

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Salem District Office
1717 Fabry Road, S.E.
Salem, Oregon 97306

33 Mystery Timber Sale
ORS06-TS-2016.0102
Date: June 22, 2016

PROSPECTUS

THIS IS A PROSPECTUS ONLY. ATTACHMENTS MAY NOT INCLUDE ALL EXHIBITS REFERRED TO IN THE CONTRACT. THE COMPLETE CONTRACT, INCLUDING ALL EXHIBITS, IS AVAILABLE FOR INSPECTION AT THE SALEM DISTRICT OFFICE.

NOTICE IS HEREBY GIVEN that the Bureau of Land Management will offer for sale timber as described herein for oral auction, pursuant to Instructions to Bidders, as stated on Form No. 5440-9, attached. Written and oral bids will be received by the District Manager, or her representative, in the timber sale room at the District Office, 1717 Fabry Road, S.E., Salem, Oregon. Written bids and deposits will be accepted beginning at 8:30 a.m. and the timber sale oral auction will commence at 9:00 a.m., on Wednesday, June 22, 2016.

THIS TIMBER SALE NOTICE does not constitute the decision document for purposes of protest and appeal of a forest management decision. Consistent with 43 CFR Subpart 5003-Administrative Remedies, the notice of a timber sale, when published as a legal ad in a newspaper of general circulation shall constitute the decision document for purposes of protest and appeal. Protests may be filed with the Contracting Officer within 15 days of the publication of the aforementioned decision document in the newspaper. It is anticipated that the decision document will be published in the South County Spotlight on or about May 27, 2016. BLM does not warrant publication on this exact date. All parties considering protest of the timber sale decision document are encouraged to review the aforementioned newspaper(s) to ensure accurate knowledge of the exact publication date.

AN ENVIRONMENTAL ASSESSMENT was prepared for each timber sale tract, and a Finding of No Significant Impact has been documented. These documents are available for inspection as background for each timber sale tract at the Salem District Office.

A WRITTEN BID on Form 5440-9 at not less than the advertised appraised price on a unit basis per species and the required minimum bid deposit shall be required to participate in oral bidding.

THE SUCCESSFUL BIDDER, as a condition of award, will be required to sign Form 5430-11, a certification that the bid was arrived at by the bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. Also, Form 5450-17, Export Determination must be completed by the successful bidder. To expedite procedure, this form should be completed and submitted with the written bid.

THE VOLUMES LISTED herein are estimates only. The sale volumes listed are based on 16-foot taper breaks which must be taken into consideration if comparisons are made with volume predictions based on other standards. The volumes based on 32-foot taper breaks are shown for comparison purposes. No sale shall be made for less than the advertised appraised price. The Purchaser shall be liable for the total purchase price, without regard to the amount bid per unit, even though the quantity of timber actually cut or removed or designated for taking is more or less than the estimated volume or quantity so listed.

THIS TIMBER SALE has been cruised based upon Eastside Scribner board foot measure. The minimum bid figures shown by species are dollars per thousand board feet (MBF). The minimum bid increment will be \$0.10 per MBF.

A PERFORMANCE BOND in an amount not less than 20 percent of the total purchase price will be required for all contracts of \$2,500 or more. A minimum performance bond of not less than \$500 will be required for all installment contracts less than \$2,500.

QUALIFIED SMALL BUSINESS concerns may apply to SBA for a loan to provide financing for access road construction required under the terms of qualifying timber sale contracts, and necessary contract changes will be made. Approval of loan applications rests with SBA and may be contingent on availability of funds. Applicants for such loans shall notify BLM of their intention to apply for a loan.

PRE-AWARD QUALIFICATIONS. The high bidder may be required to furnish information to determine the ability to perform the obligations of the contract. If the high bidder is determined not qualified, responsible or refuses to respond within fifteen (15) days of a request for information pertaining to qualifications, the contract may be offered and awarded for the amount of the high bid to the highest of the bidders who is qualified, responsible, and willing to accept the contract.

LOG EXPORT AND SUBSTITUTION: All timber sales, including timber from Federal rights-of-ways, shall be subject to the restrictions relating to the export and substitution of unprocessed timber from the United States in accordance with P.L. 94-165 and 43 CFR 5400 and 5420, as amended.

LOG EXPORT AND SUBSTITUTION RESTRICTIONS: Excepting Port-Orford-cedar, all timber offered for sale hereunder 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. 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.

CONTRACT TERMINATION: A revised 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:

1. Comply with the Endangered Species Act, or;
2. Comply with a court order, or;
3. Protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Salem District Record of Decision (ROD) and Resource Management Plan (RMP), or;
4. Protect species which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP.

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.

ADDITIONAL INFORMATION concerning this timber sale tract is available at the above District Office. A copy of the timber sale contract is also available for inspection at the District Office. The prospectus for this/these sale(s) is also available online at: <http://www.blm.gov/or/districts/salem/timbersales/index.php>. The prospectus includes maps and tables that cannot be made Section 508 compliant. For help with its data or information, please contact the Salem District Office at 503-375-5646.

Attachments:

- Form 5450-17
- Form 5430-11
- Form 5440-9

TIMBER SALE NOTICE

SALEM DISTRICT
TILLAMOOK FIELD OFFICE
COLUMBIA MASTER UNIT

Sale Date: June 22, 2016

CONTRACT NO.: ORS06-TS-2016.0102, 33 Mystery Timber Sale, Lump Sum
COLUMBIA COUNTY, OREGON: O&C: **ORAL AUCTION**: BID DEPOSIT REQUIRED: \$109,600.00

All timber designated for cutting on: E½NE¼, S½, Sec 33, T. 5 N., R. 3 W., W.M., Oregon

THIS TIMBER SALE HAS BEEN CRUISED BASED UPON EASTSIDE SCRIBNER MEASURE.

Minimum bid figures shown by species are dollars per thousand board feet (MBF). The minimum bid increment will be \$0.10 per MBF.

Approx. No. Merchantable Trees	Est. Vol. MBF 32' Log	Species	Est. Vol. MBF 16' Log	Appraised Price Per MBF	Estimated Volume Times Appraised Price
8,942	3,093	Douglas-fir	3,752	\$292.00	\$1,095,584.00
1,083	2	red alder	3	\$113.40	\$340.20
10,025	3,095	Totals	3,755		\$1,095,924.20

LOG EXPORT AND SUBSTITUTION RESTRICTIONS: All timber offered for sale hereunder is restricted from export from the United States in the form of unprocessed timber and also prohibited from substitution of exported private timber.

CRUISE INFORMATION: The timber volumes for the partial cut units were based on a variable plot cruise for estimating the board foot volume of trees. Plots were measured using a 20 basal area factor (BAF) for young partial cut stand located in the south east corner of unit 2, the remainder of the partial cut area for all units used a 22 basal area factor (BAF) and the regeneration cut units used a 40 basal area factor (BAF). None of the total sale volume is salvage material. For merchantable Douglas-fir trees the average DBHOB is 17.1 inches; the average gross merchantable log contains 90 bf; the total gross volume is approximately 3,899 MBF; and 96% recovery is expected. The Right-of-Way volume is based on a 3-P cruise for estimating the board foot volume of trees.

CUTTING AREA: Four (4) units totaling approximately 95 acres shall be partial cut and approximately 32 acres shall be regeneration cut. In addition, approximately three (3) acres of right-of-way shall be cut. Acres shown on Exhibit A have been computed using a Trimble Pro XH Global Positioning System receiver. Acreage was calculated based on Global Positioning System traverse procedures including differential correction.

DURATION OF CONTRACT: Contract length will be 36 months for cutting and removal of timber.

LOCATION: The contract area is located approximately 6 air miles east of Vernonia, Oregon. Starting in Vernonia, proceed north on Highway 47 for approximately 5 miles to the intersection of Highway 47 and the Scappoose/Vernonia Highway. Turn right onto the Scappoose/Vernonia Highway and travel east for approximately 5 miles to Scaponia Park. Turn onto Hawkins Quarry Road across from Scaponia park. From the gate, consult the included map to reach individual harvest units. Access to the sale area is through locked

gates. Prospective bidders may obtain a combination from the Tillamook Field Office by calling 503-815-1100.

ACCESS AND ROAD MAINTENANCE: Access is provided by County, Rayonier Washington Timber Company, and Bureau of Land Management (BLM) controlled roads. All roads used in conjunction with this sale will be maintained by the Purchaser, except the 4N-3-10.3. Purchaser will be required to pay a rock wear obligation of (\$5,499.47) to the Government and spread 760 CY crushed rock on BLM roads for maintenance.

In the use of Rayonier Washington Timber Company controlled roads, under Agreement S-522F (OR066364) and as shown on Exhibit E, the Purchaser will be required to enter into a license agreement which requires: (a) Purchaser pay a rockwear fee of \$1,804.99, (c) Purchaser shall pay a maintenance fee of \$2,799.58 towards the 4N-3-10.3, and (d) Purchaser provide proof of insurance with limits of \$1,000,000/ \$1,000,000/ \$1,000,000 and a performance bond of \$1,000.00. Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a copy of the executed license agreement.

In the use of road 5N-3-33.4 (Station 31+21) a turnaround will be constructed as described in Exhibit C and requires the removal of merchantable timber, the Purchaser shall enter into an agreement with Weyerhaeuser Company to purchase the merchantable timber. The Purchaser will be required to enter into an agreement prior to commencement of operations and shall furnish to the Authorized Officer a copy of the required agreement.

Purchaser maintenance shall include frequent blading and shaping of road surface; ditch, culvert, and catch basin cleaning; removal of minor slides and other debris. Roads shall be left in a condition to withstand adverse weather at the end of the seasonal operations. It shall also include the spreading of 10 CY crushed rock on the 4N-3-10.0 (County Controlled Road) as needed and instructed by Authorized Officer.

Alternate access is available but will require a contract modification. Contact Engineers at the Tillamook Field Office for more detailed information.

ROAD CONSTRUCTION AND RENOVATION: The Purchaser will be required to do all work set forth below. The Purchaser shall supply all materials unless otherwise indicated.

1. **New Road Construction:**

Road Spur A- 317 feet, 14-foot outsloped subgrade, Natural Surfacing, Blading, Clearing and Grubbing, Landing Construction.

Road Spur B- 411 feet, (0+00 – 1+00): 14-foot ditched subgrade, Natural Surfacing, Blading, Clearing and Grubbing, culvert installation, Install Metal “T” Posts at culvert inlet. (1+00 – 3+11): 14-foot outsloped subgrade, Natural Surfacing, Blading, Clearing and Grubbing, Landing Construction.

Road Spur C- 312 feet, 14-foot outsloped subgrade, Natural Surfacing, Blading, Clearing and Grubbing, Landing Construction.

Road Spur D- 275 feet, 14-foot outsloped subgrade, Natural Surfacing, Blading, Clearing and Grubbing, Landing Construction.

Road Spur E- 208 feet, 14-foot outsloped subgrade, Natural Surfacing, Blading, Clearing and Grubbing, Landing Construction.

Road Spur F – 834 feet, 14-foot outsloped subgrade, Natural Surfacing, Blading, Clearing and Grubbing, Roadside and End Landing Construction, installation of one pipe, Install Metal “T” Posts at culvert inlet, and some slope stake/designed construction.

2. **Renovation:**

Road Spur G- 280 Feet, 14-foot outsloped subgrade, Natural Surfacing, Blading, Clearing and Grubbing, Landing Construction.

Road 3N-3-3.0- 3.319 Miles, 16-foot ditched subgrade, Rocked Surfacing, Spot Rock Placement, Blading, Clean Culverts, Brushing with some Clearing and Grubbing, Turnout Construction, Two Truck Turnarounds Construction, Road Widening, Installation of 23 Poly Pipes, Two Aluminized Steel Pipes, Two Perforated Inlet/Stand pipes with elbows, one down spout, ditchline enlargement and armoring (MP 1.295 – 1.337), Install Metal “T” Posts at all culvert inlets, Install a free draining fill (MP 2.874), Spread a 6” lift of 1-1/2”-0” Rock (MP 1.453 – 1.820), and re-establish ditchlines by bunching and hauling.

Road 4N-3-7.0- 0.516 Miles, 16-foot ditched subgrade, Rocked Surfacing, Spot Rock Placement, Blading, Clean Culverts, Brushing, Replace/install five Poly Pipes, Install Metal “T” Posts at all culvert inlets, Construct one truck turnaround, Construct one rolling dip, and re-establish ditchlines by bunching and hauling.

Road 4N-3-10.0- 0.070 Miles, 16-foot ditched subgrade, Rock Surfacing, Spot Rock Placement, Blading, Brushing, re-establish ditchlines by bunching and hauling.

Road 4N-3-10.3- 0.981 Miles, 16-foot ditched subgrade, Rock Surfacing, Blading, Clearing and Grubbing as marked, Brushing, Spot Rock Placement, Waste Area Construction, Road Widening, Replace/install five Poly Pipes, Install Metal “T” Posts at all culvert inlets, re-establish ditchlines by bunching and hauling.

Road 5N-3-33.0- 0.321 Miles, 16-foot ditched subgrade, Rock Surfacing, Spot Rock Placement, Blading, Brushing, Waste Area Construction, Install two Poly Pipes and one downspout, Install Metal “T” Posts at all culvert inlets, and Ditchline re-establishment by bunching and hauling.

Road 5N-3-33.3- 356 Feet, 14-foot outsloped subgrade, Natural Surfacing, Clearing and Grubbing, Blading, and Landing Construction.

Roads 5N-3-33.4- 3,346 Feet, 16-foot ditched subgrade, Rocked Surfacing, Spot Rock Placement, Blading, Clean Culverts, Clearing and Grubbing as Marked and Brushing, Replace/Install four Poly Pipes and one downspout, Install Metal “T” Posts at all culvert inlets, Construct Turnaround, Outslope last 274 Feet, and Ditchline re-establishment by bunching and hauling.

5N-3-33.5- 428 Feet, 16-foot ditched subgrade, Rocked Surfacing, Spot Rock Placement, Blading, Clearing and Grubbing as Marked and Brushing, Turnaround Construction, Landing Constructions, Waste Area Construcon, Sidecast PullBack and Road Widening, and Ditchline re-establishment by bunching and hauling.

5N-3-33.7- 0.184 Miles, 16-foot ditched subgrade, Rocked Surfacing, Spot Rock Placement, Blading, Clearing and Grubbing as marked and Brushing, Install one Poly Pipe with one downspout, Install Metal “T” Posts at all culvert inlets, Construct a turnaround, Waste Area Construction, and Ditchline re-establishment by bunching and hauling.

5N-3-33.8- 0.105 Miles, 16-foot ditched subgrade, Rocked Surfacing, Spot Rock Placement, Blading, Clearing and Grubbing as marked and Brushing, and Ditchline re-establishment by bunching and hauling.

3. Estimated Quantities:

- a. Clearing, Grubbing, and Brushing:
 - 2.0 acres of new construction (clearing and grubbing)
 - 5.7 acres of renovation (clearing and grubbing)
 - 6.21 miles brushing

b. Culverts:

1,110 feet of 18 inch Corrugated Plastic Pipe (CPP) – Type S
254 feet of 24 inch Corrugated Plastic Pipe (CPP) – Type S
5 feet of 24 inch Slotted/Perforated Corrugated Plastic Pipe Vertical Inlet (CPP) – Type C
40 feet of 18 inch Corrugated Plastic Pipe Downspout (CPP) - Type C
40 feet of 42 inch 16 gage Aluminized Steel Pipe – Gaskets Required with Band Installations
48 feet of 48 inch 16 gage Aluminized Steel Pipe – Gaskets Required with Band Installations
6 feet of 48 inch 16 gage Aluminized Steel Slotted/Perforated Pipe Vertical Inlet
1 – 24 inch Corrugated Plastic Pipe Elbow
1 – 48 inch 16 gage Aluminized Steel Elbow – Gaskets Required with Band Installations
47 – Metal “T” Post Inlet Markers

c. Aggregate Material:

<u>Quantity</u>	<u>Description</u>
1,040 cubic yards	1-1/2” minus crushed rock – Commercial Spot Rock - Construction rock
465 cubic yards	1-1/2” minus crushed rock – Commercial Culvert bedding material – Construction rock
626 cubic yards	1-1/2” minus crushed rock – Commercial 6” Lift Rock – Construction rock
60 cubic yards	1-1/2” – 3/4” Crushed Rock – Commercial Drain Rock – Construction rock
40 cubic yards	Pit-Run Rock – Commercial Landing/Turnaround Rock – Construction rock
30 cubic yards	Pit-Run Rock – Commercial Ditchline Armor Rock – Construction rock
585 cubic yards	Pit-Run Rock – Commercial Spot/Culvert Rock – Construction rock
760 cubic yards	1-1/2” minus Commercial crushed rock – BLM maintenance rock
10 cubic yards	1-1/2” minus Commercial crushed rock – non-BLM maintenance rock (4N-3-10.0)
190 cubic yards	Riprap – (Class 3)

Rock Source: Commercial (Oak Ranch/Teevan)

OTHER:

Compaction of all final subgrades will be required.

