 hr x \$78.81/hr = \$78.81</pre>		
	Subtotal:	\$633.13
Section 700-1200 Surfacing: Surfacing:	Subtotal:	\$0.00
Section 1400 Slope Protection:	Subtotal:	\$0.00
Section 1800 Soil Stabilization:	Subtotal:	\$0.00
<pre>Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&amp;E RoadSide Brushing Heavy: \$1326.72/acre x 0.40 acres = \$530.69 Chipping for Roadside Brushing Brush Chipper 2 hr x \$84.33/hr = \$168.66</pre>		
Brush Chipper 2 hr x $584.33/hr = 5168.66$	Subtotal:	\$699.35
Section 2300 Engineering:	Subtotal:	\$0.00
Section 2400 Minor Concrete:	Subtotal:	\$0.00
Section 8000 Miscellaneous:	Subtotal:	\$0.00
Mobilization: Construction - 0.78% of total Costs = \$65.53 surfacing = 0% \$0.00	Subtotal:	\$65.53
Quarry Development:	Subtotal:	\$0.00
	Total:	\$1,398.00

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-27.3(A-B) Road Name:	
Road Renovation: 1.52 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 1.52 mi	\$3,289.59
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):1.5 acres	\$2,496.06
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$750.00
Mobilization: Const. \$321.41 Surf. \$0.00	\$321.41
Quarry Development:	\$0.00
Notes:	\$6,857.06
Quantities shown are estimates only and not pay items.	

Road Construction Worksheet Road Number: 35-7-27.3(A-B) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 1.52 mi = \$1,055.64 Scarification: \$857.82/mi x 1.10 mi = \$943.60 Compaction: \$325.47/mi x 1.52 mi = \$494.71 Clean Culverts: \$365.82/mi x 1.52 mi = \$556.05 Water for Compaction Water Truck 3000 Gal 3.04 hr x \$78.81/hr = \$239.58 Subtotal: \$3,289.59 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 1.50 acres = \$1,990.08 Chipping for Roadside Brushing Brush Chipper 6 hr x \$84.33/hr = \$505.98 Subtotal: \$2,496.06 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Reconstruct Water Dips Tractor: D7 with rippers 3 EA x \$250.00/EA = \$750.00Subtotal: \$750.00 Mobilization: Construction - 3.82% of total Costs = \$321.41surfacing = 0% \$0.00 Subtotal: \$321.41 Quarry Development: Subtotal: \$0.00 Total: \$6,857.06

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-27.7(A) Road Name:	
Road Renovation: 0.66 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.66 mi	\$1,018.65
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.6 acres	\$1,006.86
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$453.60
Mobilization: Const. \$121.92 Surf. \$0.00	\$121.92
Quarry Development:	\$0.00
Total:	\$2,601.03
Notes: Quantities shown are estimates only and not pay items.	
Quantities prown are epermated only and not pay reams.	

Road Construction Worksheet Road Number: 35-7-27.7(A) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 0.66 mi = \$458.37 Compaction: \$325.47/mi x 0.66 mi = \$214.81 Clean Culverts: \$365.82/mi x 0.66 mi = \$241.44 Water for Compaction Water Truck 3000 Gal 1.32 hr x \$78.81/hr = \$104.03 Subtotal: \$1,018.65 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 0.60 acres = \$796.03 Chipping for Roadside Brushing Brush Chipper 2.5 hr x \$84.33/hr = \$210.83 Subtotal: \$1,006.86 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Reconstruct Truck Turnaround Motor Grader 14M 2 hr x \$140.96/hr = \$281.92 Backhoe 2 hr x \$85.84/hr = \$171.68 Subtotal: \$453.60 Mobilization: Construction - 1.45% of total Costs = \$121.92surfacing = 0% \$0.00 Subtotal: \$121.92 Quarry Development: Subtotal: \$0.00 Total: \$2,601.03

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-28.0(A-B) Road Name:	
Road Renovation: 1.60 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 1.60 mi	\$2,453.69
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):1.6 acres	\$2,713.06
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$453.60
Mobilization: Const. \$276.40 Surf. \$0.00	\$276.40
Quarry Development:	\$0.00
Notes:	\$5,896.76
Quantities shown are estimates only and not pay items.	

Road Construction Worksheet Road Number: 35-7-28.0(A-B) Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 1.60 mi = \$1,111.20 Compaction: \$325.47/mi x 1.60 mi = \$520.75 Clean Culverts: \$365.82/mi x 1.60 mi = \$585.31 Water for Compaction Water Truck 3000 Gal 3 hr x \$78.81/hr = \$236.43 Subtotal: \$2,453.69 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 1.60 acres = \$2,122.75 Chipping for Roadside Brushing Brush Chipper 7 hr x \$84.33/hr = \$590.31 Subtotal: \$2,713.06 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Reconstruct Truck Turnaround Motor Grader 14M 2 hr x \$140.96/hr = \$281.92 Backhoe 2 hr x \$85.84/hr = \$171.68 Subtotal: \$453.60 Mobilization: Construction - 3.28% of total Costs = \$276.40 surfacing = 0% \$0.00 Subtotal: \$276.40 Quarry Development: Subtotal: \$0.00 Total: \$5,896.76

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-29.0(A) Road Name:	
Road Renovation: 0.95 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.95 mi	\$1,474.12
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.9 acres	\$1,531.37
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$147.80 Surf. \$0.00	\$147.80
Quarry Development:	\$0.00
Total:	\$3,153.29
Notes:	
Quantities shown are estimates only and not pay items.	

Road Construction Worksheet		
Road Number: 35-7-29.0(A) Road Name:		
Section 200 Clearing and Grubbing:	Subtotal:	\$0.00
Section 300 Excavation:	Subtotal:	\$0.00
Section 400 Drainage:	Subtotal:	\$0.00
<pre>Section 500 Renovation: Blading: \$694.50/mi x 0.95 mi = \$659.78 Compaction: \$325.47/mi x 0.95 mi = \$309.20 Clean Culverts: \$365.82/mi x 0.95 mi = \$347.53 Water for Compaction Water Truck 3000 Gal 2 hr x \$78.81/hr = \$157.62</pre>		
	Subtotal:	\$1,474.12
Section 700-1200 Surfacing: Surfacing:	Subtotal:	\$0.00
Section 1400 Slope Protection:	Subtotal:	\$0.00
Section 1800 Soil Stabilization:	Subtotal:	\$0.00
<pre>Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&amp;E RoadSide Brushing Heavy: \$1326.72/acre x 0.90 acres = \$1,194.05 Chipping for Roadside Brushing Brush Chipper 4 hr x \$84.33/hr = \$337.32</pre>		
	Subtotal:	\$1,531.37
Section 2300 Engineering:	Subtotal:	\$0.00
Section 2400 Minor Concrete:	Subtotal:	\$0.00
Section 8000 Miscellaneous:	Subtotal:	\$0.00
Mobilization: Construction - 1.75% of total Costs = \$147.80 surfacing = 0% \$0.00		
	Subtotal:	\$147.80
Quarry Development:	Subtotal:	\$0.00
	Total:	\$3,153.29

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: 35-7-29.1 Road Name:	
Road Renovation: 0.25 mi 14 ft Subgrade 3 ft ditch	
200 Clearing and Grubbing: acres	\$0.00
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.25 mi	\$385.85
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
2100 RoadSide Brushing (Manual):0.2 acres	\$349.67
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$453.60
Mobilization: Const. \$58.48 Surf. \$0.00	\$58.48
Quarry Development:	\$0.00
Total:	\$1,247.61
Notes: Quantities shown are estimates only and not pay items.	
QUALICITES SHOWIN ALE ESCIMALES ONLY AND NOT PAY ILEMS.	

