

**LUMP SUM SALE  
PROSPECTUS**

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
LAKEVIEW DISTRICT  
KLAMATH FALLS FIELD OFFICE

KLAMATH FALLS FIELD OFFICE  
KLAMATH MASTER UNIT

Klamath Falls Sale No. ORL04-TS25-01  
Sale Date: **June 25, 2025 (10:00am)**

**Bryant Timber Sale,**  
Klamath County, PD

Bid Deposit Required: **\$11,100.00**

All timber designated for cutting in E ½ NE ¼, SW ¼ NE ¼, E ½ NW ¼, E ½ SW ¼, SE ¼ Sec. 12; NE ¼ NE ¼, E ½ NW ¼ Sec. 13; NE ¼, N ½ SE ¼ Sec. 24; E ½ NE ¼, NE ¼ SE ¼ Sec. 25 T.40S., R.12E., SW ¼ NW ¼, W ½ SW ¼, SE ¼ SW ¼, SW ¼ SE ¼, Sec. 7; SW ¼ NW ¼, NW ¼ SW ¼, Sec. 17; W ½ NE ¼, SE ¼ NE ¼, E ½ NW ¼ Sec. 18; W ½ NW ¼, SE ¼ NW ¼, N ½ SW ¼, SW ¼ SW ¼ Sec. 19; NW ¼ SW ¼ Sec. 30 T.40S., R.13E., Willamette Meridian

<b>Approx # of trees</b>	<b>Species</b>	<b>Est Volume MBF 16'</b>	<b>Appraised \$/MBF</b>	<b>Appraised Price</b>
18,226	Ponderosa Pine	1,757	\$41.70	\$73,266.90
3,265	White Fir	345	\$107.30	\$37,018.50
450	Incense-cedar	28	\$22.80 **	\$ 638.40
<b>21,941</b>		<b>2,130</b>		<b>\$110,923.80</b>

\*Stumpage values have been determined by analytical and market value appraisal methods. Additional information concerning the appraised price is available at the Klamath Falls Field Office (KFFO).

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

A revised Special Provisions 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 to prevent incidental take of northern spotted owls in accordance with management direction in the Record of Decision (ROD) and Resource Management Plan (RMP), or (2) Comply with a court order, or: (3) Protect species which were identified for protection in accordance with management direction established in the ROD and RMP.

**CRUISE INFORMATION - SAWLOG INFORMATION** – This sale will be offered as a **lump sum sale**. The timber cruise was completed April of 2020. Timber volumes were based upon the PCMTRE (Variable Plot) method with a 20 BAF and one plot for every 2.27 acres. Plots were monumented with a pink pin flag at plot center and pink flagging hung near each plot. One strata was used in this cruise; volume should be considered as the total sale volume, and not by the unit.

With respect to merchantable trees of all conifer species: the average tree is 14.4 inches DBHOB; the average gross merchantable log contains 50 bd. ft.; the total gross volume is approximately 3,029 MBF.; and 82% recovery is expected. Combined sampling error for the cruise was estimated at 12.60%.

Note: This timber sale has been cruised, appraised, and advertised based upon Scribner Board Foot Volumes (16 Foot Log). The minimum bid figures shown by species are dollars per thousand board feet (MBF). The minimum bid increment will be \$.50 per MBF.

**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 is prohibited from use as a substitute for exported private timber.

**CUTTING AREA & HARVEST PRESCRIPTION** – There are eleven (11) units containing approximately 490 acres of density management treatment. All units within the Bryant Timber Sale are “leave-tree marked”, and only live, unmarked trees > 8” DBH shall be cut and removed. Leave-trees are marked with orange paint.

**CUTTING TIME** - Contract duration is thirty-six (36) months for cutting and removal of timber.

**ACCESS** - Access to the sale area is available via existing BLM and Green Diamond Resource Company roads.

**ROAD MAINTENANCE** - The Purchaser is required to maintain approximately seventeen (17) miles of existing BLM roads. In addition, the Purchaser is required to pay a rock wear fee of \$4,010.19 for the use of these roads that are rocked.

**SOIL DAMAGE PREVENTION** - Pursuant to Section 26 of Form 5450-4, Timber Sale Contract, the Purchaser must not operate or cause to have operated on the contract area, any ground-based logging equipment when soil moisture content exceeds 20% by weight as determined by a moisture meter. This requirement does not apply if snow logging conditions exist as described in the contract.

**EQUIPMENT REQUIREMENTS** -

1. Mechanized harvesting equipment capable of cutting up to a 20-inch DBH tree and reaching a minimum of twenty (20) feet laterally.
2. At least one ground-based yarding tractor must be equipped with an integral arch and winch system capable of lining logs at least one hundred feet (100').

**SLASH DISPOSAL**-

1. Whole tree yarding or yarding with the tops attached is required on all trees designated for cutting within all harvest units on Exhibit A.
2. Unmerchantable timber (slash, limbs, tops, cull logs, pieces of logs, etc.) may be removed as biomass or other products. If unmerchantable timber is removed as biomass or other nontraditional products, a second contract will be used, and the price of the material will be negotiated.

## **OTHER-**

1. Extension of time beyond the normal 30 days may be granted for completing bonding and contract signing requirements upon written request and justification from the Purchaser.
2. All operations are seasonally restricted from October 15<sup>th</sup> of one calendar year to June 1<sup>st</sup> of the following calendar year, unless waived by the Authorized Officer or winter logging conditions exist.
3. Cut stumps of all species fourteen (14) inches in diameter and larger must be treated with a fungicide. The fungicide must contain a cement dye to help monitor application compliance.
4. All logging equipment must be washed prior to operating on BLM lands to prevent the spread of noxious weeds.
5. All landing piles require a machine constructed fire line around the entire pile down to mineral soil.
6. This contract includes an additional special provision to ensure the Purchaser understands he/she is required to conduct all operations in compliance with Contract Section 12 (Purchaser's Contractual Responsibilities for Liability) and Contract Section 29 (Safety and Health) and the Special Provisions included in Section 42 of this Contract.
7. The purchaser must select, mark, and create two hundred nineteen (219) snags in accordance with Exhibit E of the contract.
8. No harvest activity will be conducted within 660' of any eagle nest as shown on the Exhibit A between January 1st and August 31st both days inclusive. Hauling is allowed through the Eagle Restriction area between January 1st and August 31st with the condition that no Jake brakes are to be used in these areas, vehicles must remain moving, and occupants must not leave their vehicles while in these areas. If certain conditions are met such as successful fledging as determined by the Contracting Officer prior to August 31st harvest activity may be allowed.

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

## **NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA –**

The sale is located approximately twenty (20) miles east of Klamath Falls. From Klamath Falls, take Highway 140 east for approximately six (6) miles to N. Poe Valley Road. Turn right on N. Poe Valley Road and travel East for approximately nine (9) miles. Turn right toward Harpold Road then in 500ft turn left on Harpold Road. Travel on Harpold Road for approximately three (3) miles. Turn right onto W Langell Valley Road. Stay on W Langell Valley Road for approximately two (2) miles then turn right onto Bryant Mountain Road (39-11-26.0). Follow Bryant Mountain Road for approximately six (6) miles to the project area.

**ENVIRONMENTAL ASSESSMENT** - An environmental assessment was prepared for this sale, and a Finding of No Significant Impact has been documented. This document is available for inspection as background information for this sale at the Klamath Falls Field Office.

Notice of Decision for sale of timber dated July 1<sup>st</sup>, 2020.

## Section 43

### (A) Timber Reserved from Cutting

The following timber on the contract area is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of the Government:

- (1) **AR-1** All timber on the reserve areas as shown on Exhibit A and all blazed, orange painted, or orange painted and/or posted trees which are on or mark the boundaries of the reserve areas, and all orange painted trees within cutting units as shown on Exhibit A, and all trees within the scattered reserve area “skips” designated with green posters and orange paint on the exterior boundary.
- (2) **IR-6** All western juniper as described in exhibit S in all units shown on Exhibit A.
- (3) **IR-13** All snags, or downed trees of all decay classes in all cutting units shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer. All snags felled and all downed trees shall be retained on site unless approved by the Authorized Officer.