Right of way debris will be disposed of by scattering adjacent to all roads (outside of clearing limits).

All natural surface roads will be water barred and blocked at the end of seasonal operations.

Roads Spur A, Spur B, Spur C, Spur D, Spur E, Spur F, and 5N-3-33.3 will be subsoiled to a depth of 18”inches, culverts removed, water barred, blocked, & slash scattered over road prism upon completion of

logging. Clearing debris shall be placed on and around the barriers so as to prevent further use of the road by vehicles. Roads Spur G and 5N-3-33.5 will be decommissioned by water barred, blocked, & slash scattered over road prism upon completion of logging (no subsoiling). Clearing debris shall be placed on and around the barriers so as to prevent further use of the road by vehicles.

Grass seeding will be required on all newly disturbed areas. Grass seed will be furnished by the Government. Straw mulch will be required on all disturbed/seeded soils that are wet and/or within 50 feet each side of "live stream" locations and all disposal sites. Straw will be furnished by the Government.

All waste from re-establishing ditchlines on rock surfaced roads shall be bunched and end-hauled to designated waste areas.

All slide removal, sidecast pullback, widening material, and excess fill material shall be end-hauled to designated waste areas.

Culverts removed during decommissioning shall be designated as salvageable and shall be hauled to the BLM Maintenance facility.

All trees removed on Private Property shall be purchased from the Land owner prior to being cut. These trees have been marked with non-tracer orange paint.

SPECIAL ATTENTION ITEMS:

Sec. 42.l-n Seasonal Restrictions

Sec. 42.o Safety

Sec. 42.ee Logging Residue Reduction

Note: This sale includes areas of broken ground that will require directional falling with long lining and in some minor areas cable skyline machines to sit on skid trails to yard small isolated steep areas then skid the logs to a landing.

DESIGNATION AND SALE OF ADDITIONAL TIMBER (Sec. 42.k):

This contract contains provisions for the sale and removal of additional timber necessary to facilitate safe and efficient purchaser operations. These provisions include:

- The designation and sale of additional timber, such as corridor and guyline trees, at contract price, as necessary to facilitate safe and efficient logging. Such trees may be felled and removed when they are painted by the Authorized Officer;
- Sale of additional timber volume at current fair market value where the species and/or size of trees are not representative of the forest stand(s) being thinned;
- Government reservation of trees previously marked for cutting (replacement) when the Authorized Officer determines that it is necessary in order to maintain stand densities consistent with objectives set forth in management prescriptions;
- The use of unilateral modifications executed by BLM for such additional timber and replacement timber;
- Revocation of the purchaser's right to cut additional timber if the Authorized Officer determines that trees have been cut and removed that were not previously marked and approved for cutting and removal by the Authorized Officer; and,

SEASONAL RESTRICTION MATRIX:

Restricted Times are Shaded

Activity	JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC	
	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16	1	16
Ground-Based Yarding																								
Skyline Yarding																								
In-Stream Work																								
Road Construction, Renovation, Stabilization, and Decommissioning																								
Log Haul																								

*All dates, except for In-Stream work, are dependent on actual weather conditions

TIMBER SALE CONTRACT SPECIAL PROVISIONS

Sec. 41.

RESERVED

- a. All timber in the reserve area(s) shown on Exhibit A, and all trees that are painted orange and/or posted, which mark the boundaries of the reserve areas.
- b. All trees marked with orange paint in the harvest areas shown on Exhibit A.
- c. All snags and down trees in the harvest areas shown on Exhibit A, unless approved by the Authorized Officer.

Sec. 42. Special Provisions

LOGGING

- a. Periodic Payment and First Installment Adjustment
 1. Notwithstanding the provisions of Sec. 3(b), the amount of the first installment may be reduced by the Government when the Contracting Officer requests the Purchaser to interrupt or delay operations for a period expected to last more than thirty (30) days during the operating season. Such interruption or delay must be beyond the Purchaser's control. Operating Season shall be defined, for this purpose, as the time of year in which operations of the type required are normally conducted and not specifically restricted under the contract. The first installment may be reduced to five (5) percent of the installment amount listed in Sec. 3(b), during the delay period. The Purchaser must request such a reduction in writing. When the Contracting Officer notifies the Purchaser that operations may proceed, the Purchaser shall have fifteen (15) days after such notification to return the first installment to the full value specified in Sec. 3(b). Failure to return the first installment to the full value within the allotted time will be considered a material breach of contract. No timber shall be cut or removed from the contract area until the first installment is restored to the full amount.
 2. Notwithstanding the provisions of Sec. 3(b), adjustments in the due dates for periodic payments may be made by the Government if the Contracting Officer interrupts or delays contract operations for a period expected to last at least thirty (30) days, and the interruption or delay is beyond the Purchaser's control. Any adjustment made shall provide the Purchaser with an equal amount of operating time as would have been available without the delay. The Purchaser shall request such adjustment in writing before the due date for a periodic payment contained in Sec. 3(b).
- b. 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 assure protection of the environment and watershed. A pre-work conference between the Purchaser's authorized

representative and the Authorized Officer's representative must be held at a location designated by the Authorized Officer before the logging plan will be approved. The Purchaser shall provide a minimum of seven (7) days' notice when requesting the scheduling of a pre-work conference.

c. 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 he plans to begin operations. This written notification must be received by the Authorized Officer no less than seven (7) days prior to the date the Purchaser plans to begin or resume 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.

d. No trees may be felled into the reserve areas designated on Exhibit A, or adjacent private land, unless approved by the authorized officer.

e. No yarding or loading is permitted in or through the reserve area, shown on Exhibit A, unless approved by the Authorized Officer.

f. Prior to attaching any logging equipment to a reserve tree, the Purchaser shall obtain written approval from the Authorized Officer and shall take precautions to protect the tree from damage as directed in writing by the Authorized Officer.

g. Excessive damage to reserve timber, as determined by the Authorized Officer, will result in suspension of yarding operations until corrective measures to prevent further damages have been approved by the Authorized Officer.

h. As shown on Exhibit A, cable yarding shall be done with a skyline-type system. The skyline-type system shall be equipped with a clamping energized or mechanical slackpulling carriage that has at least seventy-five (75) feet lateral yarding capabilities. The carriage shall be capable of being held in position on the skyline during all lateral yarding and shall be able to pass intermediate support jacks as required. Skyline yarding roads shall be spaced an average of one hundred fifty (150) feet apart at the point where the skyline intersects the harvest Area boundaries. Skyline yarding roads shall be located parallel to the yarding slope unless otherwise approved by the Authorized officer. The Purchaser shall directionally fall trees into the lead with the yarding direction. The leading end of all logs shall be transported free of the ground during yarding, on slopes greater than 65% and within the riparian-no harvest buffer full suspension of all logs is required. The rigging of tail or lift trees, intermediate supports and use of tail holds outside the Partial Cut Areas shall be required where necessary to meet this requirement. The number of designated corridors and their locations and tail and lift trees will be approved by the Authorized Officer prior to commencement of falling operations. Some areas may require a cable yarding machine to position itself on a skid trail to yard logs then with ground based machinery skid the logs to a loading point.

i. As shown on Exhibit A, all ground based yarding shall be done so that the lead-end of the log is lifted fully off the ground. The area composed of skid trails and landings shall not exceed 12% of the total ground-based yarding area. Ground based skidding equipment shall operate on slopes less than or equal to 35% and on existing skid roads as much as possible.

Excavation on designated skid roads shall be limited to a maximum cut of one foot unless authorized by the Authorized Officer. All trees that must be removed to facilitate construction of these skid roads shall be felled prior to falling operations in the remainder of this area. The Purchaser shall directionally fall trees into the lead with the skidding direction and winch or carry to these skid roads. Skid roads shall be approved by the Authorized Officer prior to the commencement of falling operations. All non-skidding equipment operated off skid roads shall not exceed a ground pressure rating of 8 p.s.i. (pounds per square inch), and shall be tracked-mounted, have a boom mounted cutting head or grapple and shall operate on a continuous layer of slash, with no more than two passes over the same ground, unless approved by the Authorized Officer. Immediately following ground-based yarding activities for any operating season, the Purchaser shall construct water bars and block the entrance to skid trails as designated by the Authorized Officer.

j. Before cutting and removing any trees necessary to facilitate logging in the Partial Cut Areas shown on Exhibit A, the Purchaser shall identify the location of 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 the following conditions must be met:

1. 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 contract 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 Authorized Officer, the width of both skid roads and cable roads shall be limited to twelve (12) feet.
2. 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 a non-reserve color of paint above and below stump height by the Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. Operational trees located within the harvest area will be retained as determined 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 Sec. 3.(b). of the contract or sufficient bonding has been provided in accordance with Sec. 3.(f). of the contract.
3. 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 Sec. 9 of the contract; or, the Authorized Officer determines that the tree species are not listed in Exhibit B of this contract and otherwise reserved in Section 41 of the

contract or any tree that exceeds 32 inches diameter at breast height shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Sec. 8 of the contract.

4. 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.

5. 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 Sec. 8 or Sec. 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.

SEASONAL RESTRICTIONS

l. Ground based yarding, cable yarding to natural surfaced and/or non-winter haul designated roads, and hauling on natural surfaced and non-winter haul designated roads are prohibited in the timber harvest areas shown on Exhibit A between October 16 of one calendar year and May 31 of the following calendar year, both days inclusive, and during other periods of wet soil conditions as determined by the Authorized Officer.

m. Cable yarding and/or hauling on rock surfaced roads for portions of units 3 and 4 (up to and not extending past spur F) are prohibited in the timber harvest areas shown on Exhibit A during periods of wet soil conditions as determined by the Authorized Officer.

n. No road renovation, road construction, road decommissioning/stabilization, and subsoiling, shown on Exhibit C shall be conducted between October 16 of one calendar year and May 31 of the following calendar year, both days inclusive, and during other periods of wet soil conditions as determined by the Authorized Officer. Road Maintenance as shown on Exhibit E and described in Exhibit D shall be performed during periods approved by Authorized Officer.

o. No in-stream work on culverts shall be conducted between September 1 of one calendar year and June 31 of the following calendar year, both days inclusive.

SAFETY

p. Purchaser's operations shall facilitate BLM's safe and practical inspection of Purchaser's operations and BLM's conduct of other official duties on 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 contract 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.

ROAD CONSTRUCTION, IMPROVEMENT, RENOVATION, MAINTENANCE AND USE

q. The Purchaser shall construct natural surfaced roads: Spur A, Spur B, Spur C, Spur D, Spur E, and Spur F. Purchaser shall renovate natural surfaced road: Spur G and 5N-3-33.3. Purchaser shall renovate surfaced roads: 4N-3-3.0, 4N-3-7.0, 4N-3-10.0, 4N-3-10.3 5N-3-33.0, 5N-3-33.4, 5N-3-33.5, 5N-3-33.7, and 5N-3-33.8.

r. Any required construction, improvement, and renovation of roads shall be completed and accepted prior to the removal of any timber, except right-of-way timber, over that road.

s. Within 30 days of completion of yarding and hauling operations, the Purchaser shall decommission Spur A, Spur B, Spur C, Spur D, Spur E, Spur F, and 5N-3-33.3 as shown on Exhibit C, by subsoiling, removing culverts, installing non-drivable waterbars, scattering slash, and blocking. Purchaser shall decommission Spur G and 5N-3-33.5 by installing non-drivable waterbars, scattering slash, and blocking. Subsoiling shall consist of loosening the soil to a depth of eighteen 18 inches utilizing excavator attachments, log loader tongs or other approved equipment acceptable to the Authorized Officer. No subsoiling shall be required where the road

traverses rock outcroppings. All natural water courses shall be opened to prevent erosion of the road. Barriers shall be constructed and clearing debris shall be placed on and around the barriers so as to prevent further use of the road by vehicles as shown on Exhibit C.

t. The Purchaser is authorized to use the roads listed below and shown on Exhibit E which are under the jurisdiction of the Bureau of Land Management for the removal of Government timber sold under the terms of this contract and/or the hauling of rock as required in Exhibit C provided that the Purchaser comply with the conditions set forth in Sections 42.u.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
Spur A	0.06	BLM	Natural	Purchaser
Spur B	0.08	BLM	Natural	Purchaser
Spur C	0.06	BLM	Natural	Purchaser
Spur D	0.05	BLM	Natural	Purchaser
Spur E	0.04	BLM	Natural	Purchaser
Spur F	0.16	BLM	Natural	Purchaser
Spur G	0.05	BLM	Rocked	Purchaser
4N-3-3.0 Seg. A,B,C	3.32	BLM	Rocked	Purchaser
4N-3-7.0 Seg. H	0.52	BLM	Rocked	Purchaser
5N-3-33.0	0.98	BLM	Rocked	Purchaser
5N-3-33.3	0.07	BLM	Natural	Purchaser
5N-3-33.4	0.63	BLM	Rocked	Purchaser
5N-3-33.5	0.08	BLM	Rocked	Purchaser
5N-3-33.7	0.18	BLM	Rocked	Purchaser
5N-3-33.8	0.11	BLM	Rocked	Purchaser

u. The Purchaser shall perform any road repair and maintenance work on roads used, under the terms of Exhibit D, "Road Maintenance Specifications," of this contract which is attached hereto and made a part hereof. Purchaser shall spread **760** cubic yards of crushed rock on BLM controlled roads as directed by Authorized Officer as part of maintenance requirements. Purchaser shall also pay a rock wear fee of \$5,499.47 to the Government. Additional fees for rockwear will be calculated at the agreed upon rates for additional timber volume and be charged to Purchaser.

v. In the use of roads listed below and shown on Exhibit E, the Purchaser shall comply with the conditions of Right-of-Way and Road use Agreement S-522F (OR066364) between the United States of America and Rayonier Washington Timber Company. The Purchaser will be required to enter into a license agreement prior to commencement of operations. The Purchaser shall furnish to the Authorized Officer a copy of the required executed license agreement. The license agreement conditions include: 1) No payment to Rayonier Washington Timber Company for road use obligation. 2) Payment to Rayonier Washington Timber Company a rockwear fee obligation of \$1,804.99. Rockwear fees have been calculated using estimated timber volumes.

Additional fees for rockwear will be calculated at the agreed upon rates (in the license agreement) for additional timber volume and be charged to Purchaser. All payments shall be made to Licensor prior to contract termination. 3) The Purchaser shall *not* perform maintenance on road Segments 4N-3-10.3. Purchaser shall pay a maintenance fee of \$2,799.58 to Rayonier Washington Timber Company for this road. Maintenance fees have been calculated using estimated timber volumes. Additional fees for maintenance on this road will be calculated at the agreed upon rates (in the license agreement) for additional timber volume and be charged to Purchaser. 4) The Purchaser will also be required to enter into a timber sale contract with Rayonier for the purchase of right-of-way timber needed for improvements of road 4N-3-10.3. 5) Default by the Purchaser of said Right-of-Way and Road Use Agreement or any license agreement executed pursuant thereto, 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. The Purchaser will be required to carry liability insurance with the limits of \$1,000,000/ \$1,000,000/ \$1,000,000 and provide a performance bond in the amount of \$1,000.00.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
4N-3-10.3	0.98	Rayonier	Rocked	Rayonier

w. In the use of road 5N-3-33.4 (Between Station 29+23 and 33+46) clearing of trees for road renovation and a turnaround will be accomplished as described in Exhibit C and requires the removal of merchantable timber, the Purchaser shall enter into an agreement with Weyerhaeuser Company to purchase the merchantable timber. The Purchaser will be required to enter into an agreement prior to commencement of operations and shall furnish to the Authorized Officer a copy of the required agreement.

x. The Purchaser also agrees that if they elect to use any other private road 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, 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.

y. The Purchaser shall perform any road repair and maintenance work on roads used (and designated as Purchaser Maintenance), under the terms of Exhibit D, "Road Maintenance Specifications," of this contract which is attached hereto and made a part hereof. Purchaser shall spread **10** cubic yards of crushed rock on the 4N-3-10.0 (County Controlled Road) used for this timber sale, as directed by Authorized Officer as part of maintenance requirements.