Road Construction Worksheet Road Number: 35-7-29.1 Road Name: Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Blading: \$694.50/mi x 0.25 mi = \$173.63 Compaction: \$325.47/mi x 0.25 mi = \$81.37 Clean Culverts: \$365.82/mi x 0.25 mi = \$91.46 Water for Compaction Water Truck 3000 Gal 0.5 hr x \$78.81/hr = \$39.41 Subtotal: \$385.85 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Subtotal: \$0.00 Section 2100 Roadside Brushing: Manual Brushing Comment: Chipping estimated under T&E RoadSide Brushing Heavy: \$1326.72/acre x 0.20 acres = \$265.34 Chipping for Roadside Brushing Brush Chipper 1 hr x \$84.33/hr = \$84.33 Subtotal: \$349.67 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Reconstruct Truck Turnaround Motor Grader 14M 2 hr x \$140.96/hr = \$281.92 Backhoe 2 hr x \$85.84/hr = \$171.68 Subtotal: \$453.60 Mobilization: Construction - 0.69% of total Costs = \$58.48 surfacing = 0% \$0.00 Subtotal: \$58.48 Quarry Development: Subtotal: \$0.00 Total: \$1,247.61

Road Number: 35-7-29.6 Road Name: Road Renovation: 0.09 mi 14 ft Subgrade 0 ft ditch
200 Clearing and Grubbing: 0.2 acres \$725.67
300 Excavation: \$0.00
400 Drainage:\$0.00 Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf
500 Renovation:
700-1200 Surfacing: \$0.00
1400 Slope Protection: \$0.00
1800 Soil Stabilization: 0.0 acres \$0.00
2100 RoadSide Brushing (Manual):0.1 acres
2300 Engineering: 0.00 sta \$0.00
2400 Minor Concrete: \$0.00
8000 Miscellaneous: \$453.60
Mobilization: Const. \$77.74 Surf. \$0.00 \$77.74
Quarry Development: \$0.00
Total: \$1,658.52
Notes: Quantities shown are estimates only and not pay items.

```
Road Construction Worksheet
Road Number: 35-7-29.6 Road Name:
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Pile and Burn (Slash): Adjustment Factor (1.28)
  less than 20' (Avg Clearing Widths): Adjustment Factor (0.25)
  Total Adjustment Factor: 2.54 + 0 + 1.28 + 0.25 = 4.07
  Base Cost/Acre: $891.49 x Adjustment Factor: 4.07 x Total Acres: 0.2 = $725.67
                                                                 Subtotal: $725.67
Section 300 Excavation:
                                                                 Subtotal:
                                                                               $0.00
Section 400 Drainage:
                                                                 Subtotal:
                                                                              $0.00
Section 500 Renovation:
  Scarification: $857.82/mi x 0.09 mi = $77.20
 Blading w/o Ditches: $428.91/mi x 0.09 mi = $38.60
 Compaction: $325.47/mi x 0.09 mi = $29.29
 Water for Compaction
  Water Truck 3000 Gal .5 hr x $78.81/hr = $39.41
                                                                 Subtotal: $184.50
Section 700-1200 Surfacing:
Surfacing:
                                                                 Subtotal:
                                                                               $0.00
Section 1400 Slope Protection:
                                                                 Subtotal:
                                                                                $0.00
Section 1800 Soil Stabilization:
                                                                 Subtotal: $0.00
Section 2100 Roadside Brushing:
Manual Brushing
Comment: Chipping estimated under T&E
 RoadSide Brushing Heavy: $1326.72/acre x 0.10 acres = $132.67
 Chipping for Roadside Brushing
  Brush Chipper 1 hr x $84.33/hr = $84.33
                                                                 Subtotal: $217.00
Section 8000 Miscellaneous:
 Reconstruct Truck Turnaround
  Motor Grader 14M 2 hr x $140.96/hr = $281.92
  Backhoe 2 hr x $85.84/hr = $171.68
                                                                 Subtotal: $453.60
Mobilization:
  Construction - 0.92% of total Costs = $77.74
  surfacing = 0\% $0.00
                                                                 Subtotal:
                                                                              $77.74
Quarry Development:
                                                                 Subtotal:
                                                                                $0.00
                                                                 Total:
                                                                           $1,658.52
```

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17	
<b>Road Number: Temp 11-5</b> Road Name: Reconstruction Temporary Road: 0.36 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 1.1 acres	\$3,667.59
300 Excavation: 1,544 cy	\$4,237.47
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 1.1 acres Includes Small Quantity Factor of 1.19	\$840.38
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$474.33
Mobilization: Const. \$453.41 Surf. \$0.00	\$453.41
Quarry Development:	\$0.00
Notes: Total:	\$9,673.18
Quantities shown are estimates only and not pay items.	

```
Road Construction Worksheet
Road Number: Temp 11-5 Road Name: Reconstruction
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Scatter (Slash): Adjustment Factor (1)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1 + 0.1 = 3.74
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.74 x Total Acres: 1.10 = $3,667.59
                                                                   Subtotal: $3,667.59
Section 300 Excavation:
  Excavation - Common: $2.01/cy \times 1,544 cy = $3,103.44
  Embankment Placement & Compaction 306.f - Common: $0.25/cy x 1,544 cy = $386.00
  Subgrade Compaction: 4 Sta/hr $27.12/sta. x 19.2 sta = $520.70
  Blading without ditch: $11.84/station x 19.20 stations = $227.33
                                                                   Subtotal: $4,237.47
Section 400 Drainage:
                                                                   Subtotal:
                                                                                  $0.00
Section 500 Renovation:
                                                                   Subtotal:
                                                                                  $0.00
Section 700-1200 Surfacing:
Surfacing:
                                                                                  $0.00
                                                                   Subtotal:
Section 1400 Slope Protection:
                                                                   Subtotal:
                                                                                  $0.00
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 1.10 acres = $488.38
        Includes Small Quantity Factor of 1.19
        + Mulch Cost: $320.00/acre x 1.10 acres = $352.00
                                                                   Subtotal:
                                                                                $840.38
Section 2100 Roadside Brushing:
                                                                   Subtotal:
                                                                                  $0.00
Section 8000 Miscellaneous:
  Construct Barricade
  Tractor: D7 with rippers 1 hr x $158.11/hr = $158.11
  Construct Truck Turnaround
  Tractor: D7 with rippers 2 hr x $158.11/hr = $316.22
                                                                   Subtotal:
                                                                                $474.33
Mobilization:
 Construction - 5.38% of total Costs = $453.41
  surfacing = 0\% $0.00
                                                                   Subtotal:
                                                                                $453.41
Quarry Development:
                                                                   Subtotal:
                                                                                  $0.00
                                                                   Total:
                                                                              $9,673.18
```

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 <b>Road Number: Temp 29-1CD</b> Road Name: Re/New Construction Temporary Road: 0.37 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 1.1 acres	\$3,700.93
300 Excavation: 2,067 cy	\$5,425.30
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 1.1 acres Includes Small Quantity Factor of 1.19	\$848.02
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$474.33
Mobilization: Const. \$513.84 Surf. \$0.00	\$513.84
Quarry Development:	\$0.00
Notes:	\$10,962.42

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards.

```
Road Construction Worksheet
Road Number: Temp 29-1CD Road Name: Re/New Construction
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Scatter (Slash): Adjustment Factor (1)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1 + 0.1 = 3.74
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.74 x Total Acres: 1.11 = $3,700.93
                                                                  Subtotal: $3,700.93
Section 300 Excavation:
  Excavation - Common: $2.01/cy \times 2,067 cy = $4,154.67
  Embankment Placement & Compaction 306.f - Common: $0.25/cy x 2,067 cy = $516.75
  Subgrade Compaction: 4 Sta/hr $27.12/sta. x 19.4 sta = $524.77
  Blading without ditch: $11.84/station x 19.35 stations = $229.10
                                                                  Subtotal: $5,425.30
Section 400 Drainage:
                                                                   Subtotal:
                                                                                  $0.00
Section 500 Renovation:
                                                                   Subtotal:
                                                                                  $0.00
Section 700-1200 Surfacing:
Surfacing:
                                                                                  $0.00
                                                                  Subtotal:
Section 1400 Slope Protection:
                                                                  Subtotal:
                                                                                  $0.00
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 1.11 acres = $492.82
        Includes Small Quantity Factor of 1.19
        + Mulch Cost: $320.00/acre x 1.11 acres = $355.20
                                                                   Subtotal:
                                                                                $848.02
Section 2100 Roadside Brushing:
                                                                   Subtotal:
                                                                                  $0.00
Section 8000 Miscellaneous:
  Construct Truck Turnaround
  Tractor: D7 with rippers 2 hr x $158.11/hr = $316.22
  Construct Barricade
  Tractor: D7 with rippers 1 hr x $158.11/hr = $158.11
                                                                   Subtotal:
                                                                                $474.33
Mobilization:
 Construction - 6.10% of total Costs = $513.84
  surfacing = 0\% $0.00
                                                                   Subtotal:
                                                                                $513.84
Quarry Development:
                                                                  Subtotal:
                                                                                  $0.00
                                                                  Total:
                                                                             $10,962.42
```