## Section 44

### (A) Logging

- (1) **L-1** Before beginning operations on the contract area for the first time or after a shutdown of seven (7) or more days, the Purchaser shall notify the Authorized Officer in writing of the date they plan to begin operations. The Purchaser shall also notify the Authorized Officer in writing if they intend to cease operations for any period of seven (7) or more days.
- (2) **L-2** Prior to the commencement of operations the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract, which shall include measures needed to ensure protection of the environment and watershed such as having spill kits on site during operations. A pre-work conference between the Purchaser’s authorized representative and the Authorized Officer must be held at a location designated by the Authorized Officer before the logging plan will be approved. All logging shall be done in accordance with the plan.
- (3) **L-4** All western juniper trees three (3) inches or larger D.B.H.O.B., which are not reserved as described in Exhibit S shall be felled and yarded in all units shown on Exhibit A.
- (3) **L-5** All green trees (7.0) inches or larger D.B.H.O.B. which are not reserved shall be felled and yarded in all cutting units shown on Exhibit A.
- (4) **L-8** In all harvest units as shown on Exhibit A, all trees designated for cutting shall be felled and whole tree yarded except when excessive stand damage occurs as

determined by the Authorized Officer. If excessive stand damage occurs, all logs shall be completely limbed, except the top log, and bucked into lengths determined by the Authorized Officer prior to being yarded.

- (5) **L-10** In all harvest units shown on Exhibit A, all trees designated for cutting which are within one hundred (100) feet of any fence, boundary, or powerline shall be directionally felled away from the fence or powerline in accordance with Section 14 of the Contract. Use of jacks, wedges, and/or tree pulling with cables or lines shall be employed when necessary to meet this requirement.

Prior to operating near powerlines, purchaser will coordinate with Authorized Officer to contact PP&L and Bonneville Power Administration.

Any fences that need to be dropped or modified to facilitate logging operations will be approved by the Authorized Officer. All damaged or modified fences will be repaired or replaced immediately following operations.

- (6) **L-12** In the entire contract area shown on Exhibit A, yarding and felling shall be done in accordance with the yarding requirements or limitations for the designated area as follows.

<u>Designated Area</u>	<u>Yarding Requirements or Limitations</u>
Entire Contract Area	Approval of landing locations and sizes shall be obtained from the Authorized Officer prior to landing construction or use.
Entire Contract Area	Landing size shall not exceed one-quarter (¼) acre unless otherwise approved by the Authorized Officer.
Entire Contract Area	No tractor or wheel-type equipment shall be operated in or through any stream shown on Exhibit A except under special condition approved in the logging plan.
Entire Contract Area	All log loading shall be done with boom type loaders.
Entire Contract Area	Winter yarding is allowed between October 15 and May 15, when one of the following conditions is present: (a) Snow depth in the cutting unit averages twenty (20) inches or more. (b) The ground is frozen to a depth of six (6) inches or more
Entire Contract Area	The location of the skid roads shall be clearly designated on the ground, spaced at approximately 150-foot intervals, and approved by the Authorized Officer, prior to felling of timber to be yarded over that skid road. Existing skid roads will be utilized where possible.
Entire Contract Area	Yarding and Mechanical Harvesting shall be confined to periods when soil moisture is less than twenty (20) percent at

a six (6) inch depth as measured by the Authorized Officer, or when wintertime yarding conditions are met. Yarding and Mechanical Harvesting will be suspended if soil damage is occurring, as determined by the Authorized Officer in accordance with Section 26.

Entire Contract Area	Yarding equipment shall be operated only on skid roads approved by the Authorized Officer.
Entire Contract Area	At least one yarding tractor or wheel-type equipment shall be equipped with an integral arch and winch system capable of lining logs at least one hundred (100) feet.
Entire Contract Area	All trees designated for cutting that cannot be felled with a mechanical harvester shall be hand felled to the lead of the designated skid trails.
Entire Contract Area	All trees twenty (20) inches DBH and smaller designated for cutting shall be felled and pre-bunched within forty (40) feet of and to the lead of designated skid trails with a mechanical harvester. The mechanical harvester must be capable of cutting up to a twenty (20) inch DBH tree and have an arm capable of reaching at least twenty (20) feet laterally.

- (8) **L-19** No harvest activity shall be conducted on all cutting units and all roads between October 15 of one calendar year and May 15 of the following calendar year both days inclusive. If conditions are met as described in Section 44 [A][6] as determined by the Contracting Officer harvest activity will be allowed.

No harvest activity shall be conducted within 660' of any eagle roost as shown on the Exhibit A between January 1st and August 31st both days inclusive. If certain conditions are met such as successful fledging as determined by the Contracting Officer prior to August 31<sup>st</sup> harvest activity may be allowed. For the eagle restriction area, there will be no noise above ambient level within 660 feet of the roost from December 1st – April 31st. Hauling may be allowed through the Eagle Restriction area with the condition that no jake brakes are to be used in these areas, vehicles will remain moving, and occupants will not leave their vehicles while in these areas.

- (9) **L-24** Before cutting and removing any trees necessary to facilitate logging in all cutting units shown on Exhibit A, the Purchaser shall identify the location of the skid roads, landings, and danger trees on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the Logging Plan. Said Purchaser identification of trees to be cut and removed does not constitute authority to proceed with cutting and removal. In addition, before proceeding with cutting the following conditions must be met:

(a) All skid roads 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 Contracting Officer, the width of each skid road shall be limited to 14 feet.

(b) The Purchaser may immediately cut and remove additional timber to clear skid roads, landings, and danger trees when the trees have been marked with pink paint above and below stump height by the Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. The volume of the timber to be sold will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures. No timber may be cut or removed under terms of this provision unless sufficient installment payments have been made in accordance with Section 3. (a). of the contract or sufficient bonding has been provided in accordance with Section 3. (e). of the contract.

(c) The Purchaser agrees that sale of this additional timber shall be accomplished by a unilateral modification of the contract executed by the Contracting Officer and that such timber shall be sold at the unit prices shown in Exhibit B of this contract unless: the value of the timber must be reappraised subject to the terms for contract extension set forth in Section 9 of the contract; or, the Authorized Officer determines that the species of trees are not listed in Exhibit B of this contract or any tree that exceeds forty (40) inches diameter at breast height shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Section 8 of the contract.

(d) This authorization for the Purchaser to cut and remove additional timber prior to the execution of a modification may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser has cut and removed any tree not previously marked and approved for cutting by the Authorized Officer, which under Section 10 of the contract constitutes a violation of the contract and under Section 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.

(e) If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one (1) working day prior to the need for cutting and removing any additional timber, and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown in Exhibit B of the contract or in accordance with Section 8 or Section 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all contract work for the period of time deemed necessary and appropriate for the Government to safely measure and mark additional timber.

- (10) **L-32** Distributed within cutting units as shown on Exhibit A, the Purchaser shall, select, mark, and create two hundred nineteen (219) snags in accordance with Exhibit E which is attached hereto and made part hereof.
- (11) **L-33** 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 Purchase Price specified in Section 2 of the timber sale contract, as amended, to compensate for the changed conditions. Unless otherwise specified in writing, when operations are in progress adjacent to or on roads and/or trails in the harvest unit area, Purchaser shall furnish, install, and maintain all temporary traffic controls that provide the road or trail user with adequate warning of and protection from hazardous or potentially hazardous conditions associated with its operations. Purchaser shall prepare a Traffic Control Plan, which the Purchaser has determined is compliant with state and local OSHA and Transportation standards no later than the pre-work meeting and prior to commencing operations. Traffic control devices shall be appropriate to current operating and/or weather conditions and shall be covered or removed when not needed., Flagmen and devices shall be as specified in state OSHA and Transportation standards for logging roads or the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) published by the U.S. Department of Transportation - Federal Highway Administration. Included in the Traffic Control Plan, Purchaser shall note traffic control device locations on a Purchaser produced copy of the contract Exhibit A Map.

**(B) Road Use and Maintenance**

- (1) **R-1** The Purchaser shall renovate all roads and other structures in strict accordance with the plans and specifications shown on Exhibit C, which is attached hereto and made a part hereof.
- (2) **R-1a** Any required construction or renovation of structures and roads shall be complete and accepted, in accordance with Section 18, prior to removal of any timber, except right-of-way timber, over that road.
- (3) **R-2** The Purchaser is authorized to use the roads listed below and shown on Exhibit D which are under the jurisdiction of the Bureau of Land Management for the removal of Government timber sold under the terms of this contract, provided that the Purchaser pay the required maintenance and rockwear obligation described in Section 42 (C) (5). Any road listed on Exhibit D and requiring renovation in Exhibit C of this contract shall be maintained by the Purchaser until receiving written acceptance from the Contracting Officer. The Purchaser shall pay current Bureau of Land Management maintenance and rockwear fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length Miles Used	Road Control / Maintenance Responsibility	Road Surface Type
39-11E-26.0	9.09	BLM/ Purchaser	NAT/PRR

40-12E-13.0	3.03	BLM/ Purchaser	NAT
40-12E-13.1	1.23	BLM/ Purchaser	NAT
40-13E-7.0	0.66	BLM/ Purchaser	NAT
SPUR 13.2	0.85	BLM/ Purchaser	NAT
SPUR 19.1	0.26	BLM/ Purchaser	NAT
SPUR 19.2	0.82	BLM/ Purchaser	NAT
SPUR 19.3	0.82	BLM/ Purchaser	NAT
SPUR 24.0	0.57	BLM/ Purchaser	NAT