ENVIRONMENTAL PROTECTION

z. During culvert installation or replacement activities, all stream flow shall be diverted around the culvert work occurring in live streams, as to maintain downstream flows and minimize turbidity. Woody material removed from stream channels during culvert work shall be placed in the stream channel downstream of the culvert.

aa. In addition to the requirements set forth in Section 25 of this contract, the Purchaser shall power wash all road construction and ground-based logging equipment, including loaders and mechanically propelled brush cutters, prior to entry onto BLM lands each work season, or before returning to BLM lands after leaving it. Equipment shall be inspected by the Authorized Officer at a site approved by the Authorized Officer to verify that the equipment has been reasonably cleaned prior to entry onto BLM lands.

bb. The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Contracting Officer that:

1. 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;
2. when, in order to comply with the Endangered Species Act (or to protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Salem District Record of Decision (ROD) and Resource Management Plan (RMP)), the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
3. 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;
4. 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;
5. 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;
6. when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
7. 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;
8. 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 terminated 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 post-harvest 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.h. 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 occupied marbled murrelet sites in accordance with the ROD and RMP, 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, marbled murrelet occupied site protection in accordance with the ROD

and RMP, 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.

FIRE PROTECTION

cc. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions when operating at Oregon Department of Forestry Industrial Fire Precaution Level (IFPL) I (Closed Fire Season). At IFPL II and III, additional fire prevention and control provisions may be added as determined by the Authorized Officer and specified in written instructions to the Purchaser to mitigate dry fuel and weather conditions.

1. 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. Provide and maintain in good working order, and immediately available on the contract area, the following equipment for use during closed fire season or periods of fire danger:
 - a. Firefighting tools shall be kept at each landing or at such other place at the Authorized Officer shall designate whenever people are working on the contract area. All firefighting 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 (1) 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 or less than one (1)

tool for each man working on the contract area. Three-fourths (3/4) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

b. At each landing or such other place as the Authorized Officer shall designate during periods of operation, one (1) tank truck of one thousand (1000) gallons or more capacity, or multiple engines equal to 1000 gallons capacity, with five hundred (500) feet of 1 ½ inch hose, one thousand (1000) feet of 1 inch hose, one (1) 1 ½ inch gated wye, one (1) 1 inch gated wye, two (2) 1 ½ to 1 inch reducers, and three (3) 1 inch nozzles. The tank truck or smaller engines shall be equipped with a pump capable of delivering a minimum of forty (40) pounds per square inch (psi) engine pressure through fifty (50) feet of 1 ½ inch hose. The pump may be either a power take off (PTO), or a truck-mounted auxiliary engine. All equipment shall be acceptable to the Authorized Officer and shall conform to the standards set forth in Oregon Revised Statutes 477.645 through 477.670 and any rule promulgated pursuant to these statutes. All hose couplings shall have the standard thread adopted by the BLM (1 ½ inch 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, tank trucks, and/or engines shall be filled with fuel and made ready for immediate use. All tank trucks, and /or engines and portable tanks shall be filled with water and made available for immediate use.

c. Two (2) backpack pumps at each landing and one (1) at each tail block, or any other block, all to be kept full of water and in good operating condition.

d. A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Oregon State Forester 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 buckner 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 Oregon State Forester.

e. 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 shall hang when the cable is tight. Such clearings shall be inspected periodically by the Purchaser and shall be kept free of flammable material.

f. During Oregon Department of Forestry fire season, no smoking shall be permitted outside of closed vehicles.

LOGGING RESIDUE REDUCTION

dd. The Purchaser shall perform logging residue reduction and site preparation within the Logging Residue Reduction Area(s) as shown on Exhibit G, which is attached hereto and made a part hereof. All work shall be done as directed by the Authorized Officer in accordance with the specifications described on Exhibit F which is attached hereto and made a part hereof.

PRESCRIBED BURNING

ee. Notwithstanding the provisions of Section 15 of this contract, the Government shall assume all obligations for the disposal or reduction of the fire hazards caused by slash created by the Purchaser's operations on Government lands, except for logging residue reduction operations listed above, and burning and fire control assistance as required herein. Upon phone notification by the Authorized Officer of required performance prior to ignition, the Purchaser shall, under supervision of the Authorized Officer or his designated representative, assist in, landing pile and hand pile burning and fire control on the day of ignition. In addition, debris which has been buried at landings and is determined to be the source of holdover fire shall be excavated by the Purchaser with a tractor and/or hydraulic excavator as directed by the Authorized Officer. The Purchaser shall furnish, at his own expense, the services of personnel and equipment on all units requiring burning as shown below.

1. One (1) work leader (Firefighter Type 1 (FFT1)) to supervise crew and to serve as Purchaser's representative.
2. A five (5) person crew (Firefighter Type 2 (FFT2)) for ignition of hand piles, machine piles, or landing piles.
3. Five (5) drip torches with thirty-five (35) gallons of slash fuel (4:1 ratio of diesel to gasoline).
4. Aluma-gel or other incendiary thickener.
5. One (1) chain saw with fuel.
6. One (1) hand tool per above listed personnel on the day of ignition.

All listed personnel shall be physically fit, experienced and fully capable of functioning as required. In addition, all listed personnel shall be qualified according to the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System Guide, PMS-310-1 and provide documentation of these qualifications. On the day of ignition all listed personnel shall be fluent in speaking and understanding English, clothing shall consist of long pants and long sleeved shirts, and be of approved aramid fabric (Nomex™ or equivalent), as well as being free of diesel fuel oil. All personnel shall wear lug sole boots with minimum eight (8) inch tall uppers that provide ankle support, approved hardhats and leather gloves. Personnel who do not meet these requirements or do not have proper clothing and personal protective equipment (PPE) will not be allowed to participate.

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.

In the event of a fire escapement, the Purchaser's personnel and equipment shall, under supervision of the Authorized Officer or his designated representative, take action to 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: (1) reimburse the Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for the Western Area and at equipment rates shown in the current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule until the Purchaser is released from such service by the Government or (2) release the Purchaser from additional suppression work and assume responsibility for suppressing the escaped fire.

In case of injury to personnel or damage to equipment furnished 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 the personnel and equipment required herein, the Purchaser shall be responsible for all additional cost 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 a deferral of burning and new conditions necessitate additional site preparation work and/or the use of additional personnel and equipment to accomplish the planned burn, the Purchaser also shall be responsible for such additional costs.

LOG EXPORT RESTRICTION

ff. 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 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 (8-3/4) 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 redcedar 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 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 remanufacturing of eight and three-quarters (8-3/4) 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:

1. Date of last export sale.
2. Volume of timber contained in last export sale.
3. Volume of timber exported in the past twelve (12) months from the date of last export sale.
4. Volume of Federal timber purchased in the past twelve (12) months from date of last export sale.
5. Volume of timber exported in succeeding twelve (12) months from date of last export sale.
6. 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 "Certificate as to Nonsubstitution and 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 the 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 Authorized Officer, the Purchaser shall, prior to the removal of timber from the contract area, brand with Purchaser's registered log brand at least one end of each log, bolt, or other roundwood and identify each of these by painting with highway yellow paint.

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.

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.

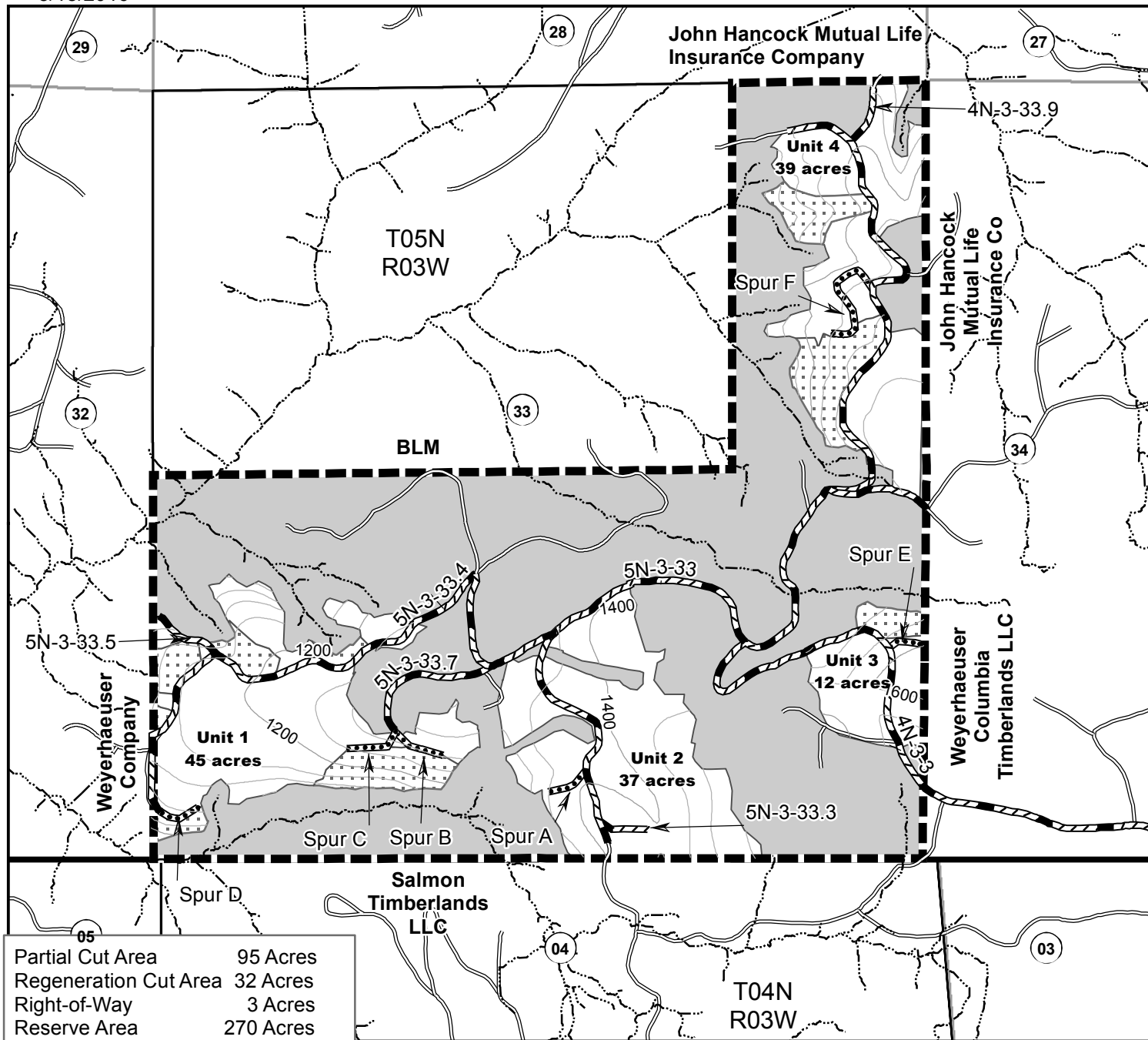


United States Department of the Interior
BUREAU OF LAND MANAGEMENT
TIMBER SALE CONTRACT MAP

Contract No. ORS06-TS-2016.0102
33 Mystery Timber Sale
Exhibit A
Page 1 of 1

5/18/2016

T. 5N. R. 3W, Section 33 W. M. - SALEM DISTRICT - OREGON



Partial Cut Area	95 Acres
Regeneration Cut Area	32 Acres
Right-of-Way	3 Acres
Reserve Area	270 Acres

Contract Area 400 Acres

0 500 1,000 2,000 3,000
Feet

Contour Interval: 40 feet 1 inch = 1,000 feet

- | | | | |
|--|----------------------------|--|------------------------|
| | Harvest Area-Ground Based | | Road to be constructed |
| | Harvest Area-Skyline Based | | Road to be renovated |
| | 33 Mystery Project Area | | Existing Roads |
| | Reserve Area | | Streams |

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. Note: Boundaries of harvest area and rights-of-ways (ROW) are painted orange and posted. Harvest area acres do not include existing roads or previously harvested patch cuts. Acres shown on Exhibit A for harvest area have been computed using a Trimble Geo 6000 GPS Unit.

Prepared By: csween

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORS06-TS-2016.0102

33 Mystery

The following estimates and calculations of value of timber sold are made solely as an administrative aid for determining: (1) adjustments made or credits given in accordance with Secs. 6, 9, or 11; (2) when payments are due; and (3) value of timber subject to any special bonding provisions. The value of timber will be determined by multiplying the value per acre as shown below, times the amount of acreage as determined by the Authorized Officer, which has been cut or removed or designated for taking. Except as provided in Sec. 2, Purchaser shall be liable for total purchase price even though quantity of timber actually cut or removed or designated for taking is less than the estimated volume or quantity shown. Cutting areas are shown on **Exhibit A**.

SPECIES	ESTIMATED VOLUME OR QUANTITY (Units Specified)	PRICE PER UNIT	ESTIMATED VOLUME OR QUANTITY X UNIT PRICE
Douglas Fir	3,752.0 MBF	\$292.00	\$1,095,584.00
Red Alder	3.0 MBF	\$113.40	\$340.20
TOTALS	3,755.0 MBF		\$1,095,924.20

The apportionment of the total purchase price is as follows:

Unit 1

Douglas Fir	714.0 MBF	X	\$292.00	=	\$208,488.00
Red Alder	3.0 MBF	X	\$113.40	=	\$340.20
Total	717.0 Mbf				\$208,828.20 ÷ 46.0 acres = \$4,539.74/Acre

Unit 2

Douglas Fir	862.0 MBF	X	\$292.00	=	\$251,704.00
Total	862.0 Mbf				\$251,704.00 ÷ 33.0 acres = \$7,627.39/Acre

Unit 3

Douglas Fir	637.0 MBF	X	\$292.00	=	\$186,004.00
Total	637.0 Mbf				\$186,004.00 ÷ 10.0 acres = \$18,600.40/Acre

Unit 4

Douglas Fir	1,287.0 MBF	X	\$292.00	=	\$375,804.00
Total	1287.0 Mbf				\$375,804.00 ÷ 38.0 acres = \$9,889.58/Acre

Unit RW

Douglas Fir	252.0 MBF	X	\$292.00	=	\$73,584.00
Total	252.0 Mbf				\$73,584.00 ÷ 3.0 acres = \$24,528.00/Acre