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: Temp 29-1NB Road Name: Re/New Construction	
Temporary Road: 0.08 mi 14 ft Subgrade 0 ft ditch	άροο <b>Γ</b> 4
200 Clearing and Grubbing: 0.3 acres	\$833.54
300 Excavation: 465 cy	\$1,220.38
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.3 acres Includes Small Quantity Factor of 1.19	\$191.00
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$316.22
Mobilization: Const. \$125.95 Surf. \$0.00	\$125.95
Quarry Development:	\$0.00
Total:	\$2,687.09
Notes:	
Quantities shown are estimates only and not pay items.	

```
Road Construction Worksheet
Road Number: Temp 29-1NB Road Name: Re/New Construction
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Scatter (Slash): Adjustment Factor (1)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1 + 0.1 = 3.74
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.74 x Total Acres: 0.25 = $833.54
                                                                   Subtotal: $833.54
Section 300 Excavation:
  Excavation - Common: $2.01/cy \times 465 cy = $934.65
  Embankment Placement & Compaction 306.f - Common: $0.25/cy x 465 cy = $116.25
  Subgrade Compaction: 4 Sta/hr $27.12/sta. x 4.4 sta = $117.97
  Blading without ditch: $11.84/station x 4.35 stations = $51.50
                                                                   Subtotal: $1,220.38
Section 400 Drainage:
                                                                   Subtotal:
                                                                                  $0.00
Section 500 Renovation:
                                                                   Subtotal:
                                                                                  $0.00
Section 700-1200 Surfacing:
Surfacing:
                                                                                  $0.00
                                                                   Subtotal:
Section 1400 Slope Protection:
                                                                   Subtotal:
                                                                                  $0.00
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 0.25 acres = $111.00
        Includes Small Quantity Factor of 1.19
        + Mulch Cost: $320.00/acre x 0.25 acres = $80.00
                                                                   Subtotal:
                                                                                $191.00
Section 2100 Roadside Brushing:
                                                                   Subtotal:
                                                                                  $0.00
Section 2300 Engineering:
                                                                   Subtotal:
                                                                                  $0.00
Section 2400 Minor Concrete:
                                                                   Subtotal:
                                                                                  $0.00
Section 8000 Miscellaneous:
 Construct Truck Turnaround
   Tractor: D7 with rippers 2 hr x $158.11/hr = $316.22
                                                                   Subtotal:
                                                                                $316.22
Mobilization:
  Construction - 1.50% of total Costs = $125.95
  surfacing = 0% $0.00
                                                                   Subtotal:
                                                                                $125.95
Quarry Development:
                                                                   Subtotal:
                                                                                  $0.00
                                                                   Total:
                                                                              $2,687.09
```

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: Temp 29-4 Road Name: Reconstruction	
Temporary Road: 0.21 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.7 acres	\$2,109.27
300 Excavation:	\$0.00
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 40 lf	\$1,720.40
500 Renovation:Blading 0.21 mi	\$1,364.04
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.7 acres Includes Small Quantity Factor of 1.19	\$496.59
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$632.44
Mobilization: Const. \$310.94 Surf. \$0.00	\$310.94
Quarry Development:	\$0.00
Notes: Total:	\$6,633.68

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: Temp 29-4 Road Name: Reconstruction Section 200 Clearing and Grubbing: Clearing - Heavy (Clearing): Adjustment Factor (2.54) 1-15% (Avg Side Slopes): Adjustment Factor (0) Scatter (Slash): Adjustment Factor (1) 20-40' (Avg Clearing Widths): Adjustment Factor (0.1) Total Adjustment Factor: 2.54 + 0 + 1 + 0.1 = 3.64Base Cost/Acre: \$891.49 x Adjustment Factor: 3.64 x Total Acres: 0.65 = \$2,109.27 Subtotal: \$2,109.27 Section 300 Excavation: Subtotal: \$0.00 Section 400 Drainage: Poly Pipe Temp @ STA 7+25 18 inch 40 lf x \$43.01/lf = \$1,720.40 Subtotal: \$1,720.40 Section 500 Renovation: Scarification: \$857.82/mi x 0.21 mi = \$180.14 Blading w/o Ditches: \$428.91/mi x 0.21 mi = \$90.07 Compaction: \$325.47/mi x 0.21 mi = \$68.35 Clean Culverts: \$365.82/mi x 0.21 mi = \$76.82 Heavy Blading for Opening Temp Tractor: D7 with rippers 6 hr x \$158.11/hr = \$948.66 Subtotal: \$1,364.04 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Dry Method with Mulch:  $$443.98/acre \times 0.65 acres = $288.59$ Includes Small Quantity Factor of 1.19 + Mulch Cost: \$320.00/acre x 0.65 acres = \$208.00 Subtotal: \$496.59 Section 2100 Roadside Brushing: Subtotal: \$0.00 Section 8000 Miscellaneous: Remove Earthen Barricade Tractor: D7 with rippers 1 hr x \$158.11/hr = \$158.11 Reconstruct Barricade Tractor: D7 with rippers 1 hr x \$158.11/hr = \$158.11 Construct Truck Turnaround Tractor: D7 with rippers 2 hr x \$158.11/hr = \$316.22 Subtotal: \$632.44 Mobilization: Construction - 3.69% of total Costs = \$310.94 surfacing = 0% \$0.00 Subtotal: \$310.94 Quarry Development: Subtotal: \$0.00 Total: \$6,633.68

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 <b>Road Number: Temp 30-2B</b> Road Name: New Construction Temporary Road: 0.07 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.2 acres	\$666.83
300 Excavation: 475 cy	\$1,209.86
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.2 acres Includes Small Quantity Factor of 1.19	\$152.80
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$158.11
Mobilization: Const. \$107.58 Surf. \$0.00	\$107.58
Quarry Development:	\$0.00
Total: Notes: Quantities shown are estimates only and not pay items.	\$2,295.18
QUALICITIES SHOWIL ALE ESCIMALES ONLY AND NOT PAY ICEMS.	

```
Road Construction Worksheet
Road Number: Temp 30-2B Road Name: New Construction
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Scatter (Slash): Adjustment Factor (1)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1 + 0.1 = 3.74
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.74 x Total Acres: 0.20 = $666.83
                                                                   Subtotal: $666.83
Section 300 Excavation:
  Excavation - Common: $2.01/cy \times 475 \ cy = $954.75
  Embankment Placement & Compaction 306.f - Common: $0.25/cy x 475 cy = $118.75
  Subgrade Compaction: 4 Sta/hr $27.12/sta. x 3.5 sta = $94.92
  Blading without ditch: $11.84/station x 3.50 stations = $41.44
                                                                   Subtotal: $1,209.86
Section 400 Drainage:
                                                                   Subtotal:
                                                                                  $0.00
Section 500 Renovation:
                                                                   Subtotal:
                                                                                  $0.00
Section 700-1200 Surfacing:
Surfacing:
                                                                                  $0.00
                                                                   Subtotal:
Section 1400 Slope Protection:
                                                                   Subtotal:
                                                                                  $0.00
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 0.20 acres = $88.80
        Includes Small Quantity Factor of 1.19
        + Mulch Cost: $320.00/acre x 0.20 acres = $64.00
                                                                   Subtotal:
                                                                                $152.80
Section 2100 Roadside Brushing:
                                                                   Subtotal:
                                                                                  $0.00
Section 2300 Engineering:
                                                                   Subtotal:
                                                                                  $0.00
Section 2400 Minor Concrete:
                                                                   Subtotal:
                                                                                  $0.00
Section 8000 Miscellaneous:
 Construct Barricade
   Tractor: D7 with rippers 1 hr x $158.11/hr = $158.11
                                                                   Subtotal:
                                                                                $158.11
Mobilization:
  Construction - 1.28% of total Costs = $107.58
  surfacing = 0% $0.00
                                                                   Subtotal:
                                                                                $107.58
Quarry Development:
                                                                   Subtotal:
                                                                                  $0.00
                                                                   Total:
                                                                              $2,295.18
```