- (4) **R-2a** With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users on roads included in Section 44 (B) (3) of this contract; provided, that such cooperative arrangement shall not relieve the Purchaser of their liability for the maintenance and repair of such roads resulting from wear or damage, in accordance with this contract. The Purchaser shall furnish the Authorized Officer a copy of any cooperative maintenance agreements entered into with other users on these roads.
- (5) **R-2b** The Purchaser shall pay the Government a road maintenance and or rock wear fee obligation in the amount of **four thousand ten and 19/100 (\$4,010.19)** for the transportation of timber included in the contract area over said road or roads. The above road maintenance amount is for the use of seventeen (17) miles of road or less. If the total road maintenance and rockwear does not exceed five hundred dollars and no/100 (\$500.00), the purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance and rockwear fee exceeds five hundred dollars and no/100 (\$500.00), the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.
- (6) **R-2f** The Purchaser shall perform any required road repair and maintenance work on roads used by him under the terms of Exhibit D, "Road Maintenance Specifications", of this contract, which is attached hereto and made a part hereof except for the BST roads which will be maintained by the BLM.
- (7) **R-4** The Purchaser shall be required to secure written approval to use vehicles or haul forest products and equipment over Government owned or controlled roads when such vehicles or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit or if vehicles meet allowable non-permitted State vehicle weights, but the haul route crosses a structure or segment of road that is posted for reduced weights. The Purchaser agrees to abide by any special requirements included in said written approval.

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

Details shall include:

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

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

- (8) **R-5** Tracked type equipment shall not be allowed to cross over concrete bridge decks, other concrete surfaced structures or asphalt surfaced roads without the proper protection of that surface. Prior approval shall be obtained from the Authorized Officer when crossing with protective devices. The Purchaser shall be responsible for repair of any damage to roads or structures caused by the use overweight or over-dimension vehicles or equipment: (1) without written approval; (2) in violation of the conditions of a written approval; or, (3) in a negligent manner. The amount of actual damage shall be determined by the Authorized Officer following a technical inspection and evaluation.

**(C) Environmental Protection**

- (1) **E-1** In addition to the requirements set forth in Section 26 of this contract, the Purchaser shall conduct all operations in a manner that minimizes damage to conifer reproduction and all other reserved trees regardless of size or merchantability.
- (2) **E-1** In addition to the requirements set forth in Section 26 of this contract, the Purchaser shall remove slash and debris from roadways and landings concurrently with yarding as directed by the Authorized Officer.
- (3) **E-1** In addition to the requirements set forth in Section 26 of this contract, the Purchaser shall treat with a fungicide, as prescribed in this section, the stumps of all trees cut in the contract area having a diameter of fourteen (14) inches or larger in the following manner:
- (a) Each stump shall be treated immediately after cutting.
  - (b) Treatment shall consist of application of fungicide to the sawn face of the stump.
  - (c) The fungicide used shall be provided by the Purchaser and approved by the Authorized Officer. The fungicide presently approved for use is Cellu-Treat made by the NISUS Corporation. The fungicide will contain a cement dye to help monitor application compliance.

- (d) Dumping or cleaning of containers in streams or other bodies of water will not be permitted. Containers must be removed from the area and disposed of in conformance with Federal and Oregon State statutes.
- (e) Fungicide treatment shall be performed at the direction of the Authorized Officer and to their satisfaction.
- (4) **E-2** The water bars to be constructed as required by Sec. 26(c) shall be constructed in accordance with the specifications shown on Exhibit C which is attached hereto and made a part hereof.
- (5) **E-7** In order to prevent the spread of noxious weeds, the Purchaser shall pressure wash all equipment prior to entry onto BLM lands as directed by the Authorized Officer. Cleaning shall be defined as removal of all dirt, grease, plant parts and material that may carry noxious weed seeds.

**(D) Fire Prevention and Control**

- (1) **F-1a** Fire Prevention and Control Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions.
  - (a) At least three (3) days prior to the operation of power driven equipment in construction of 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 State of Oregon, Department of Forestry.
  - (b) Provide and maintain on the contract area in good working order, and immediately available, the following equipment for use during closed fire season or periods of fire danger: see Exhibit F-1
  - (c) The Purchaser shall restrict operations, and provide the services of a fire watchman, during periods of fire danger as specified in Exhibit F-2 which is attached hereto and made a part hereof.

**(E) Slash Disposal and Site Preparation**

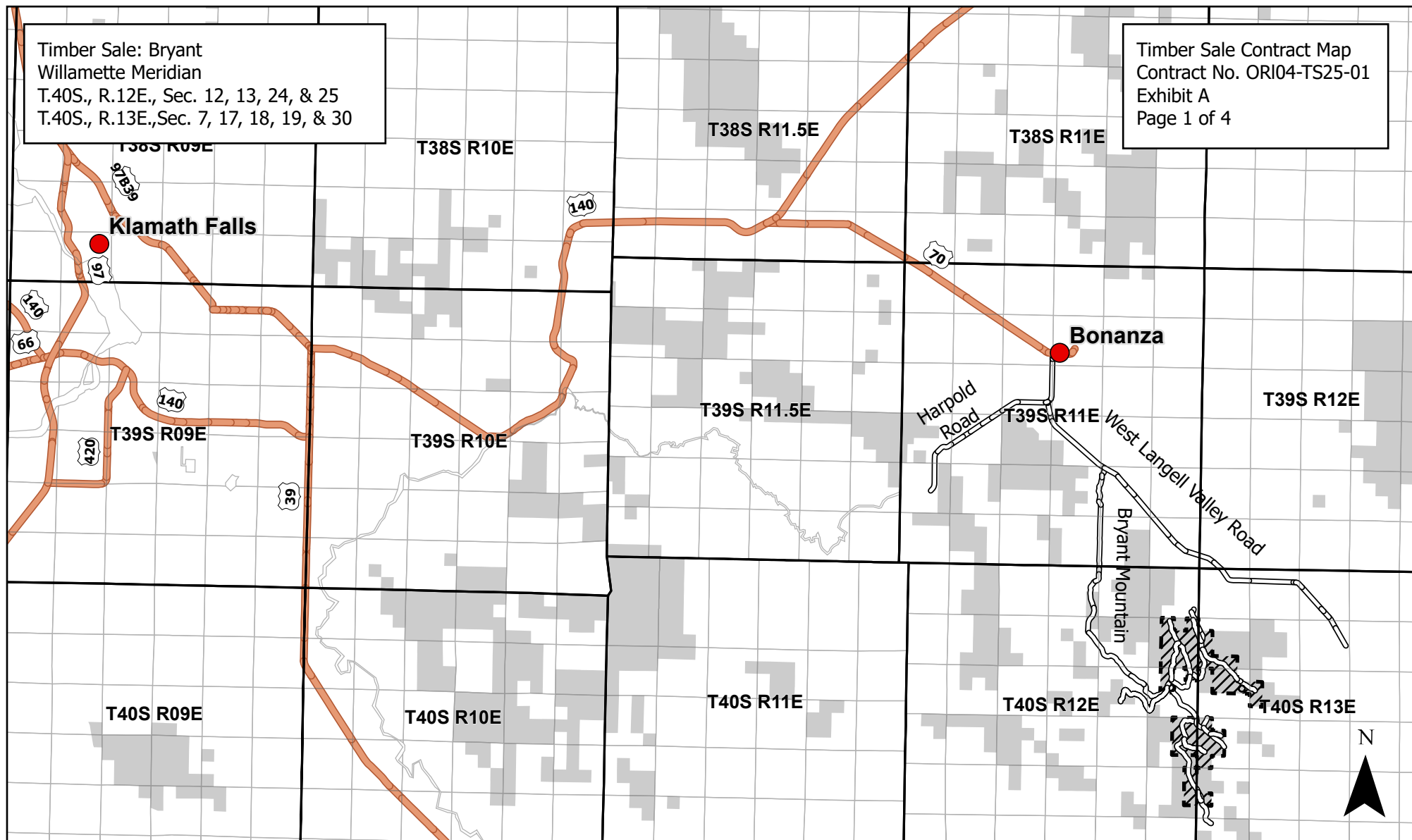
- (1) **SD-1** Fire Hazard Reduction. In addition to the requirements of Sec. 15 of this contract, and notwithstanding the Purchaser's satisfactory compliance with State laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the State's willingness to release the Purchaser from liability for such hazard, the Purchaser shall remain responsible to the Government for performance of the following hazard reduction measure(s) required by this contract:
  - (a) Definitions - Slash, as defined for this section, shall mean all woody material (brush, limbs, tops, logs, chunks, and severed trees) not removed from the contract area during the primary removal operation. This includes old slash existing prior to timber sale entry. Landing, as defined for this section, shall mean any location where woody material was loaded on trucks and also any

other location that became a destination for yarded woody material.