150: ROAD PLAN AND DETAIL SHEET

Road Number	Start Station or Milepost	End Station or Milepost	Total Length	Typical Cross Section	Min. Curve Radius	ROAD WIDTH		GRADIANT		SURFACING (*5)										Remarks	
						Subgrade	Ditch	Max. Favorable	Max. Adverse	BASE COURSE					SURFACE COURSE						
										Min. Width	Comp. Depth	Surface Type (*3)	Grading Size (*3)	Number of Lifts	Min. Width	Comp. Depth	Surface Type (*3)	Grading Size (*3)	Number of Lifts		
Spur A	0+00	3+17	3+17	3		14	0	10%	10%												New Construct. Construct Landing as marked (approx. 50 ft diameter).
Spur B	0+00	1+00	1+00	5		14	2	10%	10%												New Construct.
	1+00	4+11	3+11	3		14	0	12%	12%												New Construct. Construct Landing as marked (approx. 40 ft diameter).
Spur C	0+00	3+12	3+12	3		14	0	15%	15%												New Construction. Construct Landing as marked (approx. 50 ft diameter).
Spur D	0+00	2+75	2+75	3		14	0	15%	15%												New Construct. Construct Landing as marked (approx. 50 ft diameter).
Spur E	0+00	2+08	2+08	3		14	0	10%	10%												New Construct. Construct Landing as marked (approx. 60 ft diameter).
Spur F	0+00	8+34	8+34	3		14	0	17%	11%												New Construct. Construction to elevations and locations slope staked in field and shown on Appendix C1 drawings. Construct a roadside landing between stations 2+80 - 4+10, Construct End Landing as marked (approx. 60 ft diameter).
Spur G	0+00	2+80	2+80	3		14	0	10%	10%												Renovate Existing Road. Construct Landing as marked (approx. 50 ft diameter).
4N-3-3.0	0.000	1.453	1.453	6		14	2	--	--								ASC	C			Renovation. Spread 250 CY crushed Spot Rock as marked and needed. Spread 160 CY Pit-Run Spot/Base Rock as marked. Place 165 CY Crushed Bedding/Backfill Rock as marked. Place 50 CY Class 3 RipRap. Re-establish ditchline and haul material to WA. Construct ditchouts as marked and needed. Construct turnouts as marked and needed. Construct Lead-off ditches at culvert outlets as directed. Construct a sediment catch basin (3'x5'x3') w/ straw bale in ditchline @ MP 0.194, 0.202, 0.297, & 0.345 . Construct a extra large ditchline (armored with 30 CY Pit-Run Rock) between MP 1.295 - 1.337. Construct waste areas @ MP 0.183, 0.493, 0.556, 0.666, and as directed. Remove existing waterbars @ MP 0.382 & 0.556.
	1.453	1.788	0.335	6		14	2	--	--						12'	6"	ASC	C	1		Renovation. Spread a 6" Lift of 1-1/2"-0" Crushed Rock (approx. 626 CY). Spread 30 CY Pit-Run Spot/Base Rock as marked. Place 30 CY Crushed Bedding/Backfill Rock. Re-establish ditchline and haul material to WA. Construct ditchouts as marked and needed. Construct turnouts as marked and needed. Construct Lead-off ditches at culvert outlets as directed. Install metal inlet markers on all existing culverts.
																					Renovation. Spread 150 CY crushed Spot Rock as marked and needed. Spread 130 CY Pit-Run Spot/Base Rock as marked. Place 85 CY Crushed Bedding/Backfill Rock. Place 110 CY Class 3 RipRap. Re-establish ditchline and haul material to WA. Construct ditchouts as marked and needed. Construct turnouts as marked and needed. Construct waste areas @ MP 1.959, 3.080, 3.194, and as directed. Construct Turnarounds @ MP 1.993, 2.571, & 3.194. Excavate orgainc material from subgrade and construct a free-draining fill @ MP 2.874 (approx. 100 sq.yd. non-woven fabric and 60 CY 1-1/2"- 3/4" drain rock, 50 CY Class 3 RipRap as slope stabilization). Widen road approx. 6 ft to the right (between MP 2.943 - 2.978) for curve and intersection with Spur F, spread spot rock on exposed soil subgrade. Construct Lead-off ditches at culvert outelts as directed. Install metal inlet markers on all existing culverts.
	1.788	3.319	1.531	6		14	2	--	--								ASC	C			

*NOTES

1. **Extra subgrade widths**
Add to each shoulder: 1 ft. for fills of 1-6 ft. and 2 ft. for fills over 6 ft. Widen the inside shoulder of curves as follow:
(See Road Plan Map, Exhibit C)

2. **Backslopes**

Materials	Cut slopes	Fill slopes
Solid rock	1/4:1	Angle of repose
Soft rock and shale	1/2:1	
Common		
Slopes under 55%	1:1	1-1/2:1
Slopes over 55%	3/4:1	1-1/2:1

3. **Surface type**

PRR - Pit run rock	Grading
GRR - Grid rolled rock	A - 3"
SRN - Screened rock	B - 2"
JRR - Jaw run rock	C - 3" jaw run
ABC - Aggr. base course	C - 1-1/2"
ASC - Aggr. surface course	D - 1"
WC - Wood chips	E - 3/4"
4. **Turnouts**
Width - 10 ft. in addition to subgrade width, or as shown on the plans. Located approximately as shown on the plans. Intervisible and not more than 750ft. apart.

5. **Surfacing**
Turnouts, curve widening and road approach aprons shall be surfaced.

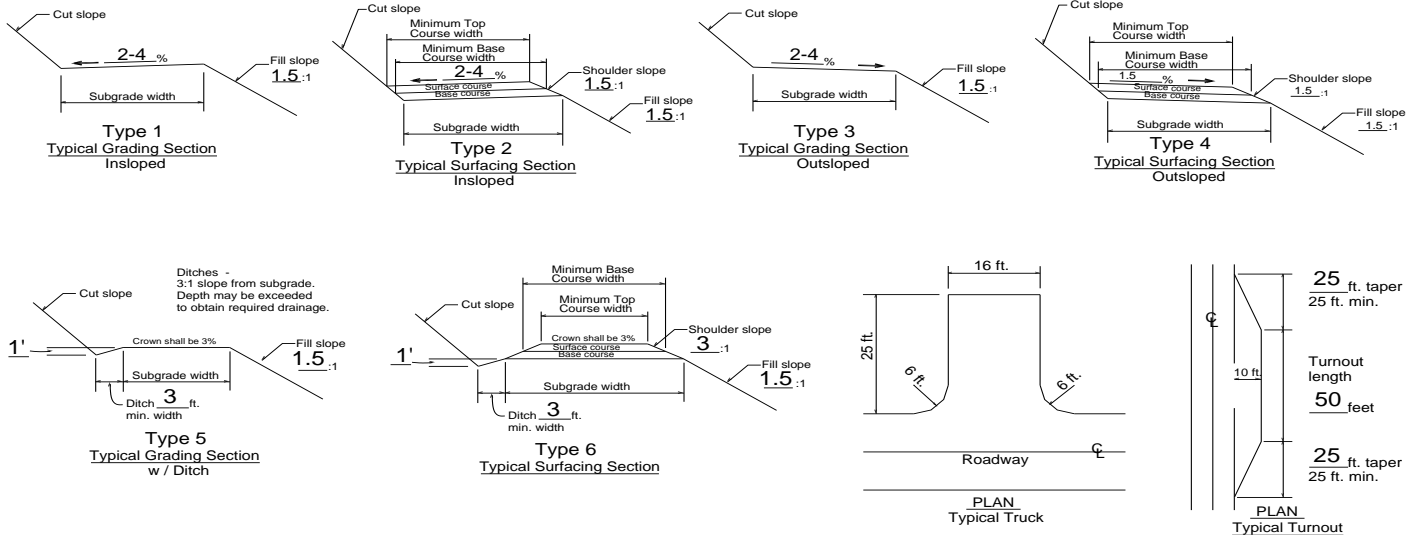
6. **Clearing width** 200
See Section

7. As posted and painted for Right-of-Way:

8. **Drainage**
See Culvert List

10. **Compaction** 300 and 400
See Sections
- Note:
Full bench construction is required on side slopes exceeding 60%.

* Clearing Limits as posted on ground



150: ROAD PLAN AND DETAIL SHEET

Road Number	Start Station or Milepost	End Station or Milepost	Total Length	Typical Cross Section	Min. Curve Radius	ROAD WIDTH		GRADIANT		SURFACING (*5)											Remarks
						Subgrade	Ditch	Max. Favorable	Max. Adverse	BASE COURSE					SURFACE COURSE						
										Min. Width	Comp. Depth	Surface Type (*3)	Grading Size (*3)	Number of Lifts	Min. Width	Comp. Depth	Surface Type (*3)	Grading Size (*3)	Number of Lifts		
4N-3-7.0	0.000	0.516	0.516	6		14	2											ASC	C		Renovation. Spread 160 CY crushed Spot Rock as marked and needed. Spread 95 CY Pit-Run Spot/Base Rock as marked. Place 55 CY Crushed Bedding/Backfill Rock. Re-establish ditchline and haul material to WA. Construct ditchouts as marked and needed. Construct turnouts as marked and needed. Construct waste area @ MP 0.516 (tucked against bank), and as directed. Construct Turnaround @ MP 0.146. Construct a water dip across road to the left to drain ditchline (MP 0.386). Start widen road to the left (MP 0.516) for curve and intersection with 5N-3-33.4, spread spot rock on exposed soil subgrade. Construct Lead-off ditches at culvert outlets as directed.
4N-3-10.0	0.000	0.070	0.070	6		14	2											ASC	C		Renovation. Spread 10 CY Spot Rock as marked and needed. Re-establish ditchline and haul material to WA. Construct waste area to the left on abandoned portion of road (MP 0.000).
4N-3-10.3	0.000	0.981	0.981	6		14	2											ASC	C		Renovation. Spread 350 CY crushed Spot Rock as marked and needed. Spread 50 CY Pit-Run Spot/Base Rock as marked. Place 50 CY Crushed Bedding/Backfill Rock. Place 15 CY Class 3 RipRap. Re-establish ditchline and haul material to WA. Construct ditchouts as marked and needed. Construct turnouts as marked and needed. Construct waste area @ MP 0.528, and as directed. Construct Lead-off ditches at culvert outlet as directed. Install metal inlet markers on all existing culverts.
5N-3-33.0	0.000	0.321	0.321	6		14	0														Renovation. Spread 50 CY Spot Rock as marked and needed. Spread 20 CY Pit-Run Spot/Base Rock as marked. Place 20 CY Crushed Bedding/Backfill Rock. Place 5 CY Class 3 RipRap. Re-establish ditchline and haul material to WA. Construct ditchouts as marked and needed. Construct turnouts as marked. Construct Lead-off ditches at culvert outlets as directed. Construct a waste area @ MP 0.080, tucked against the bank.
5N-3-33.3	0+00	3+56	3+56	3		14	0	10%	10%												Renovate Existing Road. Construct Landing as marked (approx. 50 ft diameter).
5N-3-33.4	0+00	30+72	30+72	6		14	2											ASC	C		Renovation. Spread 40 CY Spot Rock as marked and needed. Spread 65 CY Pit-Run Spot/Base Rock as marked. Place 45 CY Crushed Bedding/Backfill Rock. Place 5 CY Class 3 RipRap. Re-establish ditchline and haul material to WA. Construct ditchouts as marked and needed. Construct turnouts as marked. Construct Lead-off ditches at culvert outlets as directed. Construct a waste area as directed. Deck timber cut on Private in separate decks.
	30+72	33+46	2+74	4		14	0														Renovation. Construct ditchouts as needed. Construct Turnouts as marked. Construct a turnaround @ Sta. 30+72.
5N-3-33.5	0+00	4+28	4+28	6		14	2											ASC	C		Renovation. Spread 10 CY Spot Rock as marked and needed. Spread 40 CY Pit-Run Spot Rock as marked. Re-establish ditchline and haul material to WA. Pull back sidecast and haul to Waste Area, widen road to the left for width (Sta. 3+25 - 3+90), spread spot rock on exposed soil subgrade. Construct ditchouts as marked and needed. Construct a waste area and roadside landing @ Sta. 3+90, as directed.

*NOTES

1. Extra subgrade widths
Add to each shoulder: 1 ft. for fills of 1-6 ft. and 2 ft. for fills over 6 ft. Widen the inside shoulder of curves as follow:
(See Road Plan Map, Exhibit C)

2. Backslopes

Materials	Cut slopes	Fill slopes
Solid rock	1/4:1	Angle of repose
Soft rock and shale	1/2:1	
Common		
Slopes under 55%	1:1	1-1/2:1
Slopes over 55%	3/4:1	1-1/2:1

3. Surface type

PRR - Pit run rock	Grading A - 3" B - 2" C - 3" jaw run (base course)
GRR - Grid rolled rock	
SRN - Screened rock	
JRR - Jaw run rock	
ABC - Aggr. base course	C - 1-1/2" D - 1" E - 3/4" (surface course)
ASC - Aggr. surface course	
WC - Wood chips	
4. Turnouts
Width - 10 ft. in addition to subgrade width, or as shown on the plans. Located approximately as shown on the plans. Intervisible and not more than 750ft. apart.

5. Surfacing
Turnouts, curve widening and road approach aprons shall be surfaced.

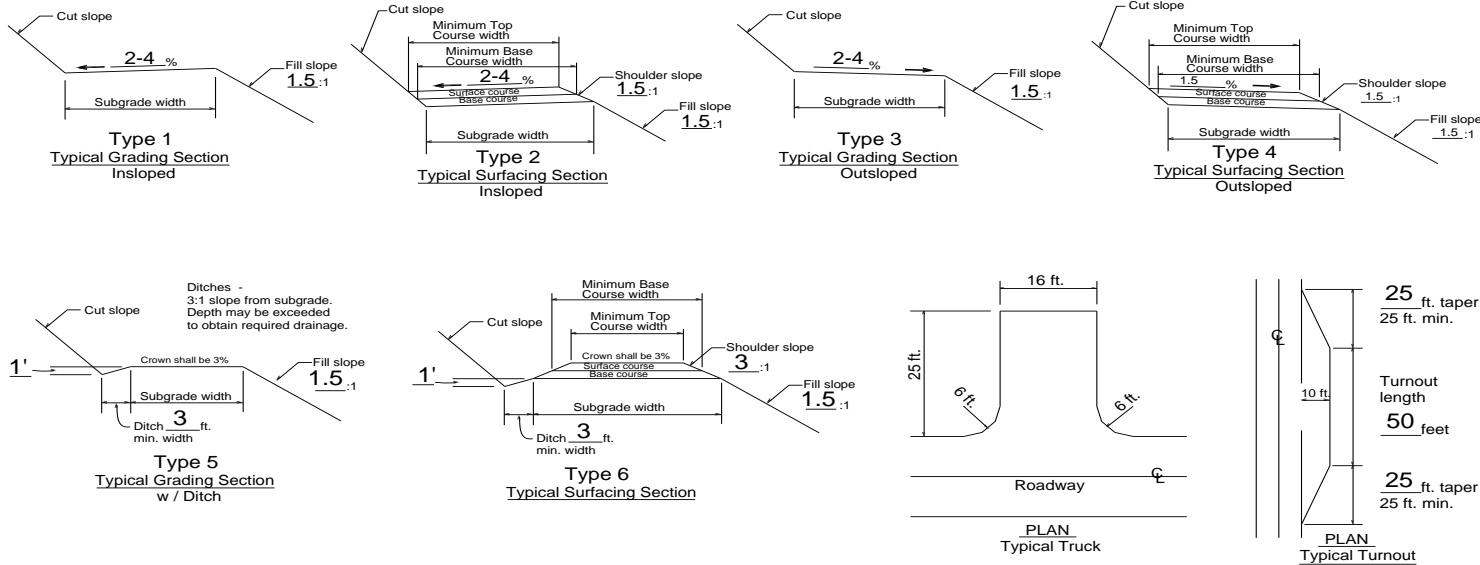
6. Clearing width
See Section 200.