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 Road Number: Temp 31-4/30-2 Road Name: Reconstruction	
Temporary Road: 0.92 mi 14 ft Subgrade 0 ft ditch 200 Clearing and Grubbing: acres	\$0.00
300 Excavation: 4,466 cy	
	+,
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:Blading 0.92 mi	\$831.28
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 1.0 acres Includes Small Quantity Factor of 1.19	\$763.98
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$632.44
Mobilization: Const. \$1,379.71 Surf. \$0.00	\$1,379.71
Quarry Development:	\$0.00
Notes: Total:	\$29,435.02
Quantities shown are estimated only and not nav items	

Quantities shown are estimates only and not pay items. Surfacing Quantities shown are loose cubic yards. Road Construction Worksheet Road Number: Temp 31-4/30-2 Road Name: Reconstruction Section 200 Clearing and Grubbing: Subtotal: \$0.00 Section 300 Excavation: Excavation - Common:  $$2.01/cy \times 1,206 \ cy = $2,424.06$ Excavation - Solid: \$6.58/cy x 3,260 cy = \$21,450.80 Embankment Placement & Compaction 306.f - Common: \$0.25/cy x 206 cy = \$51.50 Subgrade Compaction: 4 Sta/hr \$27.12/sta. x 48.8 sta = \$1,323.46 Blading without ditch: \$11.84/station x 48.80 stations = \$577.79 Subtotal: \$25,827.61 Section 400 Drainage: Subtotal: \$0.00 Section 500 Renovation: Scarification: \$857.82/mi x 0.16 mi = \$137.25 Blading w/o Ditches: \$428.91/mi x 0.92 mi = \$394.60 Compaction: \$325.47/mi x 0.92 mi = \$299.43 Subtotal: \$831.28 Section 700-1200 Surfacing: Surfacing: Subtotal: \$0.00 Section 1400 Slope Protection: Subtotal: \$0.00 Section 1800 Soil Stabilization: Dry Method with Mulch:  $$443.98/acre \times 1.00 acres = $443.98$ Includes Small Quantity Factor of 1.19 + Mulch Cost: \$320.00/acre x 1.00 acres = \$320.00 Subtotal: \$763.98 Section 2100 Roadside Brushing: Subtotal: \$0.00 Section 2300 Engineering: Subtotal: \$0.00 Section 2400 Minor Concrete: Subtotal: \$0.00 Section 8000 Miscellaneous: Construct Truck Turnaround Tractor: D7 with rippers 4 hr x \$158.11/hr = \$632.44 \$632.44 Subtotal: Mobilization: Construction - 16.38% of total Costs = \$1,379.71surfacing = 0% \$0.00 Subtotal: \$1,379.71 Quarry Development: Subtotal: \$0.00 Total: \$29,435.02

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 <b>Road Number: Temp 3-4</b> Road Name: New Construction Temporary Road: 0.03 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.1 acres	\$324.50
300 Excavation: 100 cy	\$292.23
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 40 lf	\$1,720.40
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.1 acres Includes Small Quantity Factor of 1.19	\$76.40
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$316.22
Mobilization: Const. \$134.24 Surf. \$0.00	\$134.24
Quarry Development:	\$0.00
Notes: Quantities shown are estimates only and not pay items.	\$2,864.00
Anguereres shown are estimates only and not bay reams.	

```
Road Construction Worksheet
Road Number: Temp 3-4 Road Name: New Construction
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  1-15% (Avg Side Slopes): Adjustment Factor (0)
  Scatter (Slash): Adjustment Factor (1)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0 + 1 + 0.1 = 3.64
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.64 x Total Acres: 0.10 = $324.50
                                                                 Subtotal: $324.50
Section 300 Excavation:
 Excavation - Common: $2.01/cy \times 100 \ cy = $201.00
 Embankment Placement & Compaction 306.f - Common: $0.25/cy x 100 cy = $25.00
 Subgrade Compaction: 4 Sta/hr $27.12/sta. x 1.7 sta = $46.10
 Blading without ditch: $11.84/station x 1.70 stations = $20.13
                                                                 Subtotal:
                                                                              $292.23
Section 400 Drainage:
 Poly Pipe
                   Temp @ STA 0+10
                                      18 inch 40 lf x $43.01/lf = $1,720.40
                                                                 Subtotal: $1,720.40
Section 500 Renovation:
                                                                 Subtotal:
                                                                               $0.00
Section 700-1200 Surfacing:
Surfacing:
                                                                                $0.00
                                                                 Subtotal:
Section 1400 Slope Protection:
                                                                 Subtotal:
                                                                                $0.00
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 0.10 acres = $44.40
       Includes Small Quantity Factor of 1.19
       + Mulch Cost: $320.00/acre x 0.10 acres = $32.00
                                                                 Subtotal:
                                                                               $76.40
Section 2100 Roadside Brushing:
                                                                 Subtotal:
                                                                               $0.00
Section 2300 Engineering:
                                                                 Subtotal:
                                                                                $0.00
Section 2400 Minor Concrete:
                                                                 Subtotal:
                                                                                $0.00
Section 8000 Miscellaneous:
 Construct Truck Turnaround
  Tractor: D7 with rippers 2 hr x $158.11/hr = $316.22
                                                                 Subtotal:
                                                                              $316.22
Mobilization:
 Construction - 1.59% of total Costs = $134.24
 surfacing = 0%
                 $0.00
                                                                 Subtotal:
                                                                             $134.24
Quarry Development:
                                                                 Subtotal:
                                                                                $0.00
                                                                 Total:
                                                                            $2,864.00
```

<b>Road Number: Temp 7-1C</b> Road Name: New Construction Temporary Road: 0.04 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 0.1 acres	\$400.10
300 Excavation: 164 cy	\$450.51
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.1 acres Includes Small Quantity Factor of 1.19	\$91.68
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$474.33
Mobilization: Const. \$69.67 Surf. \$0.00	\$69.67
Quarry Development:	\$0.00
Notes:	\$1,486.28
Quantities shown are estimates only and not pay items.	

```
Road Construction Worksheet
Road Number: Temp 7-1C Road Name: New Construction
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Scatter (Slash): Adjustment Factor (1)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1 + 0.1 = 3.74
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.74 x Total Acres: 0.12 = $400.10
                                                                  Subtotal: $400.10
Section 300 Excavation:
  Excavation - Common: $2.01/cy \times 164 cy = $329.64
 Embankment Placement & Compaction 306.f - Common: $0.25/cy x 164 cy = $41.00
  Subgrade Compaction: 4 Sta/hr $27.12/sta. x 2.1 sta = $55.60
  Blading without ditch: $11.84/station x 2.05 stations = $24.27
                                                                  Subtotal:
                                                                                $450.51
Section 400 Drainage:
                                                                   Subtotal:
                                                                                  $0.00
Section 500 Renovation:
                                                                   Subtotal:
                                                                                  $0.00
Section 700-1200 Surfacing:
Surfacing:
                                                                                  $0.00
                                                                  Subtotal:
Section 1400 Slope Protection:
                                                                  Subtotal:
                                                                                  $0.00
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 0.12 acres = $53.28
        Includes Small Quantity Factor of 1.19
        + Mulch Cost: $320.00/acre x 0.12 acres = $38.40
                                                                   Subtotal:
                                                                                 $91.68
Section 2100 Roadside Brushing:
                                                                   Subtotal:
                                                                                  $0.00
Section 8000 Miscellaneous:
  Construct Truck Turnaround
  Tractor: D7 with rippers 2 hr x $158.11/hr = $316.22
  Construct Barricade
  Tractor: D7 with rippers 1 HR x $158.11/HR = $158.11
                                                                   Subtotal:
                                                                                $474.33
Mobilization:
 Construction - 0.83% of total Costs = $69.67
  surfacing = 0\% $0.00
                                                                   Subtotal:
                                                                                 $69.67
Quarry Development:
                                                                  Subtotal:
                                                                                  $0.00
                                                                  Total:
                                                                              $1,486.28
```