- (b) Landing Piling Pile all slash located within one hundred (100) feet of landings and designated locations for placement of gross yarded material. Slash shall be piled with a grapple/shovel loader. Finished piles shall be tight and free of earth. No portion of any pile will be located under the crown of any live or other reserve trees. A four (4) foot wide, fuel free area shall be cleared around each pile. Unmerchantable logs at landings sixteen (16) inches in diameter and larger at the small end shall be used to block skid trails.
- (c) Upon completion of landing piling, the Purchaser shall prepare the landing piles for burning by securely covering each pile with polyethylene plastic film a minimum of 6 millimeters thick and covering a minimum of a 10 feet x 20 feet area. Pieces of burnable material shall be placed on top of the plastic or tie the corners with a piece of twine to secure it from moving and to prevent it from blowing off during strong wind episodes. The Purchaser is required to furnish the covering materials. The timing of this covering work shall be in accordance with instructions from the Authorized Officer. If the structure of the landing piles will not permit adequate consumption of piled debris by burning, the Purchaser shall re-pile them at the direction of the Authorized Officer.

### **Chipping Of Slash Piles**

- (a) The purchaser may remove and utilize non-sawlog forest products by submitting a written or verbal request to the Government.
- (b) The Government may execute a separate negotiated forest product/vegetative sale permit under 43 CFR 5400. Payment under the permit must be at a price equal to or greater than the appraised value of the forest product.
  - (1) The purchaser must make any appropriate payment specified in the vegetative sale contract before removal may be authorized.
  - (2) This contract will contain a separate expiration date and stipulations as determined by the Authorized Officer.
    - a. The contract must include stipulations that require the purchaser to report quantity of non-sawlog material removed (i.e. tons of biomass).



## Contract Area Map

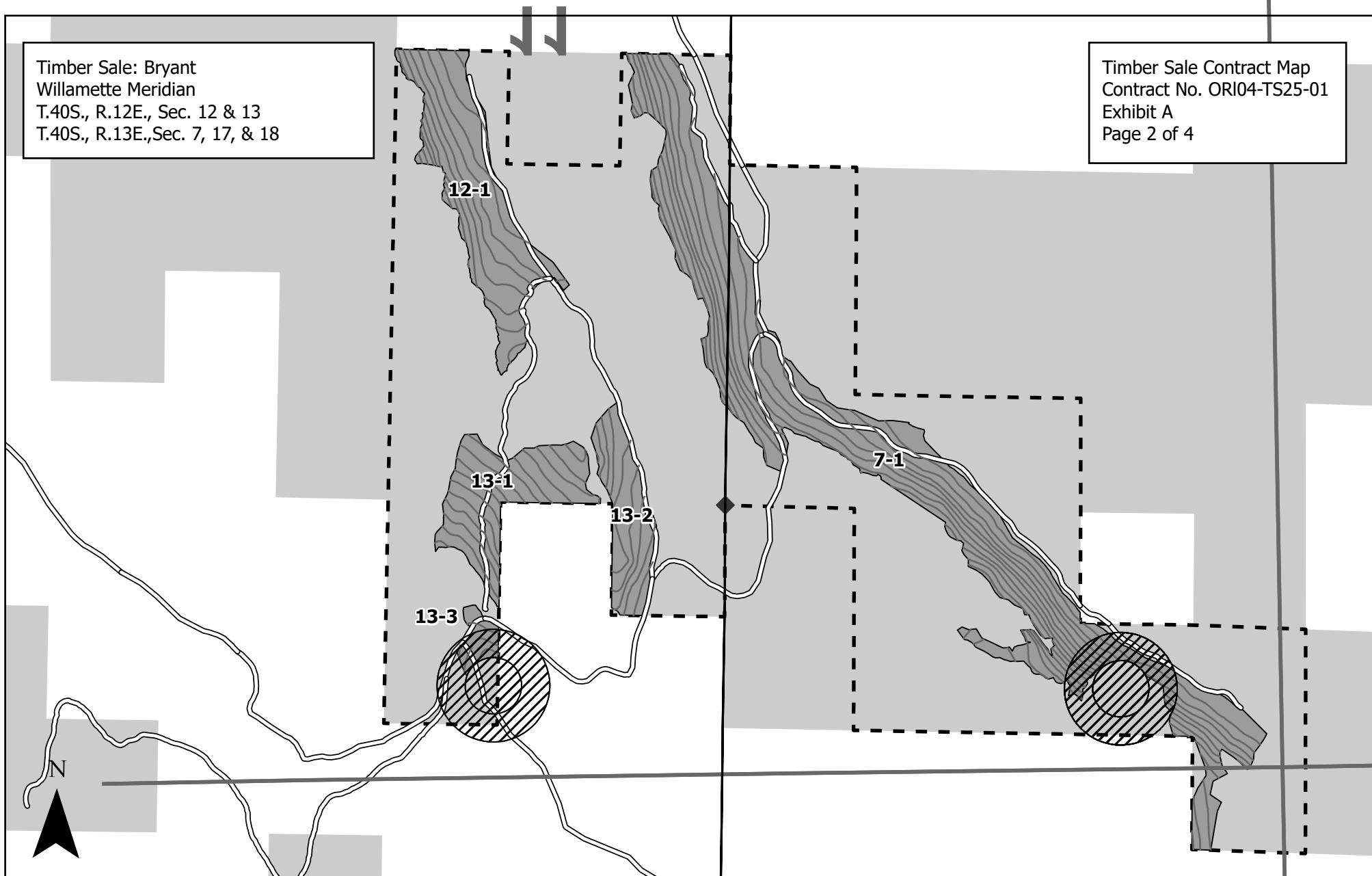
-  Bryant Contract Area
-  Bureau of Land Management Ownership
-  Town
-  Township and Range
-  Sections
-  Highway Major
-  Road



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.

Timber Sale: Bryant  
 Willamette Meridian  
 T.40S., R.12E., Sec. 12 & 13  
 T.40S., R.13E., Sec. 7, 17, & 18

Timber Sale Contract Map  
 Contract No. ORI04-TS25-01  
 Exhibit A  
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## Contract Area Map

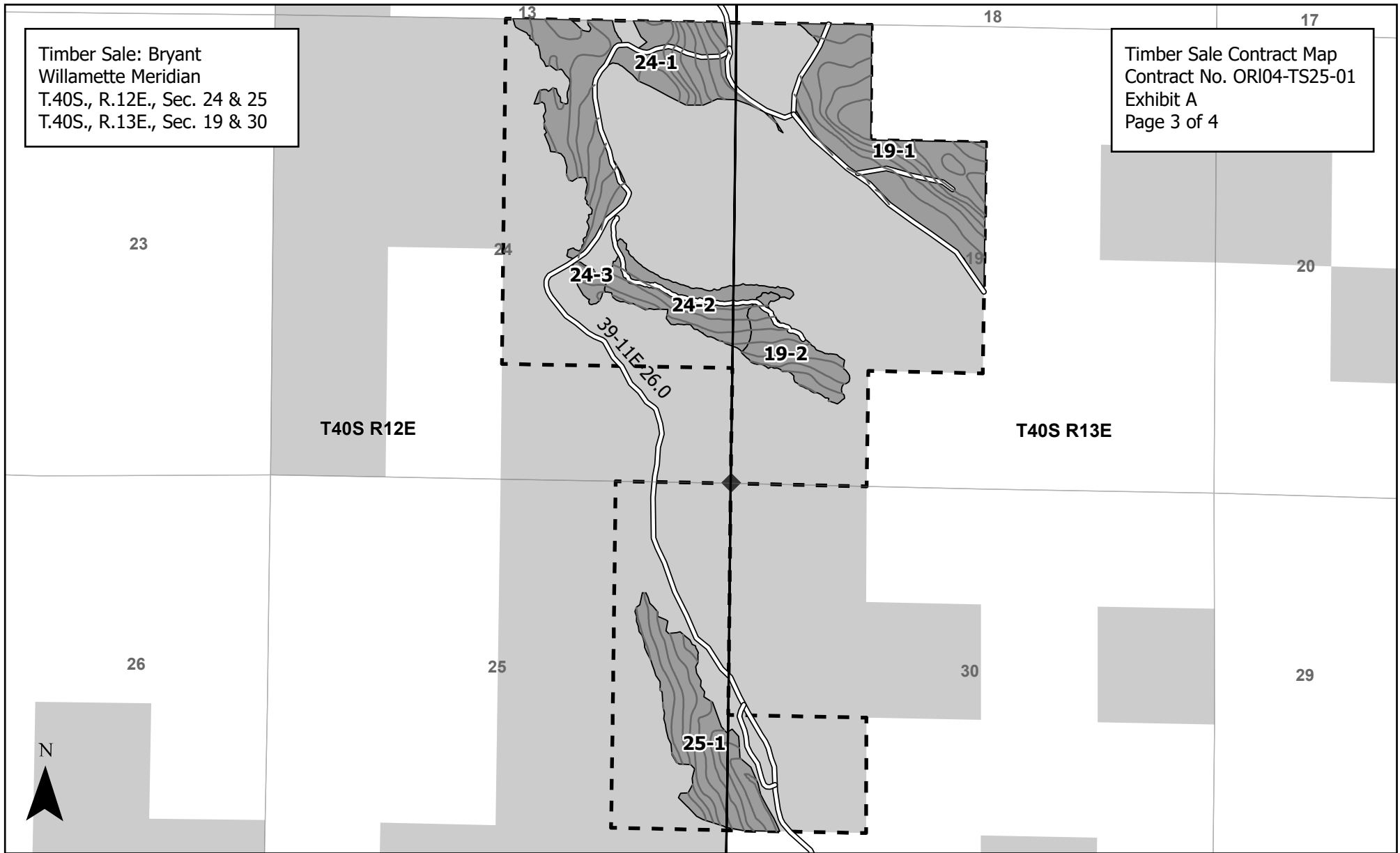
- Township and Range Sections
- Bureau of Land Management Ownership
- Bryant Contract Area
- Cutting Units
- Eagle Restriction
- Contours
- Survey Corner
- Major Road
- Highway