7. As posted and painted for Right-of-Way:

8. Drainage
See Culvert List

10. Compaction
See Sections 300 and 400
- Note:
Full bench construction is required on side slopes exceeding 60%.

* Clearing Limits as posted on ground



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Figure 1: Typical Grading and Surfacing Sections

Type 1: Typical Grading Section Insloped
 Subgrade width: 2-4%
 Fill slope: 1.5:1

Type 2: Typical Surfacing Section Insloped
 Minimum Top Course width
 Minimum Base Course width
 Subgrade width: 2-4%
 Shoulder slope: 1.5:1
 Fill slope: 1.5:1
 Surface course
 Base course

Type 3: Typical Grading Section Outsloped
 Subgrade width: 2-4%
 Fill slope: 1.5:1

Type 4: Typical Surfacing Section Outsloped
 Minimum Top Course width
 Minimum Base Course width
 Subgrade width: 1.5%
 Shoulder slope: 1.5:1
 Fill slope: 1.5:1
 Surface course
 Base course

Type 5: Typical Grading Section w/ Ditch
 Ditches - 3:1 slope from subgrade. Depth may be exceeded to obtain required drainage.
 Cut slope: 3:1
 Crown shall be 3%
 Subgrade width: 3 ft. min. width
 Fill slope: 1.5:1

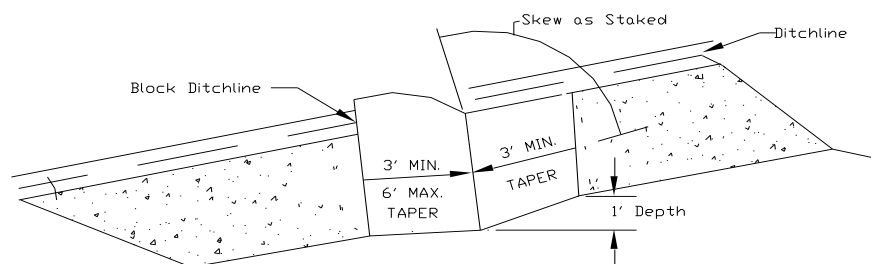
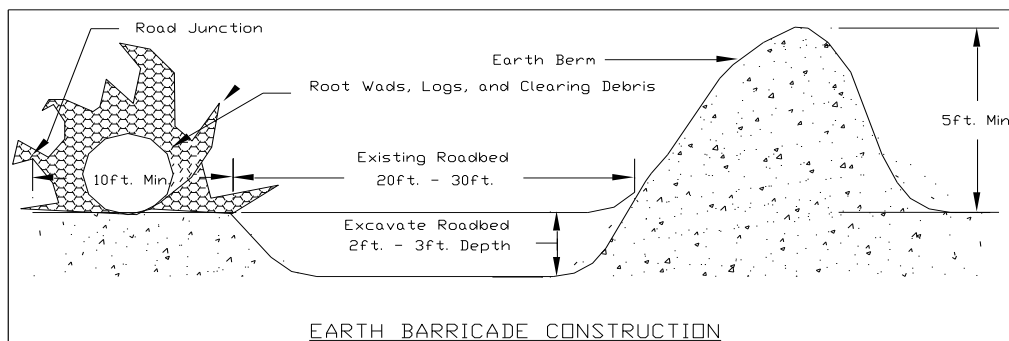
Type 6: Typical Surfacing Section
 Minimum Top Course width
 Minimum Base Course width
 Crown shall be 3%
 Subgrade width: 3 ft. min. width
 Shoulder slope: 3:1
 Fill slope: 1.5:1
 Surface course
 Base course

PLAN Typical Truck
 16 ft. width
 25 ft. height
 6 ft. wheel path

PLAN Typical Turnout
 10 ft. width
 25 ft. height
 6 ft. wheel path

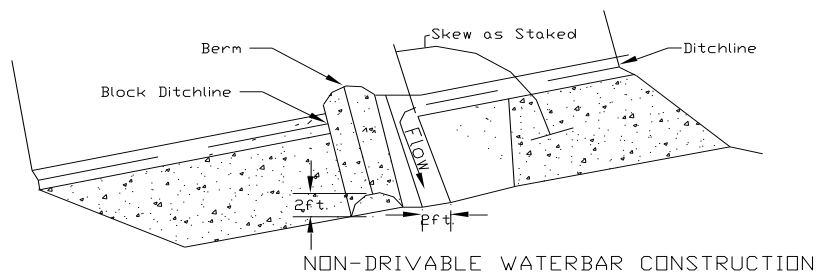
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SALEM DISTRICT OFFICE - OREGON

Earth Barricade, Waterdip, Drivable and Non-Drivable Waterbar Details



NOTE:

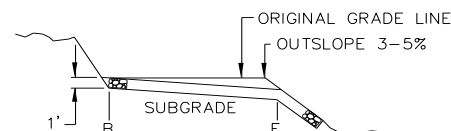
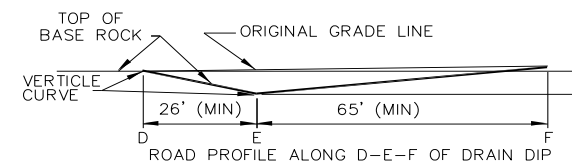
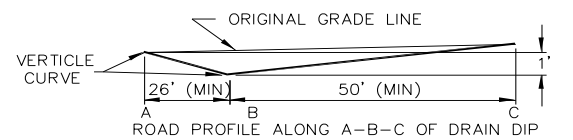
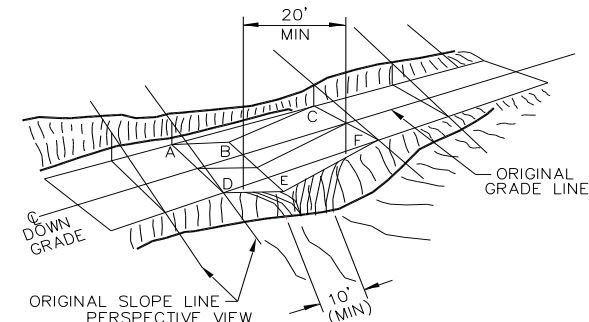
1. DITCHLINE IS TO BE BLOCKED WITH EXCAVATED MATERIAL TO PREVENT DITCH WATER FROM BYPASSING WATERBAR.
2. EXCESS MATERIAL SHALL BE UNIFORMLY SPREAD ALONG ROADWAY. NO MATERIAL WILL BE ALLOWED BEYOND THE OUTER ROAD EDGE.



WATER DIP DETAIL

Not to Scale

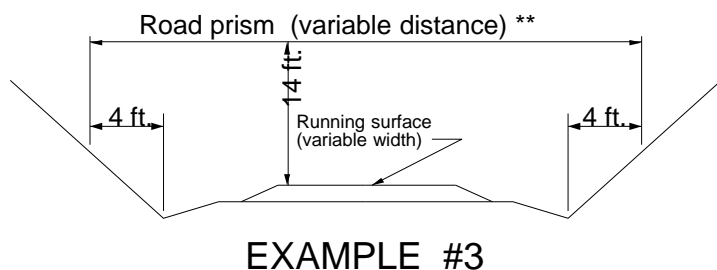
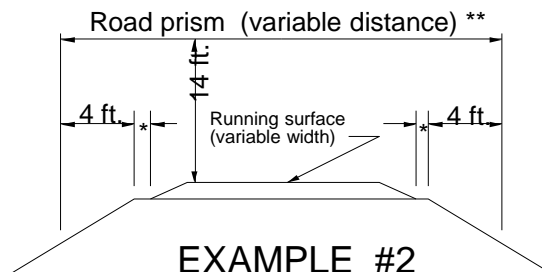
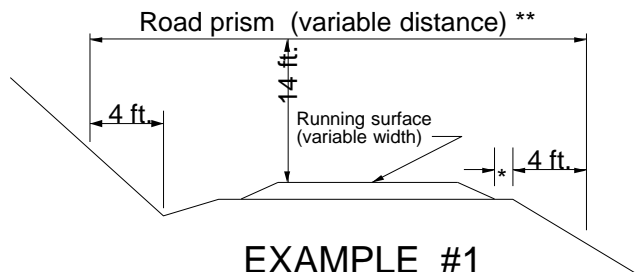
NOTE: PLAN OF DIP SHOWN IS FOR OUTSLOPED ROLLING DIP, DIPS MAY BE EITHER INSLOPED OR OUTSLOPED. WHEN INSLOPED, DIPS SHALL DISCHARGE INTO A CULVERT, DROP INLET, OR OVERSIDE DRAIN, OR DRAINAGE DITCH. WHEN OUTSLOPED, THEY SHALL DISCHARGE INTO AN OVERSIDE DRAIN OR ON TO NATURAL GROUND. THE MINIMUM CROSS GRADE FROM "B" TO "E" IS 4% GREATER THAN THE ORIGINAL ROAD GRADE. SKEW LINE B-E TO FIT LOW POINT IN DRAW, IF LOCATED IN NATURAL DRAIN.



ROCK SPILL APRON 15' WIDE WITH MATERIAL AS SHOWN ON SCHEDULE OF ITEMS TO TOE OF FILL.

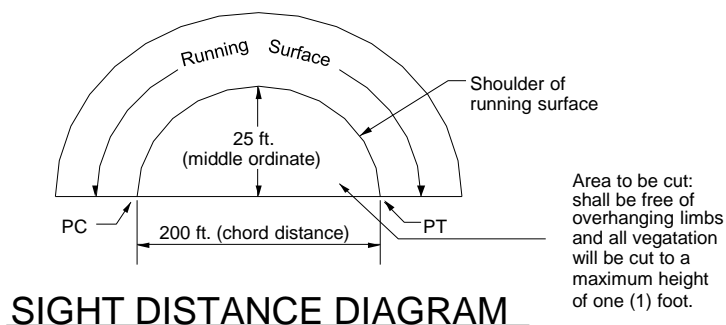
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 Bureau of Land Management
 SALEM DISTRICT OFFICE - OREGON

BRUSHING DETAILS



(NO SCALE)

- * Variable distance between running surface and start of fill slope
- ** All areas within the variable distance shall be free of all vegetation capable of growing one (1) foot in height or higher and all overhanging limbs and branches 14 feet in elevation above the running surface



***6. Include special sections, structures, headwalls, footings & other data.**

Culvert List

CULVERT LOCATIONS											ROCK			REMARKS *6			
DESIGNED *2							DOWNSPOUT(d) or STANDPIPE(s) *4				AS BUILT						RIP RAP (GRADING)
														(a)		(b)	
Road #	Sta./ M.P	SIZE	GAGE	LENGTH	CULVERT GRADE	INSTALL TYPE *3	SIZE	TYPE	LENGTH	TYPE OF ELBOW *5	SIZE	GAGE	LENGTH	INLET	OUTLET	Structure inside pipe	
4N-3-3.0 (cont.)	1.337	48"	16	40'	--	--	48"	(s)16ga	6'	90 degree w/ gaskets	--	--	--	--	20	--	Replace existing drop culvert. Place 25 CY Crushed Bedding/Backfill. Spread 20 CY Pit-Run Base Rock over pipe as Surfacing capped with 15 CY Crushed Rock. Install slotted/vertical standpipe with elbow and gaskets on inlet of pipe (drawings of slotted pipe styles available upon request).
	1.423	18"	--	30'	--	--	--	--	--	--	--	--	--	--	5	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	1.536	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	1.568	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	1.672	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	2.455	42"	16	40'	--	--	--	--	--	--	--	--	--	--	50	--	Replace existing culvert. Place 25 CY Crushed Bedding/Backfill. Spread 20 CY Pit-Run Base Rock over pipe as Surfacing capped with 20 CY Crushed Rock. Install metal inlet marker.
	2.637	18"	--	30'	--	--	--	--	--	--	--	--	--	--	5	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	2.668	24"	--	36'	--	--	--	--	--	--	--	--	--	--	5	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	2.700	18"	--	30'	--	--	18"	(d)C	10'	1	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	3.005	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	3.128	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	3.306	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	Gage Chart			<div><div><div>1. Designed culvert lengths and locations are approximate.</div><div>2. all culverts have 2 2/3" x 1/2"</div><div>unless otherwise noted.</div><div>**** Corrugated plastic pipe (CPP), Type S (double wall) shall be used for culvert sizes 24" and smaller. All larger culverts shall be aluminized steel. Culverts 20' in length or smaller shall be one piece (no joints). No Culvert piece shall be shorter than 6 foot. Minimization of banding is required.</div></div><div><div>4. Downspout or Standpipe Types</div><div>1) Full</div><div>2) Half</div><div>3) Flume</div><div>*** Downspouts and stand pipes (under 36" diameter) shall be CPP, Type C (single wall).</div></div><div><div>5. 1) Conventional or Fabricated 2) Turner type 3) Slip joint</div><div>6. Include special sections, structures, headwalls, footings & other data.</div></div></div>													
		Dec. Inches															
	Gage	Steel	Alum.														
	10	.138	.135														
	12	.109	.105														
	14	.079	.075														
	16	.064	.060														

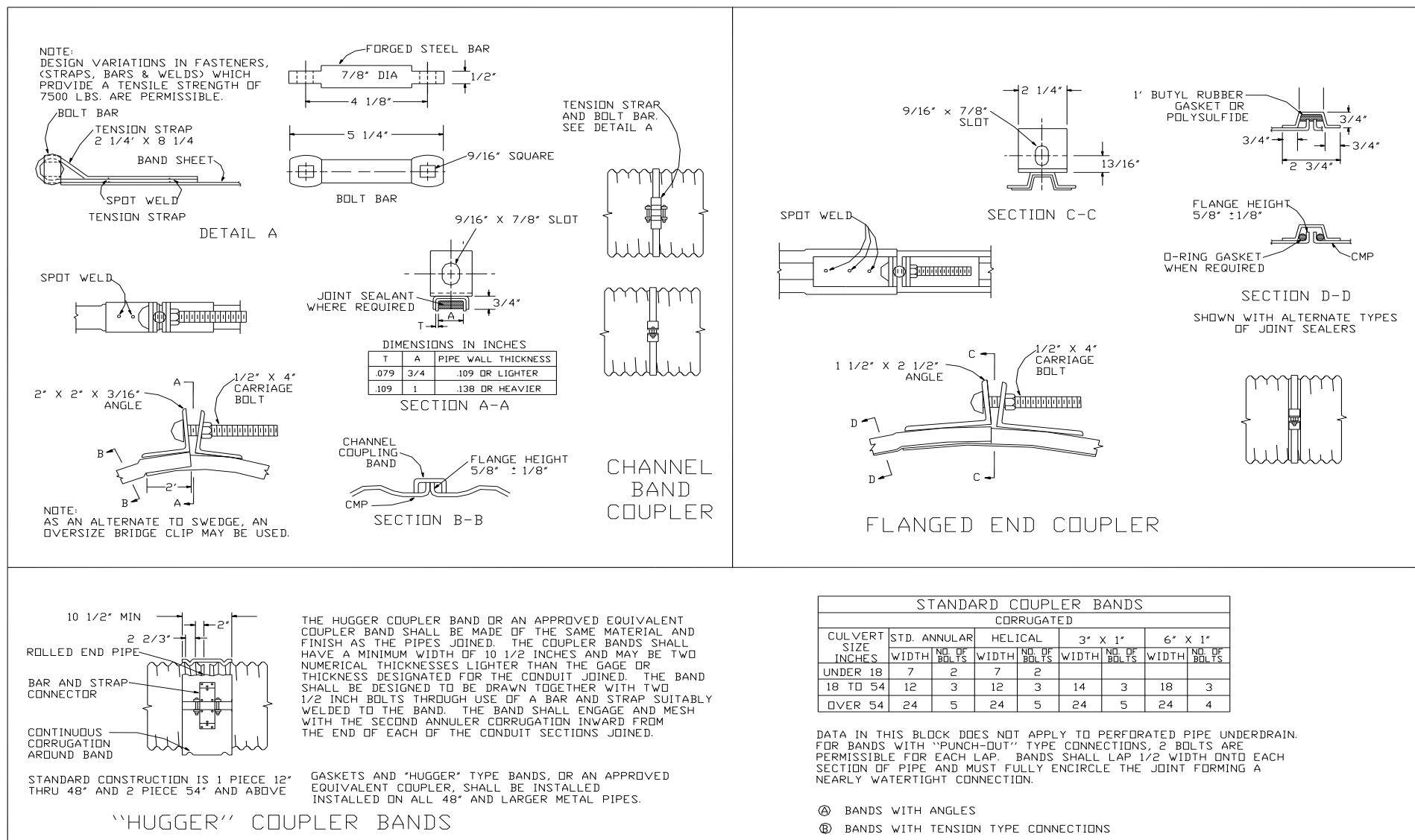
Culvert List

CULVERT LOCATIONS											ROCK			REMARKS *6			
DESIGNED *2							DOWNSPOUT(d) or STANDPIPE(s) *4				AS BUILT						RIP RAP (GRADING)
														(a)		(b)	
Road #	Sta./ M.P	SIZE	GAGE	LENGTH	CULVERT GRADE	INSTALL TYPE *3	SIZE	TYPE	LENGTH	TYPE OF ELBOW *5	SIZE	GAGE	LENGTH	INLET	OUTLET	Stucture inside pipe	
4N-3-7.0	0.108	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	0.144	24"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Re-use existing metal inlet marker.
	0.308	24"	--	46'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 15 CY Crushed Bedding/Backfill. Spread 15 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	0.407	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	0.516	18"	--	34'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
4N-3-10.3	0.385	18"	--	30'	--	--	--	--	--	--	--	--	--	--	5	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Re-use existing metal inlet marker.
	0.656	18"	--	30'	--	--	--	--	--	--	--	--	--	--	10	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Re-use existing metal inlet marker.
	0.692	18"	--	28'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	0.844	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	0.871	18"	--	28'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Re-use existing metal inlet marker.
5N-3-33.0	0.040	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	0.135	18"	--	30'	--	--	18"	(d) C	10'	1	--	--	--	--	5	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	Gage Chart			<div><div>1. Designed culvert lengths and locations are approximate.</div><div>2. all culverts have 2 2/3" x 1/2"</div><div>unless otherwise noted.</div><div>**** Corrugated plastic pipe (CPP), Type S (double wall) shall be used for culvert sizes 24" and smaller. All larger culvets shall be aluminized steel. Culverts 20' in length or smaller shall be one piece (no joints). No Culvert piece shall be shorter than 6 foot. Minimization of banding is required.</div></div> <div><div>*4. Downspout or Standpipe Types</div><div>1) Full</div><div>2) Half</div><div>3) Flume</div><div>*** Downspouts and stand pipes (under 36" diameter) shall be CPP, Type C (single wall).</div></div> <div><div>*5. 1) Conventional or Fabricated</div><div>2) Turner type</div><div>3) Slip joint</div></div> <div><div>*6. Include special sections, structures, headwalls, footings & other data.</div></div>													
	Gage	Dec. Inches															
		Steel	Alum.														
	10	.138	.135														
	12	.109	.105														
	14	.079	.075														
	16	.064	.060														