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17 <b>Road Number: Temp 7-2</b> Road Name: Re/New Construction Temporary Road: 0.52 mi 14 ft Subgrade 0 ft ditch	
200 Clearing and Grubbing: 1.6 acres	\$5,201.31
300 Excavation: 4,184 cy \$	\$10,515.55
400 Drainage: Culvert: 0 lf DownSpout: 0 lf PolyPipe: 0 lf	\$0.00
500 Renovation:	\$0.00
700-1200 Surfacing:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 1.6 acres Includes Small Quantity Factor of 1.19	\$1,191.81
2100 RoadSide Brushing (NONE):0.0 acres	\$0.00
2300 Engineering: 0.00 sta	\$0.00
2400 Minor Concrete:	\$0.00
8000 Miscellaneous:	\$790.55
Mobilization: Const. \$870.42 Surf. \$0.00	\$870.42
Quarry Development:	\$0.00
Total: \$ Notes: Quantities shown are estimates only and not pay items.	\$18,569.64

```
Road Construction Worksheet
Road Number: Temp 7-2 Road Name: Re/New Construction
Section 200 Clearing and Grubbing:
  Clearing - Heavy (Clearing): Adjustment Factor (2.54)
  16-30% (Avg Side Slopes): Adjustment Factor (0.1)
  Scatter (Slash): Adjustment Factor (1)
  20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
  Total Adjustment Factor: 2.54 + 0.1 + 1 + 0.1 = 3.74
  Base Cost/Acre: $891.49 x Adjustment Factor: 3.74 x Total Acres: 1.56 = $5,201.31
                                                                  Subtotal: $5,201.31
Section 300 Excavation:
  Excavation - Common: $2.01/cy \times 4,184 cy = $8,409.84
  Embankment Placement & Compaction 306.f - Common: $0.25/cy \times 4,184 cy = $1,046.00
  Subgrade Compaction: 4 Sta/hr $27.12/sta. x 27.2 sta = $737.66
  Blading without ditch: $11.84/station x 27.20 stations = $322.05
                                                                  Subtotal: $10,515.55
Section 400 Drainage:
                                                                  Subtotal:
                                                                                $0.00
Section 500 Renovation:
                                                                  Subtotal:
                                                                                 $0.00
Section 700-1200 Surfacing:
Surfacing:
                                                                                 $0.00
                                                                  Subtotal:
Section 1400 Slope Protection:
                                                                                 $0.00
                                                                  Subtotal:
Section 1800 Soil Stabilization:
 Dry Method with Mulch: $443.98/acre \times 1.56 acres = $692.61
        Includes Small Quantity Factor of 1.19
        + Mulch Cost: $320.00/acre x 1.56 acres = $499.20
                                                                  Subtotal: $1,191.81
Section 2100 Roadside Brushing:
                                                                  Subtotal:
                                                                                 $0.00
Section 2300 Engineering:
                                                                  Subtotal:
                                                                                 $0.00
Section 2400 Minor Concrete:
                                                                  Subtotal:
                                                                                 $0.00
Section 8000 Miscellaneous:
 Construct Truck Turnaround
  Tractor: D7 with rippers 4 hr x $158.11/hr = $632.44
  Construct Barricade
  Tractor: D7 with rippers 1 hr x $158.11/hr = $158.11
                                                                  Subtotal:
                                                                               $790.55
Mobilization:
 Construction - 10.33% of total Costs = $870.42
  surfacing = 0\% $0.00
                                                                  Subtotal:
                                                                               $870.42
Quarry Development:
                                                                  Subtotal:
                                                                                 $0.00
                                                                  Total:
                                                                            $18,569.64
```

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

### Mobilization Costs - Construction and Surfacing

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17

Average Mobilization distance = 50 miles Factor = 1.00

Mobilization: Construction

Graders-all:3 ea x (1.00 x \$410.00/ea + 6 mi x \$14.10/mi)= \$1,483.80Brush Cutter:1 ea x (1.00 x \$410.00/ea) = \$410.00Excavators:1 ea x (1.00 x \$410.00/ea) = \$410.00RTBackhoes 24/30:3 ea x (1.00 x \$861.00/ea = \$861.00RTBackhoes 24/30:3 ea x (1.00 x \$305.00/ea + 6 mi x \$5.65/mi)= \$1,016.70Tractors <= D7:</td>3 ea x (1.00 x \$635.00/ea + 6 mi x \$31.00/mi)= \$2,463.00Dump Truck<=15cy:</td>3 ea x (1.00 x \$89.00/ea + 6 mi x \$3.72/mi)= \$333.96Water Truck:3 ea x (1.00 x \$95.00/ea + 6 mi x \$3.94/mi)= \$355.92Equipment Washing:6 ea x (\$250.00) /ea = \$1,500.00

Mobilization: Surfacing

Subtotal: \$8,424.38

Subtotal: \$0.00

### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

# Summary of Construction Quantities

T.S. Contract Name: Pickett Hog TS Sale Date: 09/14/17

Road Number 34-7-2.0(A) 34-7-21.6(A-C) 34-7-22.0(A-B) 34-7-3.0(A1-A2) 34-7-3.1(A-F) 34-7-7.1 35-7-1.0(A) 35-7-1.6 35-7-11.1(A) 35-7-20.0 35-7-22.0 35-7-27.0(C-F) 35-7-27.2(A) 35-7-27.3(A-B) 35-7-28.0(A-B) 35-7-29.0(A) 35-7-29.1	Const	Improv	Renov 30.62 151.01 14.26 109.30 327.89 44.35 24.29 19.01 87.65 28.51 1.58 213.84 21.12 80.26 34.85 84.48 50.16 13.20	Decomm	Temp
35-7-29.6 Temp 11-5 Temp 29-1CD Temp 29-1NB Temp 29-4 Temp 30-2B Temp 31-4/30-2 Temp 3-4 Temp 7-1C Temp 7-2			4.75		$     19.20 \\     19.35 \\     4.35 \\     11.30 \\     3.50 \\     48.80 \\     1.70 \\     2.05 \\     27.20 \\     $
Total Sta:	·		1,341.13		137.45
200 Clearing and G	rubbing		Clearing acres		
34-7-2.0(A)			0.0		
34-7-21.6(A-C)			0.0		
34-7-22.0(A-B)			0.0		
34-7-3.0(A1-A2)			0.0		
34-7-3.1(A-F)			0.0		
34-7-7.1			0.0		
35-7-1.0(A)			0.0		
35-7-1.6			0.9		
35-7-11.1(A)			0.0		
35-7-20.0			0.0		
35-7-22.0			0.1		
35-7-27.0(C-F)			0.0		
35-7-27.2(A)			0.0		
35-7-27.3(A-B)			0.0		
35-7-27.7(A)			0.0		
35-7-28.0(A-B)			0.0		
35-7-29.0(A)			0.0		
35-7-29.1			0.0		
35-7-29.6			0.2		
Temp 11-5			1.1		
Temp 29-1CD			1.1		

Continuation of 200 Clearing and Grubbing Construction Quantities

Temp	29-1NB	0.3
Temp	29-4	0.7
Temp	30-2B	0.2
Temp	31-4/30-2	0.0
Temp	3-4	0.1
Temp	7-1C	0.1
Temp	7-2	1.6