05

0 0.13 0.25 0.5 Miles



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.



## Contract Area Map

- Township and Range
- Sections
- Bureau of Land Management Ownership
- Bryant Contract Area
- Cutting Units
- Eagle Restriction
- Contours
- Survey Corner
- Major Road

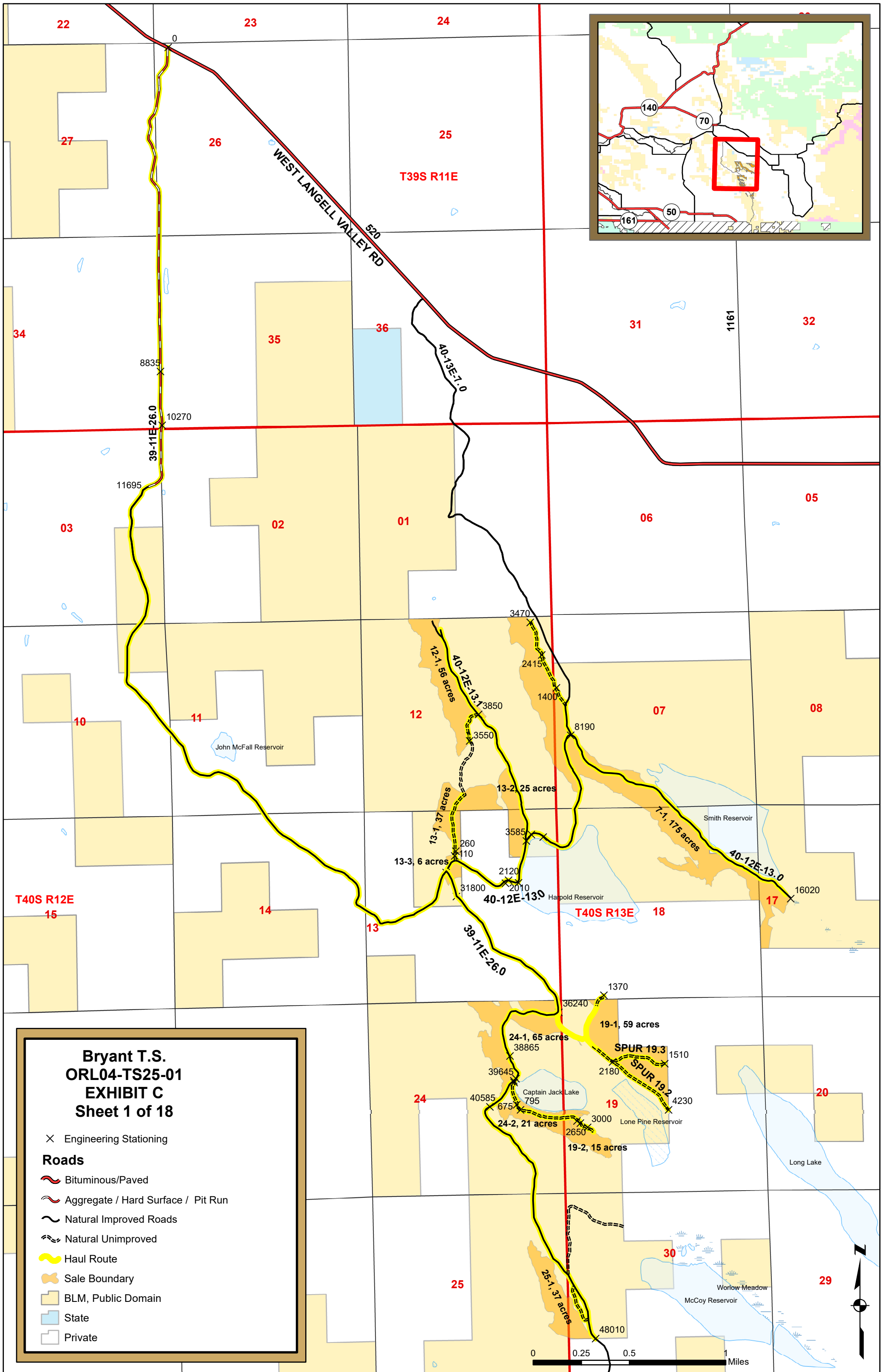


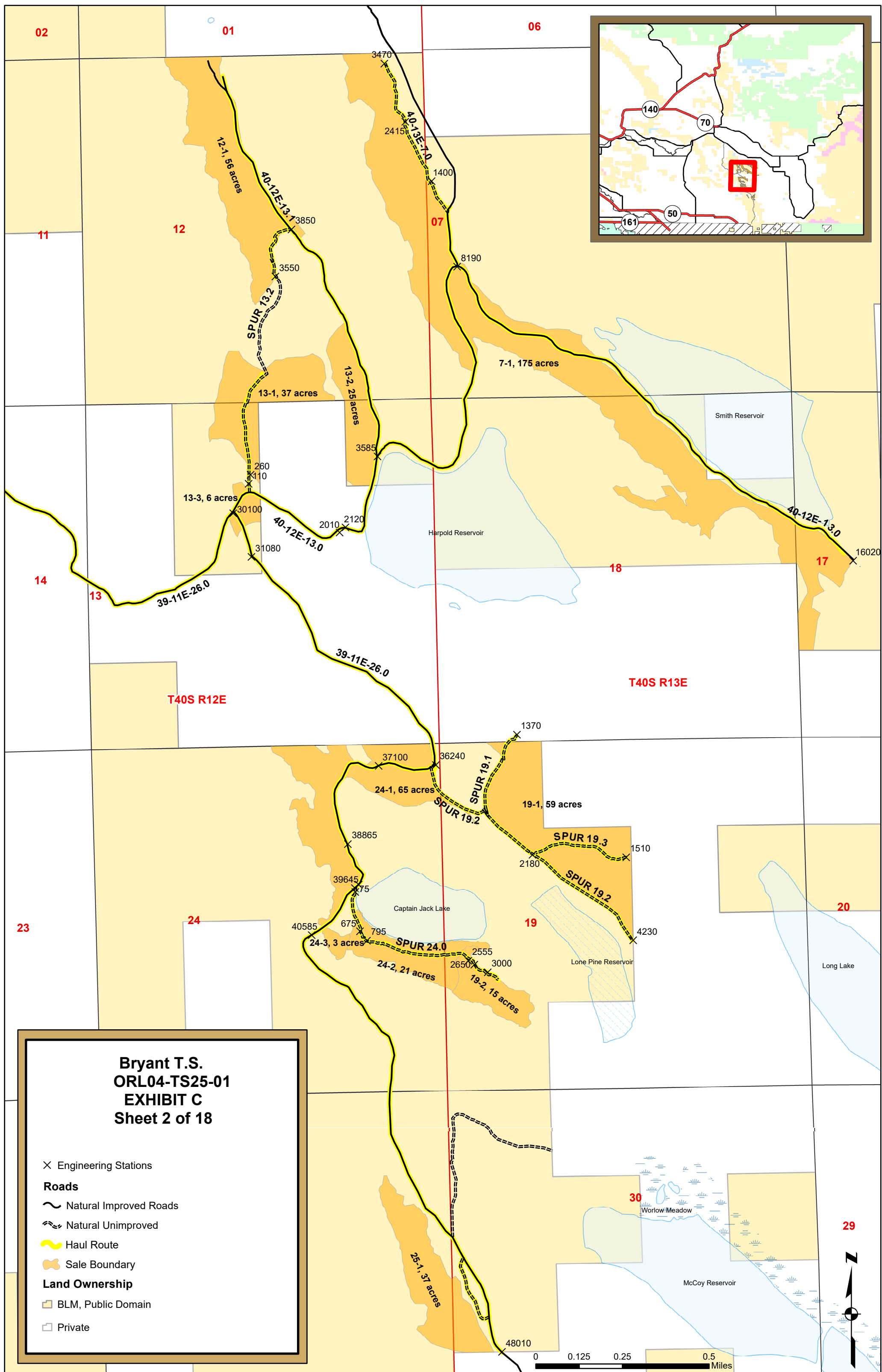
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.