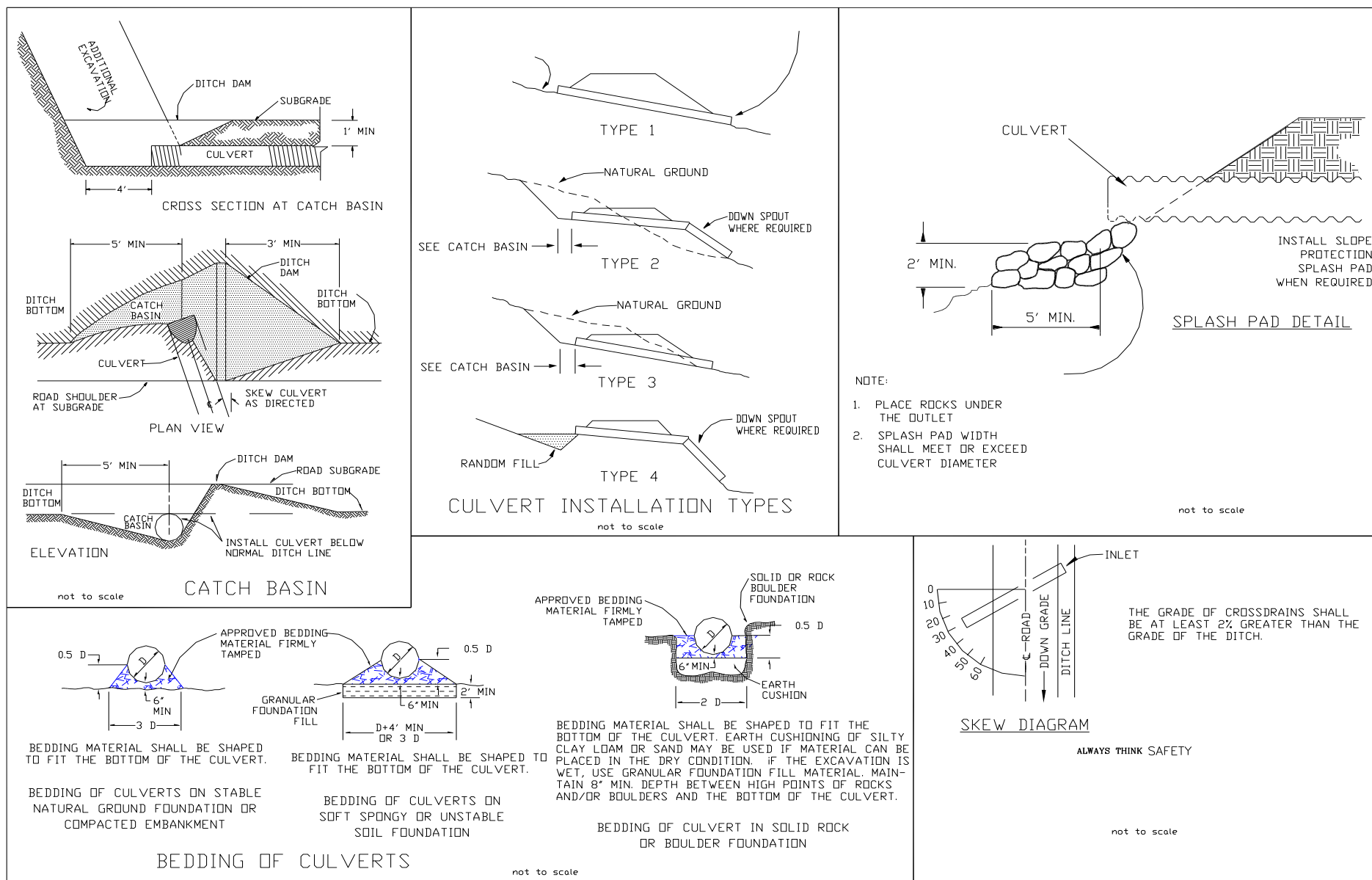
Culvert List

CULVERT LOCATIONS							DOWNSPOUT(d) or STANDPIPE(s) *4				AS BUILT			ROCK			REMARKS *6
DESIGNED *2														RIP RAP (GRADING)			
													(a)		(b)		
Road #	Sta./ M.P	SIZE	GAGE	LENGTH	CULVERT GRADE	INSTALL TYPE *3	SIZE	TYPE	LENGTH	TYPE OF ELBOW *5	SIZE	GAGE	LENGTH	INLET	OUTLET	Stucture inside pipe	
5N-3-33.4	6+98	24"	--	40'	--	--	--	--	--	--	--	--	--	--	--	--	Replace existing culvert. Place 15 CY Crushed Bedding/Backfill. Spread 15 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	12+58	18"	--	36'	--	--	18"	(d) C	10'	1	--	--	--	--	5	--	Replace existing culvert. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	23+20	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
	30+72	18"	--	30'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Place 10 CY Crushed Bedding/Backfill. Spread 10 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
5N-3-33.7	0.109	18"	--	48'	--	--	18"	(d) C	10'	1	--	--	--	--	5	--	Install New Pipe as marked in field. Place 15 CY Crushed Bedding/Backfill. Spread 15 CY Pit-Run Base Rock over Pipe as Surfacing capped with 10 CY Crushed Rock. Install metal inlet marker.
Spur B	1+00	18"	--	40'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Install metal inlet marker.
Spur F	6+44	24"	--	40'	--	--	--	--	--	--	--	--	--	--	--	--	Install New Pipe as marked in field. Install metal inlet marker.
	Gage Chart			<div><div>1. Designed culvert lengths and locations are approximate.</div><div>*2. all culverts have 2 2/3" x 1/2"</div><div>unless otherwise noted.</div><div>**** Corrugated plastic pipe (CPP), Type S (double wall) shall be used for culvert sizes 24" and smaller. All larger culverts shall be aluminized steel. Culverts 20' in length or smaller shall be one piece (no joints). No Culvert piece shall be shorter than 6 foot. Minimization of banding is required.</div></div> <div><div>*4. Downspout or Standpipe Types</div><div>1) Full</div><div>2) Half</div><div>3) Flume</div><div>*** Downspouts and stand pipes (under 36" diameter) shall be CPP, Type C (single wall).</div></div> <div><div>*5. 1) Conventional or Fabricated 2) Turner type 3) Slip joint</div><div>*6. Include special sections, structures, headwalls, footings & other data.</div></div>													
	Gage	Dec. Inches															
		Steel	Alum.														
	10	.138	.135														
	12	.109	.105														
	14	.079	.075														
	16	.064	.060														

U.S. DEPT. OF THE INTERIOR
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SALEM DISTRICT OFFICE - OREGON
CULVERT BAND DETAILS



U.S. DEPT. OF THE INTERIOR
Bureau of Land Management
SALEM DISTRICT OFFICE - OREGON
CULVERT INSTALLATION DETAILS



ROCK VOLUMES TOTALS

ROAD SEGMENT: 4N-3-3.0			MILEAGE: 0.000 to 3.319				
Application	Rock Size and Type	Location	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	400
Road Rock	1-1/2"-0"	MP. 1.453 - 1.788	6"	35	626	---	626
Culverts	Pit-Run	Spot/Base Rock	---	---	---	---	320
Ditchline Armor	Pit-Run	MP. 1.295 - 1.337	---	---	---	---	30
Culverts	1-1/2"-0"	Bedding/Backfill	---	---	---	---	280
Drain Rock	1-1/2"- 3/4"	MP 2.874	---	---	---	---	60
Fill Armor Outlet/Slope Stabilization	RipRap: Class 3	MP 0.199, 0.471, 0.545, 1.295, 1.337, 1.423, 2.455, 2.637, 2.668, & 2.874	---	---	---	---	160

ROAD SEGMENT: 4N-3-7.0			MILEAGE: 0.000 to 0.516				
Application	Rock Size and Type	Location	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	160
Culverts	Pit-Run	Spot/Base Rock	---	---	---	---	95
Culverts	1-1/2"-0"	Bedding/Backfill	---	---	---	---	55

ROAD SEGMENT: 4N-3-10.0			MILEAGE: 0.000 to 0.070				
Application	Rock Size and Type	Location/Number	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	10

ROAD SEGMENT: 4N-3-10.3			MILEAGE: 0.000 to 0.981				
Application	Rock Size and Type	Location/Number	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	350
Culverts	Pit-Run	Spot/Base Rock	---	---	---	---	50
Culverts	1-1/2"-0"	Bedding/Backfill	---	---	---	---	50
Fill Armor Outlet	RipRap: Class 3	MP. 0.385 & 0.656	---	---	---	---	15

ROAD SEGMENT: 5N-3-33.0			MILEAGE: 0.000 to 0.321				
Application	Rock Size and Type	Location	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	50
Culverts	Pit-Run	Spot/Base Rock	---	---	---	---	20
Culverts	1-1/2"-0"	Bedding/Backfill	---	---	---	---	20
Fill Armor Outlet	RipRap: Class 3	MP. 0.135	---	---	---	---	5

ROCK VOLUMES TOTALS

ROAD SEGMENT: 5N-3-33.4			STATION: 0+00 to 33+46				
Application	Rock Size and Type	Location/Number	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	40
Culverts	Pit-Run	Spot/Base Rock	---	---	---	---	65
Culverts	1-1/2"-0"	Bedding/Backfill	---	---	---	---	45
Fill Armor Outlet	RipRap: Class 3	STA. 12+58	---	---	---	---	5

ROAD SEGMENT: 5N-3-33.5			STATION: 0+00 to 4+28				
Application	Rock Size and Type	Location	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	10
Road Rock	Pit-Run	Spot Rock	---	---	---	---	40

ROAD SEGMENT: 5N-3-33.7			MILEAGE: 0.000 to 0.184				
Application	Rock Size and Type	Location/Number	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	10
Culverts	Pit-Run	Spot/Base Rock	---	---	---	---	35
Culverts	1-1/2"-0"	Bedding/Backfill	---	---	---	---	15
Fill Armor Outlet	RipRap: Class 3	MP. 0.109	---	---	---	---	5

ROAD SEGMENT: 5N-3-33.8			MILEAGE: 0.000 to 0.105				
Application	Rock Size and Type	Location	Compacted Depth	Volume per Station/Item (CY)	Approx. Total (CY)	Curve Widening (CY)	Summary Totals
Road Rock	1-1/2"-0"	Spot Rock	---	---	---	---	10

APPENDIX C1

Plan View

33 MYSTERY

TIMBER SALE

SPUR F

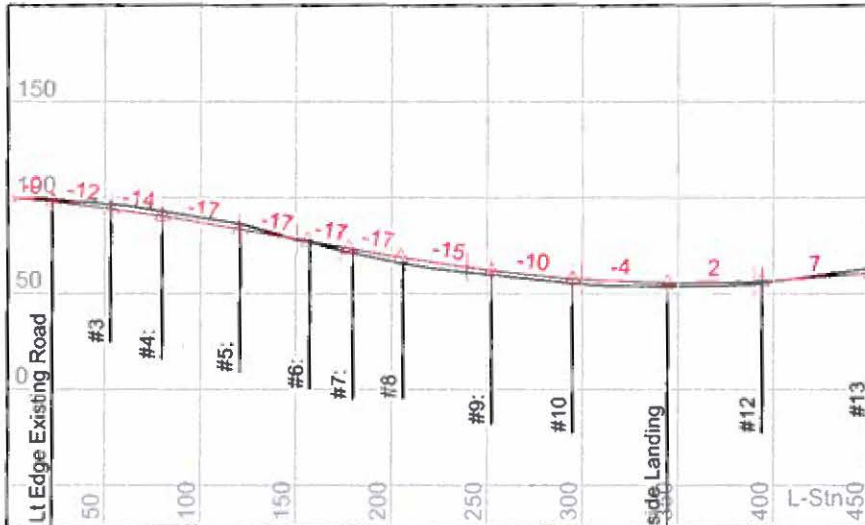
(Stations 0+00 - 8+34)

Scale: 1"= 100'

Legend

	Plan L-line Location
	Plan P-line Location
	Plan Road Edges
	Plan Cross Section Lines
	Profile Finished Grade
	Profile P-line Topography

Profile View



L-Stn ft.	H.Offset ft.	Cut Dp. ft.	Rd. Wd. L ft.	Rd. Wd. R ft.	SG Cut V. Cu. Yd.	SG Fill V. Cu. Yd.	Comment
0.0	0.0	0.0	7.0	7.0			#1: CL of Exis
23.0	0.0	1.0	7.0	7.0	4.6	0.8	#2: Lt Edge Exi
53.0	3.0	2.4	7.0	7.0	37.7	0.0	#3
79.8	5.5	2.5	7.0	7.0	76.3	0.0	#4:
120.7	4.9	3.1	12.0	7.0	112.6	0.0	
156.4	6.2	-0.4	12.0	7.0	46.4	6.4	
177.7	6.2	-2.1	13.0	7.0	4.8	14.7	
204.8	4.6	-3.2	13.0	7.0	1.9	62.6	
252.2	0.0	-2.0	13.5	7.0	0.6	139.1	#9:
295.0	0.0	-2.0	13.9	17.6	4.4	96.9	#10
344.5	-11.3	-1.5	16.0	27.0	11.7	427.9	#11: Roadside L
393.9	0.0	-1.0	14.1	17.6	16.2	372.7	#12
451.3					101.9	27.6	

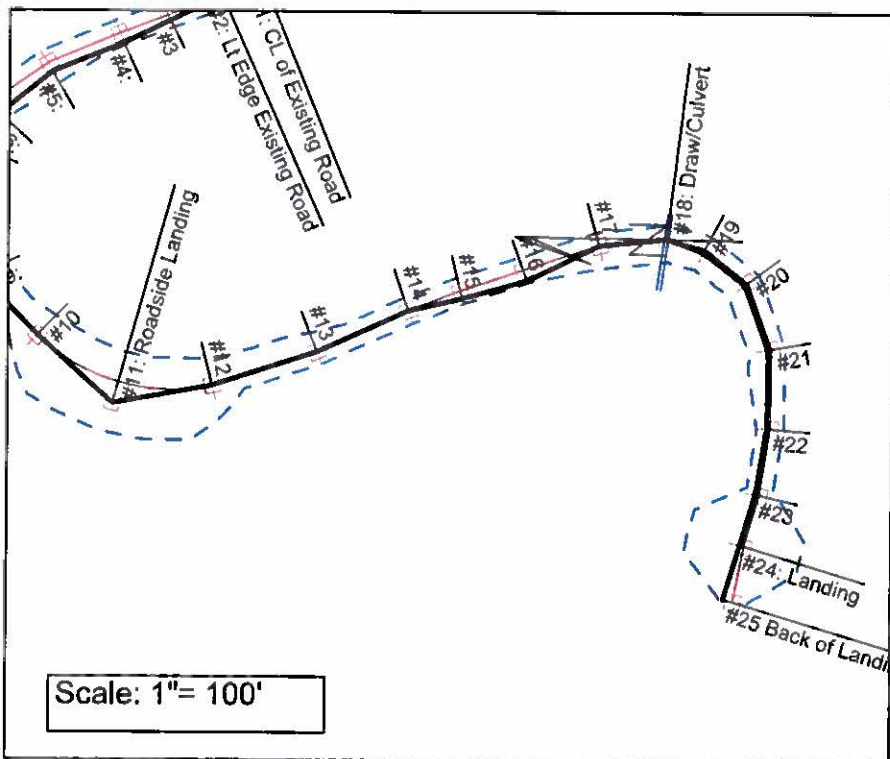
APPENDIX C1

33 MYSTERY

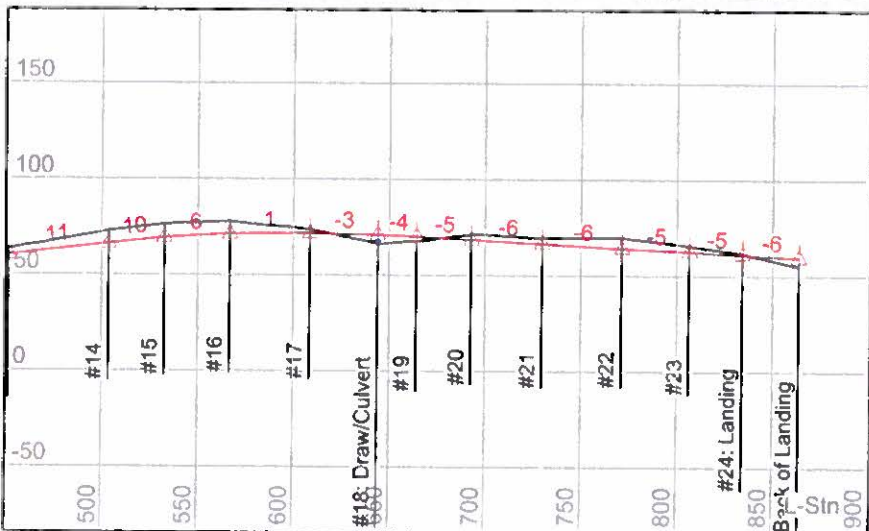
TIMBER SALE

SPUR F

(Stations 0+00 - 8+34)