300 Excavation	Excav	Haul	Haul
	LCY.s	sta-yds	yd-mi
Temp 11-5	1,544	0	0
Temp 29-1CD	2,067	0	0
Temp 29-1NB	465	0	0
Temp 30-2B	475	0	0
Temp 31-4/30-2	4,466	0	0
Temp 3-4	100	0	0
Temp 7-1C	164	0	0
Temp 7-2	4,184	0	0
Total	s: 13,465	0	0

# 400 Drainage (Temporary Pipes)

Road Number	Culvert	Polypipe	Downspout
Temp 29-4	0 lf	40 lf	0 lf
Temp 3-4	0 lf	40 lf	0 lf
Total Drainage:		80 lf	

500 Renovation		Blade Miles	Slide cy
34-7-2.0(A)		0.58	0
34-7-21.6(A-C)		2.86	0
34-7-22.0(A-B)		0.27	0
34-7-3.0(A1-A2)		2.07	0
34-7-3.1(A-F)		6.21	0
34-7-7.1		0.84	0
35-7-1.0(A)		0.46	0
35-7-1.6		0.36	0
35-7-11.1(A)		1.66	13
35-7-20.0		0.54	0
35-7-22.0		0.03	0
35-7-27.0(C-F)		4.05	0
35-7-27.2(A)		0.40	0
35-7-27.3(A-B)		1.52	0
35-7-27.7(A)		0.66	0
35-7-28.0(A-B)		1.60	0
35-7-29.0(A)		0.95	0
35-7-29.1		0.25	0
35-7-29.6		0.09	0
Temp 29-4		0.21	0
Temp 31-4/30-2		0.92	0
	Totals:	26.53	13

Heavy Blading for Opening Temp Temp 29-4
Tractor: D7 with rippers
Tractor: D7 with rippers
Water for Compaction 35-7-27.3(A-B)
Water Truck 3000 Gal
Water for Compaction 34-7-2.0(A)
Water Truck 3000 Gal
Water for Compaction 34-7-3.0(A1-A2)
Water Truck 3000 Gal
Water for Compaction 34-7-3.1(A-F)
Water Truck 3000 Gal
Water for Compaction 34-7-7.1
Water Truck 3000 Gal
Water for Compaction 34-7-21.6(A-C)
Water Truck 3000 Gal         5.72 hr
Water for Compaction         35-7-20.0           Water Truck 3000 Gal
Water Truck 3000 Gal
Water Tor Compaction         55-7-27.2(A)           Water Truck 3000 Gal
Water for Compaction $35-7-27.7(A)$
Water Truck 3000 Gal
Water for Compaction $35-7-27.0(C-F)$
Water Truck 3000 Gal
Water for Compaction 35-7-29.0(A)
Water Truck 3000 Gal
Note: for Compaction $2E_7 (20, 0/3, D)$
Water Tor Compaction         35-7-28.0(A-B)           Water Truck 3000 Gal
Water for Compaction 35-7-29 6
Water Truck 3000 Gal
Water for Compaction 35-7-29.1
Water Truck 3000 Gal
Water for Compaction 34-7-22.0(A-B)
Water Truck 3000 Gal
Water Road for Compaction 35-7-1.0(A)
Water Truck 3000 Gal
Water Roads for Compaction         35-7-11.1(A)           Water Truck 3000 Gal
water Truck 3000 Gal

### Surfacing (Loose Cubic Yards)

Note: Due to slight rounding differences between total LCY vs. subtotaled LCY, Totals shown here may not be exactly as shown in the road summaries and worksheets.

1.1

0.3

0.0

0.0

1400 Slope Protection

Temp 29-1CD

Temp 29-1NB

		Totals:	0 cy
Totals:	0		
1800 Soil stabilization - acres	Dry W/O Mulch	Dry/with Mulch	Hydro Mulch
35-7-1.6	0.0	0.3	
35-7-11.1(A)	0.0	0.3	
35-7-22.0	0.0	0.1	
Temp 11-5	0.0	1.1	

Continuation of 1800 Soil stabilization Construction Quantities

Temp	29-4		0.0	0.7	
Temp	30-2B		0.0	0.2	
Temp	31-4/30-2		0.0	1.0	
Temp	3-4		0.0	0.1	
Temp	7-1C		0.0	0.1	
Temp	7-2		0.0	1.6	
		Totals:	0.0	6.8	0.0
		Small Quantity	Factor of	1.19 used	

2100 Roadside Brushing	acres
34-7-2.0(A) - Manual Brushing	0.6
34-7-21.6(A-C) - Manual Brushing	2.8
34-7-22.0(A-B) - Manual Brushing	0.3
34-7-3.0(A1-A2) - Manual Brushing	2.0
34-7-3.1(A-F) - Manual Brushing	6.0
34-7-7.1 - Manual Brushing	0.8
35-7-1.0(A) - Manual Brushing	0.4
35-7-1.6 - Manual Brushing	0.3
35-7-11.1(A) - Manual Brushing	1.6
35-7-20.0 - Manual Brushing	0.5
35-7-22.0 - Manual Brushing	0.1
35-7-27.0(C-F) - Manual Brushing	3.9
35-7-27.2(A) - Manual Brushing	0.4
35-7-27.3(A-B) - Manual Brushing	1.5
35-7-27.7(A) - Manual Brushing	0.6
35-7-28.0(A-B) - Manual Brushing	1.6
35-7-29.0(A) - Manual Brushing	0.9
35-7-29.1 - Manual Brushing	0.2
35-7-29.6 - Manual Brushing	0.1

Totals: 24.6

Chipping for Roadside Brus	shing 35-7-22.0			
Brush Chipper			 	0.5 hr
Chipping for Roadside Brus				0.1
Brush Chipper			 • •	2 hr
Chipping for Roadside Brus				0 has
Brush Chipper			 • •	0 111
Chipping for Roadside Brus				25 hr
Brush Chipper		• • • • • •	 • •	25 III
Chipping for Roadside Brus	-			3 hr
Brush Chipper			 • •	3 111
Chipping for Roadside Brus				1 hr
Brush Chipper			 • •	T III.
Chipping for Roadside Brus	-			11 5 4
Brush Chipper		• • • • • •	 • •	11.5 hr
Chipping for Roadside Brus				
Brush Chipper		• • • • • •	 • •	/ nr
Chipping for Roadside Brus				
Brush Chipper			 • •	1.5 hr
Chipping for Roadside Brus				
Brush Chipper		• • • • • •	 • •	6 hr
Chipping for Roadside Brus	-			
Brush Chipper		• • • • • •	 • •	2 hr
Chipping for Roadside Brus	-			
Brush Chipper			 • •	2 hr
Chipping for Roadside Brus				
Brush Chipper			 • •	2.5 hr

Continuation of 2100 Roadside Brushing Construction Quantities

Chipping for Roadside Brushing 35-7-27.0(C-F)	
Brush Chipper	.6 hr
Chipping for Roadside Brushing 35-7-29.0(A)	
Brush Chipper	l hr
Chipping for Roadside Brushing 35-7-28.0(A-B)	
Brush Chipper	/ hr
Chipping for Roadside Brushing 35-7-29.6	
Brush Chipper	. hr
Chipping for Roadside Brushing 35-7-29.1	
Brush Chipper	. hr
Chipping for Roadside Brushing 35-7-1.0(A)	
Brush Chipper	? hr