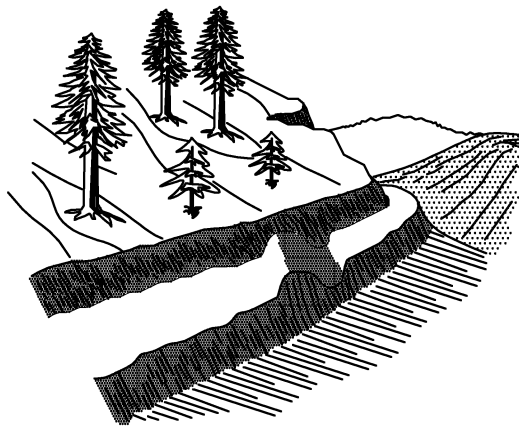
**Timber Sale Contract Map**  
**Contract No. ORL04-TS-25-01**  
**Exhibit A – Contract Acres**  
**Page 4 of 4**

Cutting	Total Cutting	
<u>Areas</u>	<u>Area Acres</u>	<u>Harvest Method</u>
7-1	174	Density Management (DM)
12-1	56	Density Management (DM)
13-1	37	Density Management (DM)
13-2	25	Density Management (DM)
13-3	5	Density Management (DM)
19-1	60	Density Management (DM)
19-2	15	Density Management (DM)
24-1	57	Density Management (DM)
24-2	21	Density Management (DM)
24-3	3	Density Management (DM)
25-1	37	Density Management (DM)
<b>Total</b>	<b>490</b>	

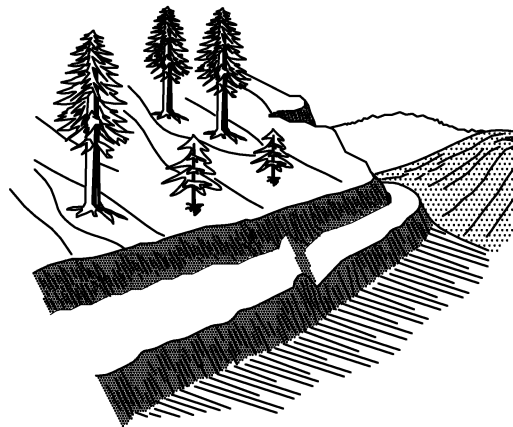
Total Cutting Area	490 acres
Total Reserve Area	<u>1,732 acres</u>
Total Contract Area	2,222 acres



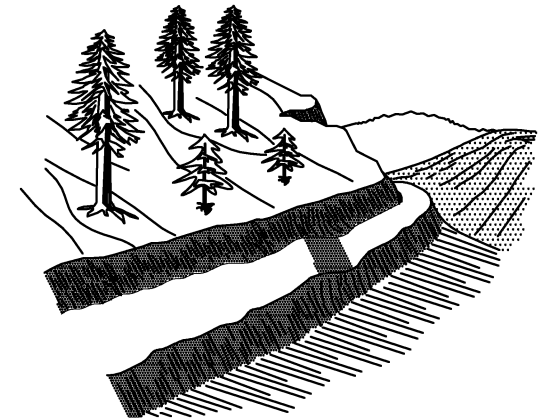




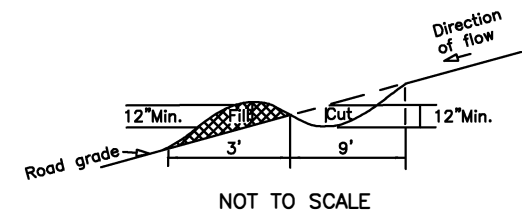
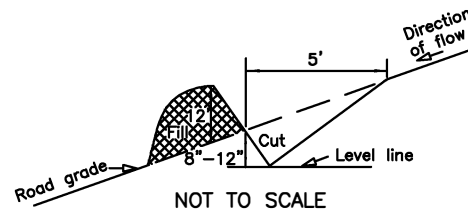
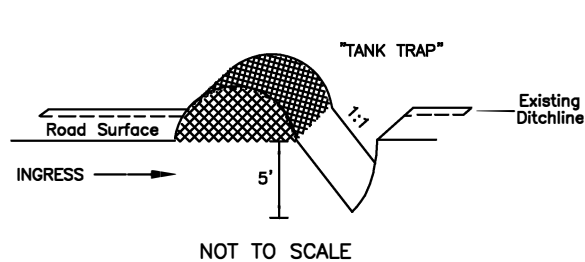
BARRIERS



WATER BAR

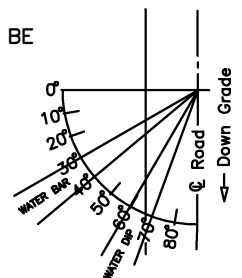


WATER DIP



NOTES

SKEW DIAGRAM



WATER DIP/BAR SPACING

ROAD GRADE	MAXIMUM SPACING
%	FEET
0-4	500
5-6	400
7-9	300
10-14	100
15-20	50

ON GRADES IN EXCESS OF 14%  
CONSTRUCT WATER BARS.



U. S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
LAKEVIEW DISTRICT OREGON

**BARRIER AND EROSION  
CONTROL DETAIL**

DESIGNED CAH

REVIEWED \_\_\_\_\_

APPROVED \_\_\_\_\_

DRAWN CAH SCALE: None

DATE AUG. 2019 STANDARD DRAWING

SHEET 3/18

1. ALL BARRIERS, WATER BARS, AND WATER DIPS AS REQUIRED SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATIONS WILL BE DIRECTED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER BARS SHALL BE SKEWED 30°-40°.
4. ALL WATER DIPS SHALL BE SKEWED 60°-70°.
5. ALL WATER BARS AND WATER DIPS SHALL BE CUT INTO THE ROADBED FROM THE DITCHLINE.
6. DITCHLINES SHALL BE BLOCKED WITH EXCAVATED MATERIAL (DITCHDAM) DOWNGRADE FROM ALL WATER BARS AND WATER DIPS.
7. EXCAVATED MATERIAL FROM BARRIER TRENCH (TANK TRAP) SHALL BE PLACED ON THE SIDE NEAREST THE BEGINNING OF THE ROAD.
8. OUTLETS OF WATER DIPS MUST BE ROCKED ON FILL SLOPE.
9. RIPRAP BARRIERS SHALL BE AT LEAST 4' HIGH, 4' DEEP, AND OF SUFFICIENT WIDTH TO COMPLETELY BLOCK THE ROADWAY AND ANY ADJACENT SHOULDERS THAT CAN BE TRAVELED WITH A VEHICLE.
10. ALL BERMS INCLUDING WATER BARS, WATER DIPS, AND EARTHEN BARRIERS SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY.

### **Road Work Narratives**

Note: For all roads listed - The contract administrator may authorize spot grading and watering if areas are deemed unnecessary to grade and water. If not authorized to do so, the road narratives are to be followed.

Note: **90 tons of 1.5-” spot rock** have been appraised to add along this road system. This rock is not optional but may be distributed at the purchaser’s discretion along with contract administrator’s approval of location. Proper moisture content to achieve compaction is required.

#### **39-11E-26.0 (Bryant Mountain Road)**

0+00	Road surface is rocked. Begin grading. Begin watering unless completed during adequate precipitation. Proper moisture content to achieve compaction is required.  *Exhibit D requirement – water rocked surface as required by contract administrator. <b>Grade from 0+00 – End.</b>
88+35	*Exhibit D only - Begin daily watering (each day in Summer months)
	116
102+70	*Exhibit D only – End daily watering (each day in Summer months)
116+95	Road surface transitions from rock to natural improved surface. End watering. End grading.
301+00	Junction with 40-12E-13.0 on left (0+00)
310+80	Road surface transitions to rock. Begin grading. Begin watering unless completed during adequate precipitation. Proper moisture content to achieve compaction is required.
348+50	Road surface transitions to natural improved. End grading. End watering.