Plan View



Profile View

Legend	
	Plan L-line Location
	Plan P-line Location
	Plan Road Edges
	Plan Cross Section Lines
	Profile Finished Grade
	Profile P-line Topography

L-Stn ft.	H.Offset ft.	Cut Dp. ft.	Rd. Wd. L ft.	Rd. Wd. R ft.	SG Cut V. Cu. Yd.	SG Fill V. Cu. Yd.	Comment
451.3	0.0	3.0	10.1	7.0			#13
503.5	0.0	6.5	7.0	7.0	247.3	0.0	#14
532.6	-4.0	7.4	7.0	7.0	173.3	0.0	#15
567.0	-6.0	6.7	7.0	7.0	238.3	0.0	#16
608.7	0.0	2.0	7.0	12.0	170.2	0.7	#17
643.9	0.0	-4.5	7.0	12.0	12.5	92.7	#18: Draw/Culvert
664.3	-2.0	-2.2	7.0	12.0	0.0	94.3	#19
693.0	-2.0	2.7	7.0	12.0	20.2	37.2	#20
729.8	-2.0	3.0	7.0	12.0	84.1	0.0	#21
771.3	-2.0	5.4	7.0	7.2	145.5	0.0	#22
806.4	-2.0	3.3	11.0	11.0	119.7	0.0	#23
834.2	-2.0	0.5	30.0	30.0	54.7	44.8	#24: Landing
863.7	-5.0	-4.3	7.0	7.0	1.7	144.4	#25 Back of Land

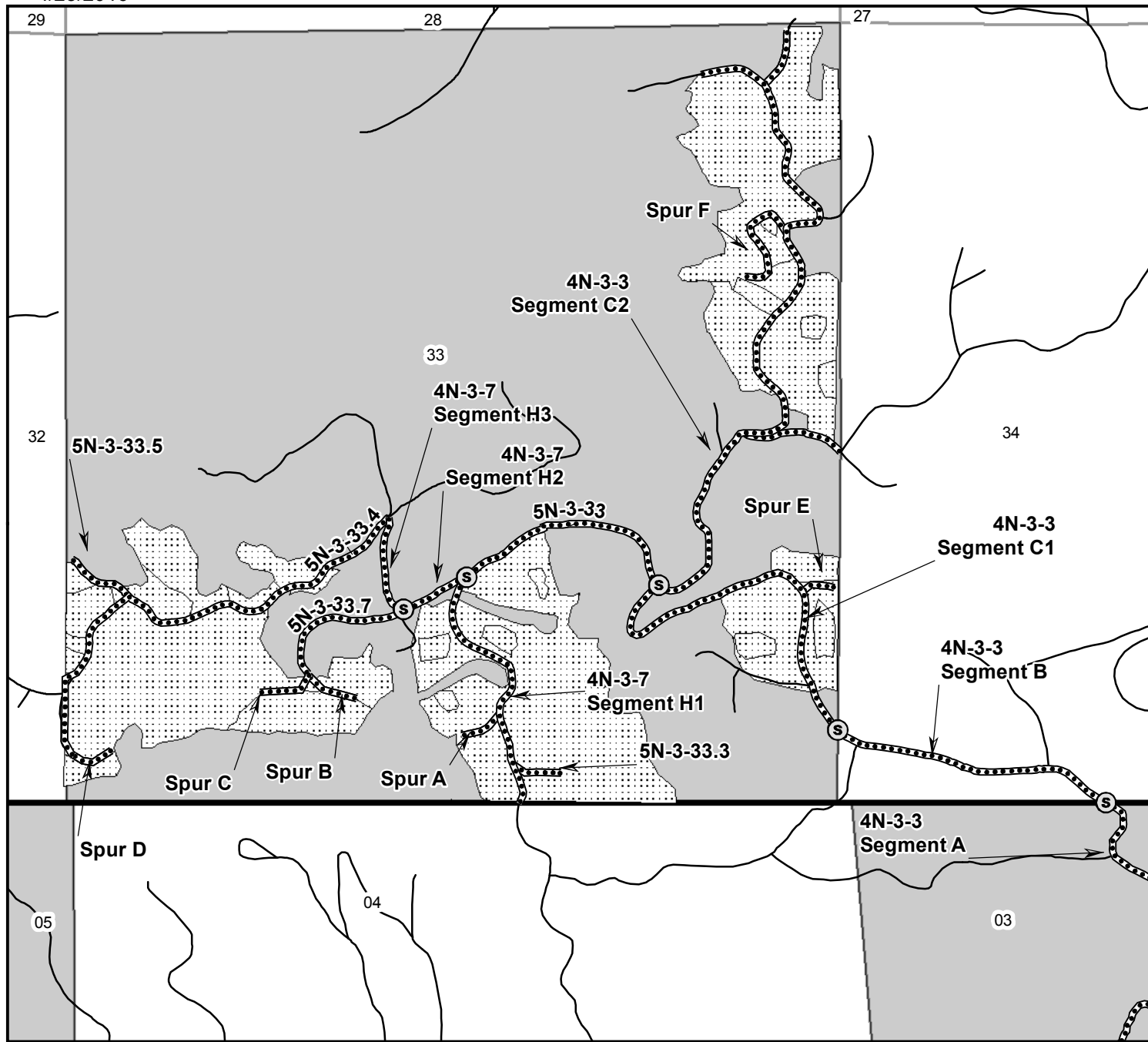


United States Department of the Interior
BUREAU OF LAND MANAGEMENT
MAINTENANCE AND ACCESS MAP

Contract No. ORS06-TS-2016.0102
33 Mystery Timber Sale
Exhibit E
Page 1 of 2

4/25/2016

T. 5N. R. 3W, Section 33 W. M. - SALEM DISTRICT - OREGON



0 500 1,000 2,000 3,000
Feet

1 inch = 1,000 feet

- Road segment breaks
- BLM controlled road- Purchaser maintenance
- Other Roads
- 33 Mystery Project Area
- Bureau of Land Management

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.

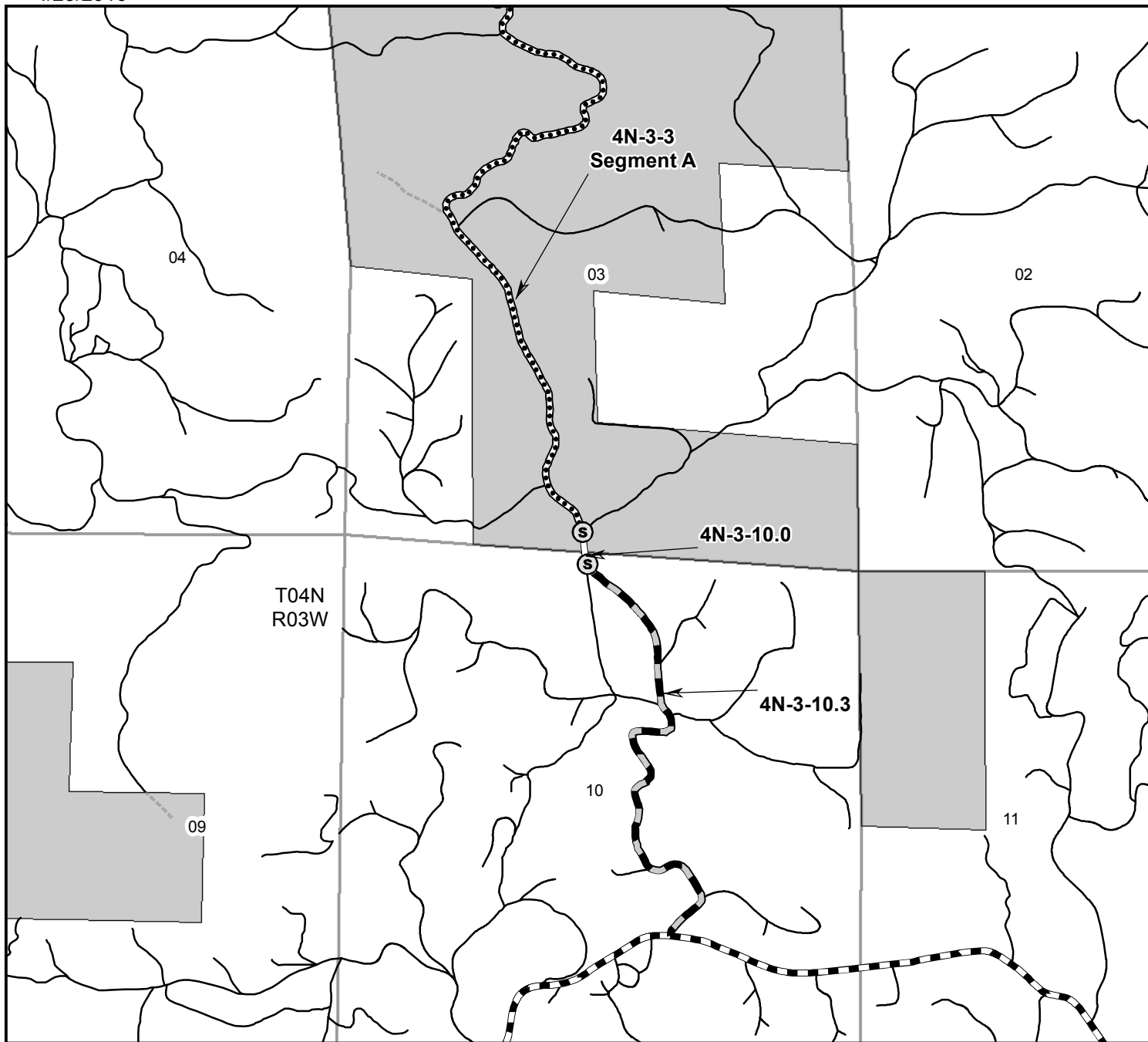


United States Department of the Interior
BUREAU OF LAND MANAGEMENT
MAINTENANCE AND ACCESS MAP

Contract No. ORS06-TS-2016.0102
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4/25/2016

T. 5N. R. 3W, Section 33 W. M. - SALEM DISTRICT - OREGON



0 750 1,500 3,000 4,500 Feet

1 inch = 1,500 feet

- | | |
|--|---------------------------|
| Road segment breaks | Scappoose Vernonia Hwy |
| BLM controlled road- Purchaser maintenance | Other Roads |
| County controlled road- Purchaser maintenance | Decommissioned Road |
| Rayonier controlled road- Rayonier maintenance | Bureau of Land Management |

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.

LOGGING RESIDUE REDUCTION

a. Immediately upon completion of harvest on any individual units, logging slash at all landings shall be machine piled and site preparation that includes slashing, lopping, hand piling, machine piling and covering of piles in the areas shown on Exhibit G will be treated as follows:

SITE PREPARATION

The Authorized Officer shall notify the Purchaser of the date work is to begin. Work shall begin within ten (10) days of such date. A pre-work meeting prior to startup of the site preparation will be required. Slashing, lopping, machine pile construction and covering of machine piles and hand pile construction and covering of hand piles shall be completed as follows:

CONSTRUCTION AND COVERING OF LANDING PILES

1. Within thirty (30) feet (horizontal distance) of the edge of each landing, tops, and other activity generated woody debris shall be piled for burning and covered within fifteen (15) days of the removal of yarding equipment from the landing area.
2. Landing piles should be located as far as possible from green trees to minimize damage.
3. Landing piles should be free of dirt and other non-wood debris, constructed as compactly as possible, with an adequate supply of finer fuels located within and under the covered area of the pile to ensure ignition of the larger fuels.
4. The total surface area of each pile shall be covered at least seventy-five percent (75%) with four (4) mil. (0.004) inch thick black plastic. Placement of the plastic shall start two (2) feet above the ground on the south and west sides of each pile and extend over the top and go three-quarters (3/4) the distance to the ground on the opposite north and east sides. Woody debris shall then be placed on top of the plastic so that both sides and the middle are held in place during strong wind conditions. If wood placed on top of the plastic isn't sufficient to hold the plastic down, the corners of the plastic shall be required to be tied down.
5. No landing debris shall be dozed off the landing and covered with dirt.
6. If landing debris is minimal and determined by the Authorized Officer to not be a major fire hazard, the debris should be removed from the landing area and scattered on yarding corridors or skid trails to a depth not to exceed six (6) inches, as directed by the Authorized Officer.

7. Completion of landing pile construction and covering is subject to the approval of the Authorized Officer.

SLASHING AND LOPPING

8. Slashing shall be completed in all areas designated for hand piling and machine piling. Lopping shall be completed in all areas designated for hand piling. All standing woody vegetation (brush), whips, and designated trees over one (1) foot in height shall be felled (slashed) and lopped into six (6) foot or smaller lengths in areas shown on Exhibit G. Designated trees to be slashed include Douglas-fir, red alder, big leaf maple and grand fir.

9. All logging slash and slashed woody vegetation that is greater than six (6) feet in length and between one (1) inch and six (6) inches in diameter shall be lopped. Larger material which has a portion meeting this specification must be bucked at the six (6) inch diameter.

10. All woody vegetation, whips, and designated trees shall be completely severed from the stump(s). Stump height shall not exceed six (6) inches measured on the uphill side.

11. All Western redcedar and Western hemlock trees shall be reserved and undamaged.

CONSTRUCTION AND COVERING OF MACHINE PILES

12. Machine piles should be located as far as possible from green trees to minimize damage.

13. Machine piles and landing piles should be free of dirt and other non-wood debris, constructed as compactly as possible, with an adequate supply of finer fuels located within and under the covered area of the pile to ensure ignition of the larger fuels.

14. The total surface area of each pile shall be covered at least seventy-five percent (75%) with four (4) mil. (0.004) inch thick black plastic. Placement of the plastic shall start two (2) feet above the ground on the south and west sides of each pile and extend over the top and go three-quarters (3/4) the distance to the ground on the opposite north and east sides. Woody debris shall then be placed on top of the plastic so that both sides and the middle are held in place during strong wind conditions. If wood placed on top of the plastic isn't sufficient to hold the plastic down, the corners of the plastic shall be required to be tied down.

CONSTRUCTION AND COVERING OF HAND PILES

15. All logging slash and slashed woody vegetation greater than two (2) feet long and between one (1) inch and six (6) inches in diameter at the large end should be hand piled and burned. Larger material which has a portion meeting this specification must be bucked at the six (6) inch diameter and that portion piled and burned.

16. All hand piles should have the slashed limbs, logs, and slashed woody vegetation placed parallel in the pile and should be constructed as compactly as possible with an adequate supply of finer fuels located within and under the covered area of the pile to ensure ignition of the larger fuels. Piles shall be no larger than ten (10) feet in diameter, nor taller than six (6) feet unless otherwise directed by the Authorized Officer. Hand piles should be placed so that no pile is closer than fifteen (15) feet from the bole of retained green trees or snags; however when bigleaf maple stumps are located closer than fifteen (15) feet from retained green trees hand piles should be placed on top of the bigleaf maple stumps regardless of spacing. When constructing hand piles on top of bigleaf maple stumps, the piles should be as large as possible to ensure that the stumps and sprouts are completely covered during burning, but not so large as to affect the retained green trees. Hand piles shall not be placed in stream channels or on roads.