2300	Engineering	stations		
		Totals:	0.00	

2400 Minor Concrete

Totals: No Quantities

8000 Miscellaneous
Construct Barricade Temp 29-1CD
Tractor: D7 with rippers
Construct Barricade Temp 7-2
Tractor: D7 with rippers
Construct Barricade Temp 7-1C
Tractor: D7 with rippers
Construct Barricade Temp 11-5
Tractor: D7 with rippers
Construct Barricade Temp 30-2B
Tractor: D7 with rippers
Construct Truck Turnaround Temp 31-4/30-2
Tractor: D7 with rippers
Construct Truck Turnaround Temp 7-2
Tractor: D7 with rippers
Construct Truck Turnaround Temp 7-1C
Tractor: D7 with rippers
Construct Truck Turnaround Temp 11-5
Tractor: D7 with rippers
Construct Truck Turnaround Temp 29-1NB
Tractor: D7 with rippers
Construct Truck Turnaround Temp 29-4
Tractor: D7 with rippers
Construct Truck Turnaround Temp 3-4
Tractor: D7 with rippers
Construct Truck Turnaround Temp 29-1CD
Tractor: D7 with rippers
Installation of BMP @ Stream 35-7-11.1(A)
General Laborer
Crew Cab or 3/4 Ton Pickup
Installation of BMP @ Stream 34-7-2.0(A)
General Laborer
Crew Cab or 3/4 Ton Pickup
Installation of BMP @ Stream 34-7-3.0(A1-A2)
General Laborer
Crew Cab or 3/4 Ton Pickup

Continuation of 8000 Miscellaneous Construction Quantities

Reconstruct Barricade Temp 29-4 Tractor: D7 with rippers	1	hr
Reconstruct Truck Turnaround 34-7-21.6(A-C) Motor Grader 14M		
Backhoe		
Motor Grader 14M		
Reconstruct Truck Turnaround 35-7-22.0 Motor Grader 14M		
Backhoe		
Motor Grader 14M		
Reconstruct Truck Turnaround 35-7-28.0(A-B) Motor Grader 14M		
Reconstruct Truck Turnaround 35-7-29.6 Motor Grader 14M		
Backhoe		
Motor Grader 14M <td></td> <td></td>		
Reconstruct Truck Turnaround 35-7-20.0 Motor Grader 14M		
Reconstruct Truck Turnaround 34-7-7.1 Motor Grader 14M		
Backhoe		
Tractor: D7 with rippers	1	hr

	orm 5440-9 UNITED STATES						Name of Bidder	
(Decei	December 2004) DEPARTMENT OF THE INT BUREAU OF LAND MANAG						Tract Number	
					ORM07-TS-2017.0007			007
				TIMBER*			Sale Name	
	DEPOS		BID FOR	(Other Tha			Picket Hog Sale Notice ( <i>dated</i> )	
						iniber)	8/18/2017	
						-	BLM District	
			LUMP SU	IVI SALE			Medford	
	Sealed Bid for Sealed	Bid Sal	e		X	Written Bid for Or	al Auction Sale	
	sponse to the above date er/vegetative resource on			red deposit	and	bid are hereby sub	mitted for the pur	chase of designated
Requ	ired bid deposited is \$ 4	6,600.0	0 and is enclose	d in the form	n of	f □ cash □	money order	bank draft □
-	•	tified cl		d bond of co	rpoi	rate surety on appro	oved list of the Un	ited States Treasury
□g	uaranteed remittance app	roved b	y the authorized o	fficer.				
unde withi	S AGREED That the b rsigned fails to execute n 30 days after the contra unit basis per species will	and retract is re-	urn the contract, the ceived by the succ	together with cessful bidde	h ar r. I	ny required perform t is understood that	ance bond and an no bid for less thar	y required payment
						P SUM SALE		
NOTE: Bidders should carefully check computations in completing the Bid Schedule				le				
			· · · · · · · · · · · · · · · · · · ·		Jaro			
			BID SUBMITTED				-	BID MADE
	PRODUCT SPECIES	UNIT	-	UNIT PRIC		TOTAL VALUE	-	
Doug			BID SUBMITTED ESTIMATED VOLUME			-	ORAL	BID MADE
	PRODUCT SPECIES	UNIT	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY	UNIT PRIC		TOTAL VALUE	ORAL UNIT PRICE	BID MADE TOTAL VALUE
Pond	PRODUCT SPECIES glas-fir	UNIT MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441	UNIT PRICE <b>X</b> \$134.10		TOTAL VALUE = \$461,438.10	ORAL UNIT PRICE X	BID MADE TOTAL VALUE
Pond	PRODUCT SPECIES glas-fir lerosa Pine	UNIT MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118	UNIT PRICE X \$134.10 X \$28.90		TOTAL VALUE = \$461,438.10 = \$3,410.20	ORAL UNIT PRICE X X	BID MADE TOTAL VALUE = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =
Pond	PRODUCT SPECIES glas-fir lerosa Pine ur Pine nse cedar	UNIT MBF MBF MBF	BID SUBMITTED ESTIMATED VOLUME OR QUANTITY 3,441 118 16 5	UNIT PRICE X \$134.10 X \$28.90 X \$28.80		TOTAL VALUE = \$461,438.10 = \$3,410.20 = \$460.80	ORAL UNIT PRICE X X X X	BID MADE TOTAL VALUE = = =

TOTAL PURCHASE PRICE

(Continued on reverse)

If sale contract is executed, undersigned is liable for total purchase price even though the quantity cut, removed, or designated

\$465,614.60

for taking is more or less than the total estimated volume or quantity shown above. Undersigned certifies bid was arrived at by bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. In submitting or confirming this bid, undersigned agrees to the foregoing provisions, applicable regulations, and certifies that he is authorized to act as, or on behalf of, the bidder.

Bid submitted on ( <i>date</i> )						
(Check appropriate box, sign in ink, and complete the following)						
Signature, if firm is individually owned	Name of firm ( <i>type or print</i> )					
Signatures, if firm is a partnership or L.L.C.	Business address, include zip code (type or print)					
Corporation organized under the state laws of Signature of Authorized Corporate Signing Officer	(To be completed following oral bidding) I HEREBY confirm the above oral bid By (signature)					
Title	Date					
Submit bid, in <i>duplicate</i> , to qualify for either an oral auction or sealed bid sale together with the required bid deposit made payable to the Department of the Interior – BLM.	Sealed Bid – Send to District Manager, who issued the sale notice, in a sealed envelope marked on the outside: (1) "Bid for Timber" (2) Vegetative Resource Other Than Timber					
Oral Auction – Submit to Sales Supervisor prior to closing of qualifying period for tract.	<ul><li>(3) Time bids are to be opened</li><li>(4) Legal description</li></ul>					

# NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 38 FR 6280 and 43 CFR 5442.1

PURPOSE: To qualify an oral auction bidder, and then if successful, to bind bidder to certain contract conditions.

**ROUTINE USE**: To determine that an individual is qualified to participate in oral auction bidding, and, as surety that bidder will fulfill contract requirements.

EFFECT OF NOT PROVIDING INFORMATION: Filing this deposit and bid information is necessary only when an individual wishes to participate in a sealed or auction bid sale for timber or vegetative resources.

#### **INSTRUCTIONS TO BIDDERS**

1. AUTHORITY – Timber located on the revested Oregon and California Railroad Grant Lands and on the reconveyed Coos Bay Wagon Road Grant Lands is administered and sold pursuant to authority of the Act of August 28, 1937 (50 Stat. 874; 43 U.S.C. 1181a); timber located on other lands and other vegetative resources on all public lands of the United States under jurisdiction of the Bureau of Land Management are administered and sold pursuant to authority of the Act of July 31, 1947 (61 Stat. 681), as amended, by the Act of July 23, 1955 (69 Stat. 367; 30 U.S.C. 601 et. seq.). Regulations of the Secretary of the Interior governing sale of timber are codified in 43 CFR Group 5400.

2. QUALIFICATIONS OF BIDDERS – A bidder for sale of timber/vegetative resources must be either (a) a citizen of the United States, (b) a partnership composed wholly of such citizens, (c) an unincorporated association composed wholly of such citizens, or (d) a corporation authorized to transact business in the State in which the timber/vegetative resource is located.

3. INSPECTION OF TIMBER/VEGETATIVE RESOURCES – Bidder is invited, urged, and cautioned to inspect the timber/vegetative resource prior to submitting a bid. By executing the timber/vegetative resource sale contract, bidder warrants that the contract is accepted on the basis of his examination and inspection of the timber/vegetative resource and his opinion of its value.