362+40	Junction with Spur 19.2 on left (0+00). Road surface transitions to rock. Begin grading. Begin watering unless completed during adequate precipitation. Proper moisture content to achieve compaction is required.
371+00	Road surface transitions to natural improved. End grading. End watering.
388+65	Road surface transitions to rock. Begin grading. Begin watering unless completed during adequate precipitation. Proper moisture content to achieve compaction is required.
396+45	Junction with Spur 24.0 on left (0+00).
405+85	Road surface transitions to natural. End grading. End watering.
480+10	End of road maintenance area.

**40-12E-13.0**

0+00	Junction with 39-11E-26.0 (301+00). Road surface is natural. *Exhibit D only – grade from 0+00 – End.
3+90	Junction with Spur 13.2 (0+00) on left.
20+10	Begin add rock: approximately 8" depth of 1" - 4" clean rock ( <b>60 tons</b> ).
21+20	End add rock.
35+85	Junction with 40-12E-13.1 (0+00) on left.
81+90	Junction with 40-13E-7.0 (0+00) on left.
160+20	End of road maintenance area.

**40-12E-13.1**

0+00	Junction with 40-12E-13.0 (35+85). Road surface is natural.
38+50	Junction with Spur 13.2 (44+75) on left.
54+55	Re-align road (12' wide) between centerline stakes on right. Remove logs in roadway.
55+20	End re-align and merge with existing road (40-12E-13.1).
62+00	Junction with unnamed spur road on left.
64+75	End of road maintenance area.

**40-13E-7.0**

0+00	Junction with 40-12E-13.0 (81+90).
23+00	Re-align road (12' wide) between centerline stakes on right.
24+15	End re-align and merge with existing road (40-13E-7.0).
34+70	End road maintenance area.

**SPUR 13.2**

0+00	Road surface is natural improved.
1+10	Begin add rock: approximately 8" depth of 1"-4" clean rock ( <b>60 tons</b> ).
2+60	End add 1"-4" clean rock.
35+50	(This portion of road can be accessed through 40-12E-13.1 if desired).
44+75	Junction with 40-12E-13.1 (38+50). End road maintenance area.

**Spur 19.1**

0+00 Junction with Spur 19.2 (12+50). Road surface is natural.

13+70 End road maintenance area.

**Spur 19.2**

0+00 Junction with 39-11E-26.0 (362+40). Road surface is natural.

12+50 Junction with Spur 19.1 (0+00) on left.

21+80 Junction with Spur 19.3 (0+00) on left.

43+20 End road maintenance area.

**Spur 19.3**

0+00 Junction with 19.2 (21+80). Road surface is natural.

15+10 End road maintenance area.

**Spur 24.0**

0+00 Junction with 39-11E-26.0 (396+45).  
Road surface is natural.  
Remove boulders at entrance (Replace in Exhibit D)

0+75 Remove earthen barrier. (Replace in Ex. D)

5+55 Remove water bar. (Replace in Ex. D)

6+75 Remove water bar. (Replace in Ex. D)

7+95 Remove water bar. (Replace in Ex. D)

11+85 Remove water bar. (Replace in Ex. D)

25+55 Remove water bar. (Replace in Ex. D)

26+50 Remove water bar. (Replace in Ex. D)

30+00 Move slash pile – pile 25' north of roadway. End road maintenance area.

## TIMBER SALE ROAD SPECIFICATIONS

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### TABLE OF CONTENTS

SECTION	DESCRIPTION
100	General
200	Clearing and Grubbing
300	Excavation and Embankment
400	Pipe Culverts
500	Renovation and Improvement of Existing Roads
600	Watering
1200	Aggregate Surface Course – Crushed Rock
2100	Roadside Brushing
3400	Dust Palliatives / Other Maintenance

### **GENERAL – 100**

101 - Prewrite Conference(s):

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

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

102 - Definitions:

AASHTO - American Association of State Highway and Transportation Officials.  
Current editions of tests and specifications.

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

ACI - American Concrete Institute

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## TIMBER SALE ROAD SPECIFICATIONS

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

ASTM - American Society for Testing and Materials.

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

BLM - Bureau of Land Management

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

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

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

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

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

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

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

Grab Tensile Strength - A modified tensile strength of a geotextile material. The strength of a specific width of geotextile material together with the additional strength contributed

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## TIMBER SALE ROAD SPECIFICATIONS

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by adjacent areas. Typically, grab strength is determined on a 12-inch-wide strip of geotextile material, with the tensile load applied at the midpoint of the geotextile material width through 1-inch-wide jaw faces.

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

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

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

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

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

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

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

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

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

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

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

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## TIMBER SALE ROAD SPECIFICATIONS

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geotextile material.

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

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

Reinforcement - Strengthening of concrete with iron bars or mesh: geotextile with geotextile material inclusion: subgrade with aggregate: etc.

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

Road Centerline - The longitudinal center of a roadbed.

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

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

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

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

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

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

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

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## TIMBER SALE ROAD SPECIFICATIONS

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Slope ratio notation (horizontal:vertical) – Slope ratios for constructed cut and fill slopes are expressed as a ratio of horizontal units to vertical units.

Spalls - Flakes or chips of stone.

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

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

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

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

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

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

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

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

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

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

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

## **TIMBER SALE ROAD SPECIFICATIONS**

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

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

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

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

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

## **TIMBER SALE ROAD SPECIFICATIONS**

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

- 501 - This work shall consist of reconditioning and preparing the roadbed and shoulders, minor excavation and/or embankment, cleaning and shaping drainage ditches, and cleaning and repairing drainage structures of existing roads in accordance with these specifications as shown on the plans and as marked on the ground with stakes.

- 502 - The existing road surface shall be bladed and shaped to the lines, grades, dimensions, and typical cross sections shown on the plans at the following location(s):

Road No.	From Sta./M.P.	To Sta./M.P.	Standard Drawing #
39-11E-26.0	0+00	116+95	NA
39-11E-26.0	310+80	348+50	
39-11E-26.0	362+40	371+00	
39-11E-26.0	388+65	405+85	

- 502a - Rocks larger than 4 inches in maximum dimension shall be removed from the scarified layers of the roadbed. Material so removed will not be permitted to remain on road shoulders or in ditches.
- 502b - Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.
- 504 - Existing road surfaces shall be uniformly watered to the optimum moisture content suitable for grading in accordance with the following table:

Road No.	From Sta./M.P.	To Sta./M.P.
39-11E-26.0	Same as Table 502	Same as Table 502

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## **TIMBER SALE ROAD SPECIFICATIONS**

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### **WATERING - 600**

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

### **AGGREGATE SURFACE COURSE - 1200** **CRUSHED ROCK MATERIAL**

- 1201 - This work shall consist of furnishing, hauling, and placing one or more layers of crushed rock material on roadbeds approved for placing crushed rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans. Material not conforming to these specifications will be rejected, and shall be removed from the road at the purchaser's expense.
- 1202a - Crushed rock materials used in this work may be obtained from commercial sources selected by the Purchaser at his option and expense, providing the rock materials furnished comply with the specifications.
- 1203 - When crushed rock material is produced from gravel, not less than 65 percent by weight of the particles retained on the No. 4 sieve will have 2 manufactured

## **TIMBER SALE ROAD SPECIFICATIONS**

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fractured faces. If necessary to meet the above requirements or to eliminate an excess of filler, the gravel shall be screened before crushing.

- 1204 - Crushed rock material shall consist of hard durable rock fragments conforming to the following gradation requirements:

TABLE 1204

AGGREGATE SURFACE COURSE

CRUSHED ROCK MATERIAL

Percentage by weight passing square mesh sieves  
AASHTO T 11 & T 27

GRADATION

Sieve Designation	C
1-1/2-inch	100
1-inch	-
3/4-inch	50-90
1/2-inch	-
No. 4	25-50
No. 8	-
No. 30	-
No. 40	5-25
No. 200	2-15

- 1205 - Crushed rock material shall not exceed 35 percent loss as determined by AASHTO T 96.
- 1206 - Crushed rock material shall show a durability value of not less than 35 as determined by AASHTO T210.
- 1206a - The crushed rock material shall show a loss of not more than 20 percent by weight, when submerged in DMSO, dimethyl sulfoxide, for five days, according to Federal Highway Administration Region 10 Accelerated Weathering Test

## TIMBER SALE ROAD SPECIFICATIONS

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Procedure.