17. The total surface area of each pile shall be covered at least seventy-five percent (75%) with four (4) mil. (0.004) inch thick black plastic. The plastic shall be oriented from the south and west sides to north and east sides. Placement of the plastic shall start one (1) foot above the ground at the south and west sides of each pile and extend over the top and go three-quarters (3/4) the distance to the ground on the opposite north and east sides. Woody debris shall then be placed on top of the plastic so that both sides and the middle are held in place during strong wind conditions. If wood placed on top of the plastic isn't sufficient to hold the plastic down, the corners of the plastic shall be required to be tied down.

18. The Purchaser shall provide all tools, materials, equipment, personnel and incidentals necessary to satisfactorily perform and complete the work at the Purchasers expense.

PRESCRIBED BURNING

Notwithstanding the provisions of Section 15 of this contract, the Government shall assume all obligations for the disposal or reduction of the fire hazards caused by slash created by the Purchaser's operations on Government lands, except for logging residue reduction listed above, and burning and fire control assistance as required herein. Upon phone notification by the Authorized Officer of required performance prior to ignition, the Purchaser shall, under supervision of the Authorized Officer or his designated representative, assist in, landing pile burning, and fire control on the day of ignition. In addition, debris which has been buried at

landings and is determined to be the source of holdover fire shall be excavated by the Purchaser with a tractor and/or hydraulic excavator as directed by the Authorized Officer.

The Purchaser shall furnish, at his own expense, the services of personnel and equipment on all units requiring burning as shown below.

1. One (1) work leader (Firefighter Type 1 (FFT1)) to supervise crew and to serve as Purchaser's representative.
2. A five (5) person crew (Firefighter Type 2 (FFT2)) for ignition of hand piles, machine piles, or landing piles
3. Five (5) drip torches with one hundred seventy six (176) gallons of slash fuel (4:1 ratio of diesel to gasoline).
4. Aluma-gel or other incendiary thickener.
5. One (1) chain saw with fuel.
6. One (1) hand tool per above listed personnel on the day of ignition.

All listed personnel shall be physically fit, experienced and fully capable of functioning as required. In addition, all listed personnel shall be qualified according to the National Wildfire Coordinating Group (NWCG) Wildland Fire Qualification System Guide, PMS-310-1 and provide documentation of these qualifications. On the day of ignition all listed personnel shall be fluent in speaking and understanding English, clothing shall consist of long pants and long sleeved shirts, and be of approved aramid fabric (Nomex™ or equivalent), as well as being free of diesel fuel oil. All personnel shall wear lug sole boots with minimum eight (8) inch tall uppers that provide ankle support, approved hardhats and leather gloves. Personnel who do not meet these requirements or do not have proper clothing and personal protective equipment (PPE) will not be allowed to participate.

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.

In the event of a fire escapement, the Purchaser's personnel and equipment shall, under supervision of the Authorized Officer or his designated representative, take action to 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: (1) reimburse the Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for the Western Area and at equipment rates shown in the current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule until the Purchaser is released from such service by the Government or (2) release the Purchaser from additional suppression work and assume responsibility for suppressing the escaped fire.

In case of injury to personnel or damage to equipment furnished 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 the personnel and equipment required herein, the Purchaser shall be responsible for all additional cost 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 a deferral of burning and new conditions necessitate additional site preparation work and/or the use of additional personnel and equipment to accomplish the planned burn, the Purchaser also shall be responsible for such additional costs.

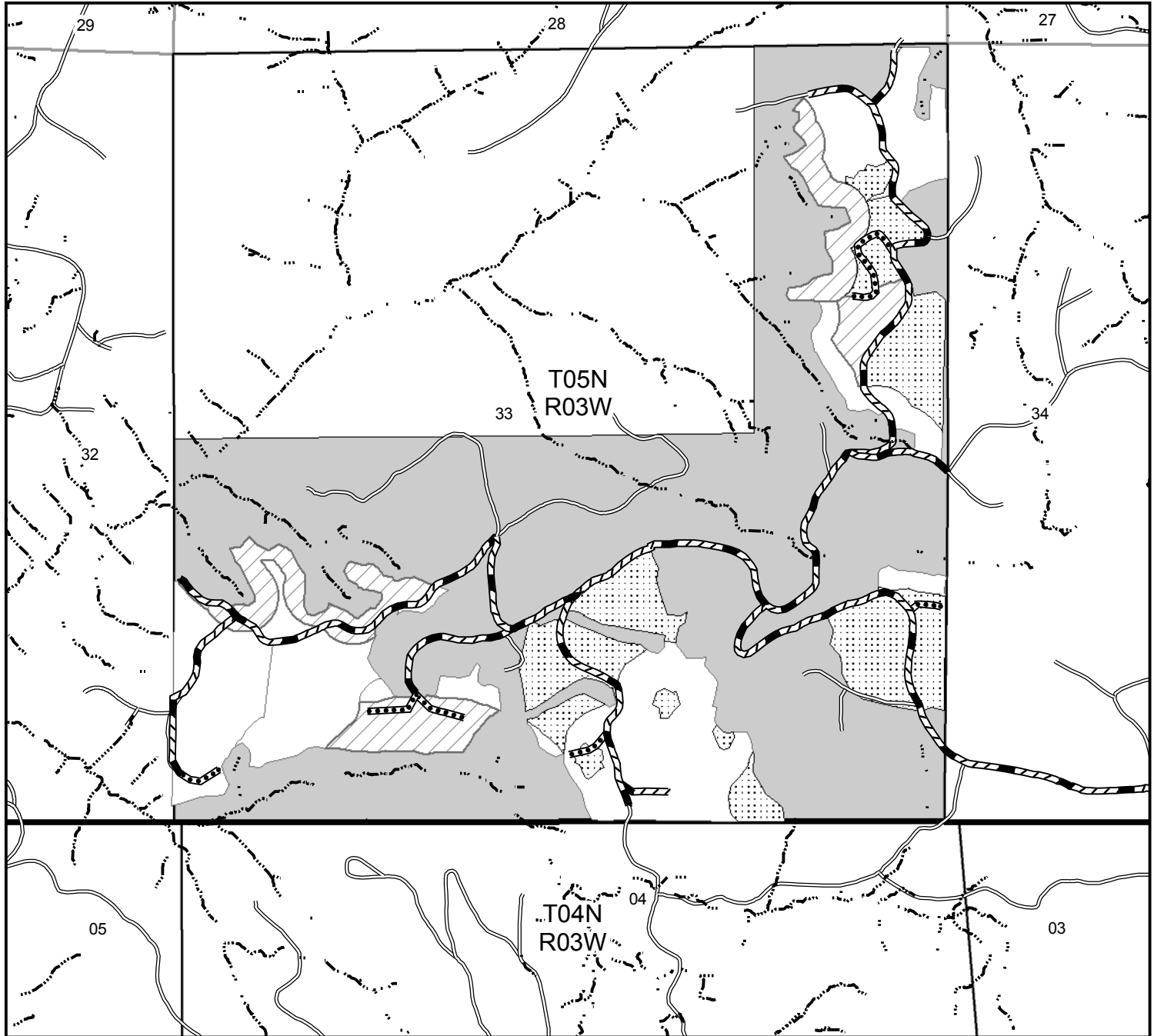


United States Department of the Interior
BUREAU OF LAND MANAGEMENT
FIRE AND FUELS MAP

Contract No. ORS06-TS-2016.0102
33 Mystery Timber Sale
Exhibit G
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5/3/2016

T. 3N. R. 3W, Section 13 W. M. - SALEM DISTRICT - OREGON



0 500 1,000 2,000 3,000 Feet 1 inch = 1,000 feet

- | | |
|------------------------|------------------------------------|
| Road to be constructed | Fuel treatment area-Hand piling |
| Road to be renovated | Fuel treatment area-Machine piling |
| Other roads | 33 Mystery treatment area |
| Streams | Reserve Area |

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. Note: Boundaries of partial cut units and rights-of-ways (ROW) are painted orange and posted. Partial cut acres do not include existing roads or previously harvested patch cuts. Acres shown on Exhibit A for partial cut have been computed using a Trimble Geo 6000 GPS Unit.

Prepared By: csween

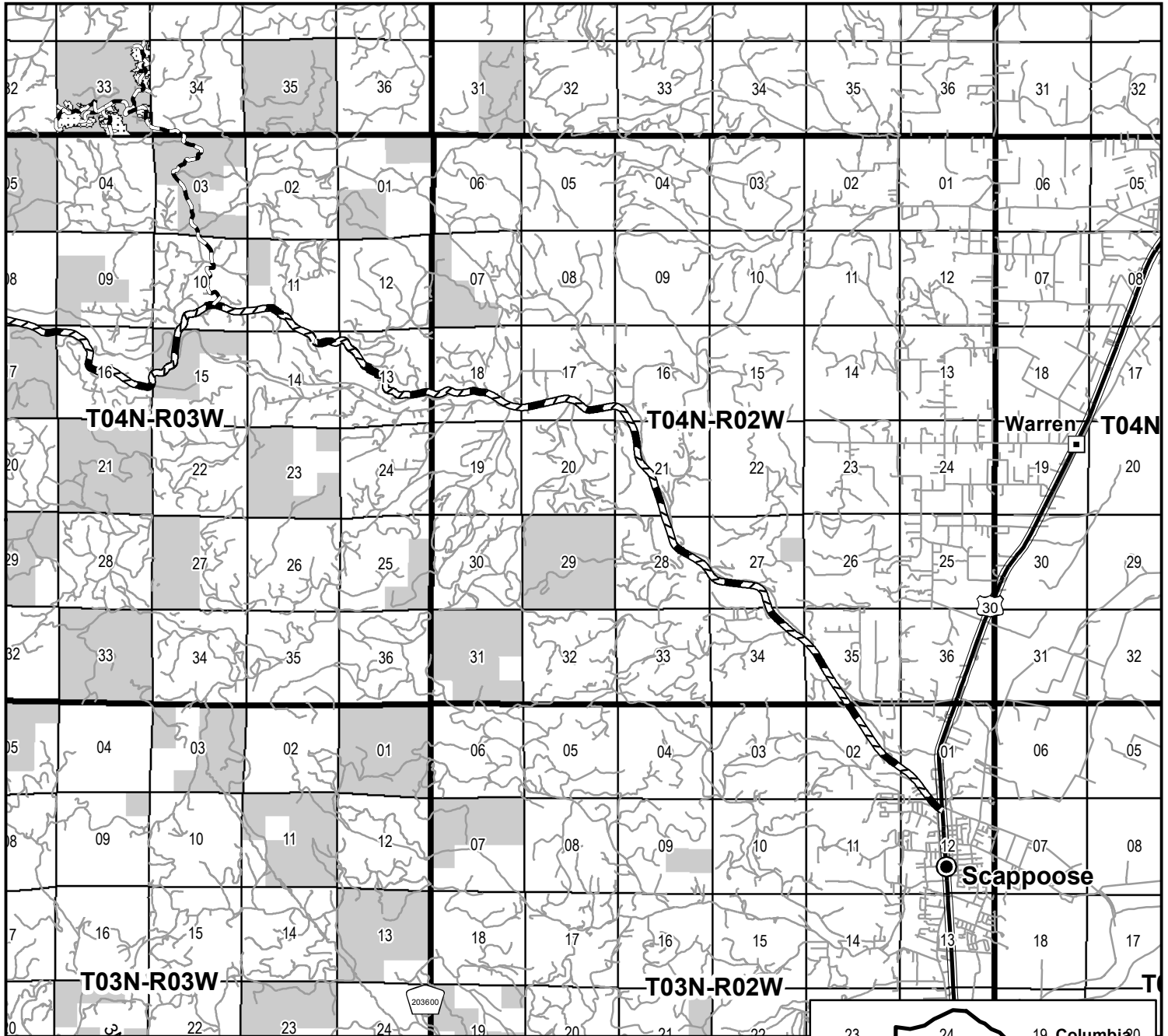


United States Department of the Interior
BUREAU OF LAND MANAGEMENT
PROJECT LOCATION MAP

Contract No. ORS06-TS-2016.0102
33 Mystery Project Location Map
Page 1 of 1

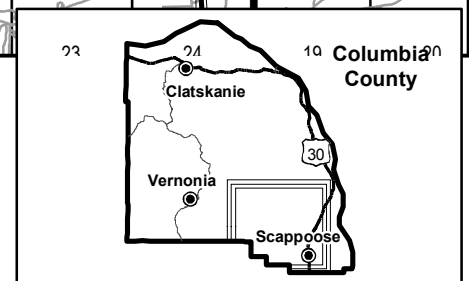
Date: 4/25/2016

T. 5N. R. 3W, Section 33 W. M. - SALEM DISTRICT - OREGON



0 1 2 4 Miles 1 inch = 8,333 feet

- 33 Mystery Project Roads
- Highway
- Scappoose Vernonia Road
- Other Roads
- 33 Mystery Project Area
- BLM Lands



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Prepared By: csween

**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
Timber - Sale - Summary**

Salem
33 Mystery
ORS06-TS-2016.0102

Legal Description

Forest Type	Township	Range	Section	Subdivision
	5N	3W	33	E1/2,NE1/4,WM..Oregon

Cutting Volume (16' MBF)

Unit	DF	RA							Total	Regen	Partial	ROW
1	714	3							717	0	46	0
2	862								862	10	23	0
3	637								637	9	1	0
4	1,287								1,287	13	25	0
RW	252								252	0	0	3
Totals	3,752	3							3,755	32	95	3

Logging Costs per 16' MBF

Stump to Truck	\$ 84.82
Transportation	\$ 47.94
Road Construction	\$ 70.71
Road Amortization	\$ 0.00
Road Maintenance	\$ 11.79

Other Allowances :

Equipment Washing	\$ 0.24
Landing Clean-up	\$ 0.58
Misc	\$ 4.01
Piling	\$ 2.22
Slashing	\$ 1.61
Total Other Allowances :	\$ 8.66

Profit & Risk

Total Profit & Risk	8 %
Basic Profit & Risk	8 % + Additional Risk 0 %
Back Off	0 %

Tract Features

Avg Log	Douglas-fir : 90 bf	All : 92 bf
Recovery	Douglas-fir : 96 %	All : 94 %
Salvage	Douglas-fir : 0 %	All : 0 %
Avg Volume (16' MBF per Acre)		29
Avg Yarding Slope		20 %
Avg Yarding Distance (feet)		350
Avg Age		80
Volume Cable		13 %
Volume Ground		87 %
Volume Aerial		0 %
Road Construction Stations		23.57
Road Improvement Stations		0.00
Road Renovation Stations		334.29
Road Decommission Stations		30.65

Cruise

Cruised By	Mario Salmon
Date	03/15/2016
Type of Cruise	VP 3P
County, State	Columbia, OR

Net Volume

Green (16' MBF)	3,755
Salvage (16' MBF)	0
Douglas-fir Peeler	58
Export Volume	0
Scaling Allowance (\$0.00 per 16' MBF)	\$0.00

Total Logging Costs per 16' MBF

\$ 223.92

Utilization Centers

Center #1 : Banks, Oregon	40 Miles
Center #2	0 Miles
Weighted distance to Utilization Centers	40

Length of Contract

Cutting and Removal Time	36 Months
Personal Property Removal Time	3 Months

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Salem
33 Mystery
ORS06-TS-2016.0102

Stumpage Summary

Stumpage Computation (16' MBF)

Species	Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Cost	(+) Marginal Log Value	(-) Back Off	Appraised Price	Appraised Value
DF	8,942	3,752	\$ 560.81	\$ 44.86	\$ 223.92			\$ 292.00	\$ 1,095,584.00
RA	1,083	3	\$ 366.69	\$ 29.33	\$ 223.92			\$ 113.40	\$ 340.20
Totals	10,025	3,755							\$ 1,095,924.20

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
Douglas-fir			2.0	68.0	27.0	3.0
Red Alder					100.0	

Marginal Log Volume

Species	Grade #7	Grade #8
Douglas-fir		
Red Alder		

Appraised By :

Date :

Area Approval By :

Date :

District Approval By :

Date :

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

Salem
33 Mystery
ORS06-TS-2016.0102

Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
Douglas-fir	8,942	3,752	3,093	
Red Alder	1,083	3	2	
Total	10,025	3,755	3,095	

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
4,000	10,025	399	16.8	4,000	43,406	92

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
43,406	2,543	45,949	4.6	3,755	4,000	94 %

Douglas-fir

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
3,899	8,942	436	17.1	3,899	43,393	90

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
43,393	0	43,393	4.9	3,752	3,899	96 %

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
1		46		46
2	10	23		33
3	9	1		10
4	13	25		38
RW			3	3
Totals :	32	95	3	130