4. DISCLAIMER OF WARRANTY – Government expressly disclaims any warranty of the fitness of the designated timber/vegetative resource for any purpose of the bidder; all timber/vegetative resources are to be sold "As Is" without any warranty of merchantability by Government. Any warranty as to the quantity or quality of timber/vegetative resource to be sold is expressly disclaimed by Government.

5. *BIDS* – Sealed or written bids for not less than the advertised appraised price, per timber/vegetative resource must be submitted in duplicate to the District Manager who issued *Timber/Vegetative Resource Sale Notice*.

(a) Sealed Bid Sales – Bids will be received until time for opening which is set out in the Notice. Enclose both copies of bid with required bid deposit in a sealed envelope marked on the outside *Bid for Timber/Vegetative Resource*, time bid is to be opened, tract number, and legal description of land on which timber/vegetative resource is located. In event of a tie, the high bidder shall be determined by lot from among those who submitted the tie bids.

(b) Auction Sales – Submission of the required bid deposit and a written bid is required to qualify for oral bidding. Oral bidding shall begin from the highest written bid. No oral bid will be considered which is not higher than the preceding bid. In the event there is a tie in high written bids, and no oral bidding occurs, the bidder who was the first to submit his bid deposit and written bid shall be declared the high bidder. If the officer conducting the sale cannot determined who made the first submission of high tie written bids, the high bidder shall be determined by lot. High bidder must confirm his bid, in writing, immediately upon being declared high bidder.

(c) Except as otherwise provided in 43 CFR 5442.2, bids will not be considered in resale of timber/vegetative resource remaining from an uncompleted contract from any person or affiliate of such person who failed to complete the original contract because of (1) cancellation for the purchaser's breach or (2) through failure to complete payment by expiration date.

(d) When it is in the interest of the Government to do so, it may reject any and all bids and may waive minor deficiencies in bids or in sale advertisement.

6. *BID FORMS* – All sealed, written bids, and confirmation of oral bids shall be submitted on forms provided by Government.

(a) Lump Sum Sales – Bids shall specify (1) Bureau of Land Management estimated volume, (2) price per unit, and (3) total purchase price. Estimated volume and price per unit are to be used for administrative and appraisal purposes only. Upon award of contract, high bidder shall be liable for total purchase price, including any adjustment which may be made as a result of reappraisal if an extension of time is granted, even though quantity of timber/vegetative resource actually cut, removed, or designated for taking is more or less than the estimated volume or quantity listed.

(b) *Timber Scale Sales* – Bids must state price per thousand board feet that will be paid for each species. High bidder will be determined by multiplying bid price per thousand board feet per species by Bureau of Land Management estimate of volume of each species. Purchaser shall be liable for purchase price of all merchantable timber sold under contract even though all such timber is not actually cut \**Applies to Timber Only* 

and removed prior to expiration of time for cutting and removal as specified in contract.\*

7. *BID DEPOSIT* – All bidders must make a deposit of not less than the amount specified in the *Timber/Vegetative Resource Notice*. Deposit may be in the form of cash, money orders, bank drafts, cashiers or certified checks made payable to the Department of the Interior – BLM, bid bonds of a corporate surety shown on the approved list of the United States Treasury Department\*, or any approved guaranteed remittance approved by the Authorized Officer. Upon conclusion of bidding, the bid deposit of all bidders, except high bidder, will be returned. The cash deposit of the successful bidder may be applied toward the required sale deposit and/or the purchase price. Cash not applied to the sale deposit or the purchase price, or a corporate surety bid bond, will be returned at the time the contract is signed by the Government.

8. AWARD OF CONTRACT – Government may require high bidder to furnish such information as is necessary to determine the ability of bidder to perform the obligation of contract. Contract will be awarded to high bidder, unless he is not qualified or responsible or unless all bids are rejected. If high bidder is not qualified or responsible or fails to sign and return the contract together with required performance bond and any required payment, contract may be offered and awarded to the highest bidders qualified, responsible, and willing to accept the contract.

9. *TIMBER/VEGETATIVE RESOURCE SALE CONTRACT* – To be executed by purchaser, has been prepared by Government, and may be examined in the District Manager's office.

10. PERFORMANCE BOND -

(a) A performance bond in an amount of not less than 20 percent of total purchase price is required, but the amount of the bond shall not be in excess of \$500,000, except when the purchaser opts to increase the minimum bond to permit cutting prior to payment as provided in 43 CFR 5451.2, or in the event the purchaser is a holder of an unresolved default the bond may be increased as provided in 43 CFR 5450.1(b). Performance bond may be (1) bond of a corporate surety shown on approval list issued by the United States Treasury Department and executed on an approved standard form, (2) personal surety bond executed on an approved standard form, (3) cash bonds, (4) negotiable securities of the United States, or (5) any guaranteed remittance approved by the Authorized Officer.

(b) If purchaser elects to cut timber without skidding or yarding it to a loading point or removing it prior to the payment of the second or subsequent installments, Government shall require an increase in amount of performance bond initially required by an amount equal to the value of timber to be cut. Such increase must be on a bond rider form supplied by Government and be approved, in writing, by Government prior to cutting timber covered by the bond increase. This increased amount of bond shall be used to assure payment for timber cut in advance of payment.\*

11. PAYMENT BOND – If purchaser elects to (a) cut and remove timber, or (b) remove timber already cut which has been secured by an increased performance bond as provided in paragraph 10(b) above, before payment of the second or subsequent installments, Government shall require a payment bond on a form supplied by Government. Purchaser shall obtain written approval from Government of payment bond prior to cutting and/or removal of timber covered by the bond. Payment bond shall be used to assure payment for timber cut and/or removed in advance of payment.\*

12. PAYMENT OF PURCHASE PRICE – For sales of \$500 or more, Government may allow payment by installments. Except as discussed in paragraphs 10 and 11 above, no part of any timber/vegetative resource sold may be severed, cut, or removed unless advance payment has been made as provided in contract.

13. *LIQUIDATED DAMAGES* – Within thirty (30) days from receipt of *Timber/ Vegetative Resource Sale Contract*, the successful bidder shall sign contract and return it to Government, together with required bond and any required payment. If successful bidder fails to comply within the stipulated time, his bid deposit shall be retained by Government as liquidated damages.

14. *NINETY-DAY SALES* – If no bid is received within time specified in the advertisement of sale and if Government determines that there has been no significant rise in the market value of timber/vegetative resource, it may, in its discretion, keep the sale open, not to exceed ninety (90) days.

15. UNAUTHORIZED USE OF GOVERNMENT PROPERTY – A sale may be refused to high bidder who has been notified that he has failed to make satisfactory arrangements for payment of damages resulting from unauthorized use of, or injury to, property of the United States.

16. EQUAL OPPORTUNITY CLAUSE – This contract is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth the nondiscrimination clauses. Copies of this order may be obtained from the District Manager. 43 CFR 60-1.7(b) requires that the Equal Opportunity *Compliance Report Certification* will be completed by prospective contractors. Certification may be obtained from District Manager.

17. LOG EXPORT – All timber offered for sale except as noted in the *Timber Sale Notice* is restricted from export from the United States in the form of unprocessed timber and cannot be used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs, and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three quarters (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end product use; or (4) western

red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 common or better. Timber manufactured into the following will be considered processed: (1) lumber and construction timbers, regardless of size, manufactured to standards and specifications suitable for end product uses; (2) chips, pulp and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacture of eight and three quarters (8-3/4) inches in thickness or less; or (6) shakes and shingles. In event purchaser wishes to sell any or all of timber restricted from export in the form of unprocessed timber, the buyer, exchanges, or recipient shall be required to comply with contractual provisions relating to "*unprocessed timber*". Special reporting, branding and painting of logs may be included in contract provisions.\*

18. **DETAILED INFORMATION** – Detailed information concerning contract provisions, bid, performance bond forms, tract location maps, and access conditions may be obtained from the District Manager. All persons interested in bidding on the products listed are encouraged to familiarize themselves with all such detailed information.