- 1207 - That portion of crushed rock material passing the No. 40 sieve, including blending filler, shall have a liquid limit of not more than 35 and a plasticity index of not less than 4 and not more than 12 as determined by AASHTO T 89 and AASHTO T 90.
- 1207a - That portion of crushed rock material passing No. 4 sieve, including blending filler, shall have a sand equivalent of not less than 35, as determined by AASHTO T 176, except where that portion exhibits a sand equivalence of less than 35, the aggregate will be accepted if it complies with the additional requirement as follows:

TABLE 1207a

Sand Equivalent	Percent Passing #200 Sieve AASHTO T 27
34	9
33	8
32	7
31	6
30	5
29 or less	4

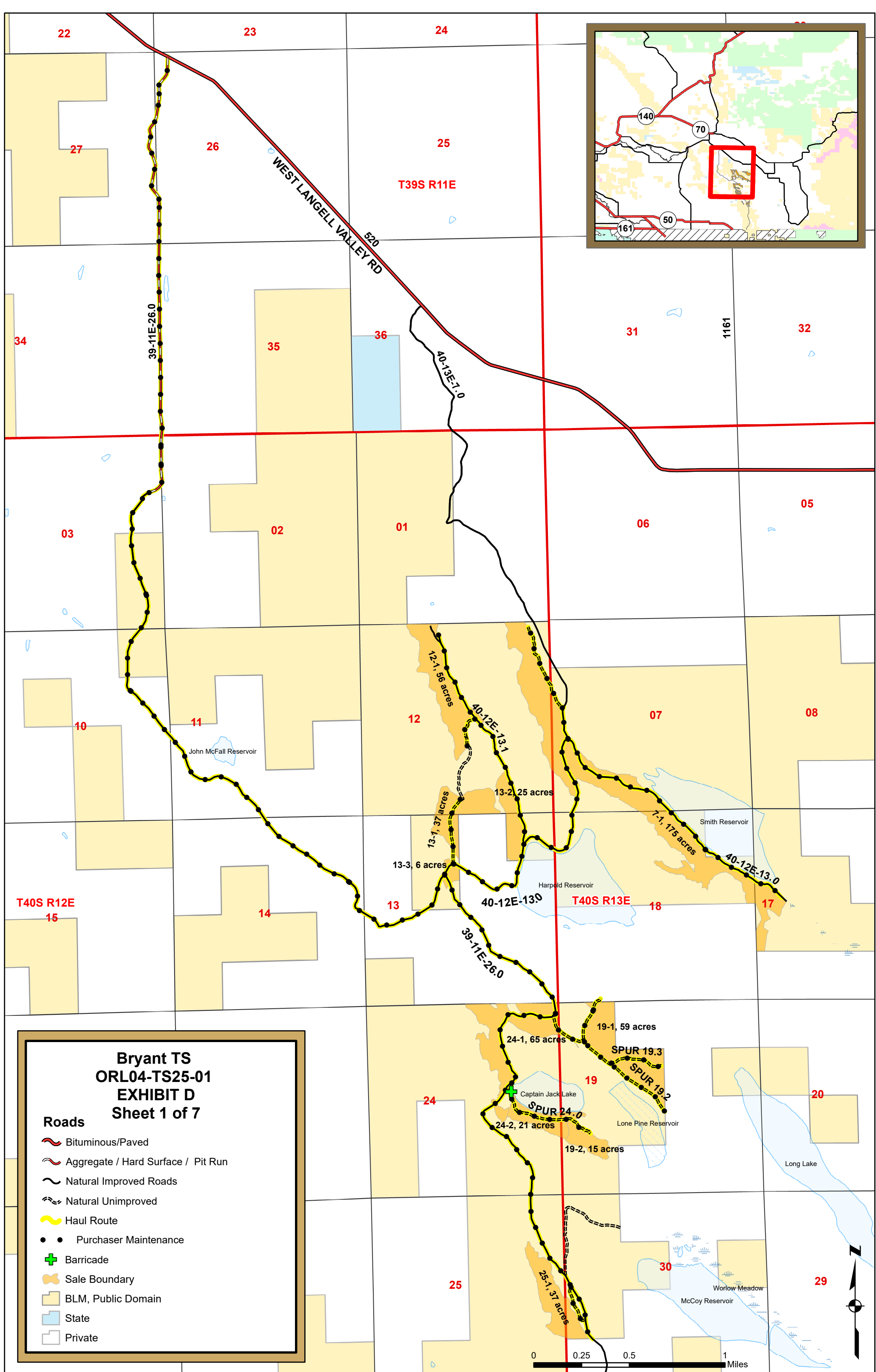
- 1208 - If additional binder or filler material is necessary to meet the grading or plasticity requirements or for satisfactory bonding of the material, it shall be uniformly blended with the crushed rock material at the crushing and screening plant prior to placing on the road, unless otherwise agreed. The material for such purposes shall be obtained from sources approved by the Authorized Officer and shall be free from stones, vegetative matter, and other deleterious materials.
- 1208a - Each layer of crushed rock material shall be thoroughly mixed on the roadbed by alternately blading, to full depth, until a uniform mixture has been obtained. The mixture shall then be spread to full width. When completed, the spreading shall produce a surface which is smooth, presents uniform shoulder lines, and conforms to the specified cross section.

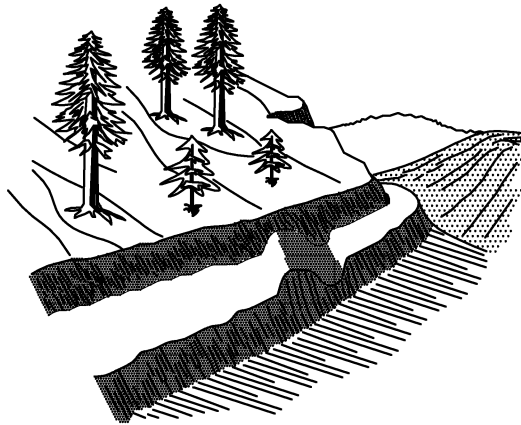
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## **TIMBER SALE ROAD SPECIFICATIONS**

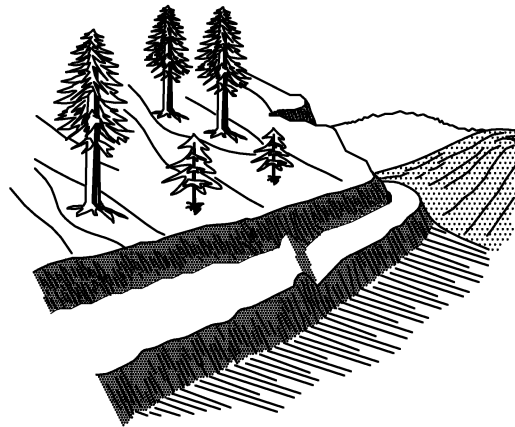
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- 1209 - Shaping and compacting of roadbed base course shall be completed and approved in writing, prior to placing crushed rock material, in accordance to the requirements of Subsection 500 for placing on the roadbed. Notification for final inspection prior to rocking shall be 72 hours prior to the inspection and shall be 10 days prior to start of surfacing operations.
- 1210 - Crushed rock material conforming to the requirements of these specifications shall be placed on the approved roadbed in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Compacted layers shall not exceed 4 inches in depth. When more than one layer is required, each shall be shaped, processed, compacted, and approved in writing by the Authorized Officer before the succeeding layer is placed. Irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and then adding or removing crushed rock material until the surface is smooth and uniform.
- 1210a - Crushed rock material used to repair or reinforce soft, muddy, frozen, yielding, or rutted roadbed shall not be construed as surfacing required by this specification.
- 1212 - Each layer of crushed rock material placed, processed, and shaped as specified shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted to full width by compacting equipment conforming to the requirements of Subsection 103 - i. Minimum compaction shall be 1 hour of continuous compacting for each 150 cubic yards of crushed rock material placed per layer, or fraction thereof.

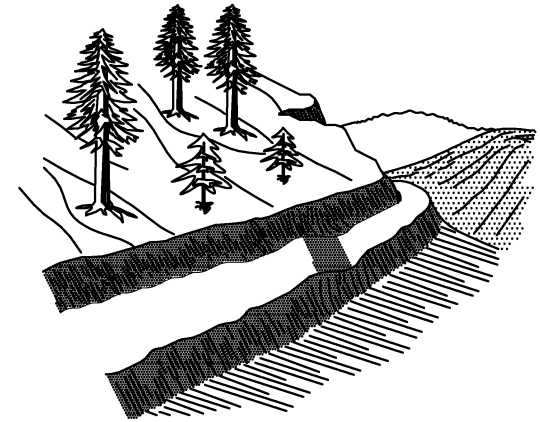




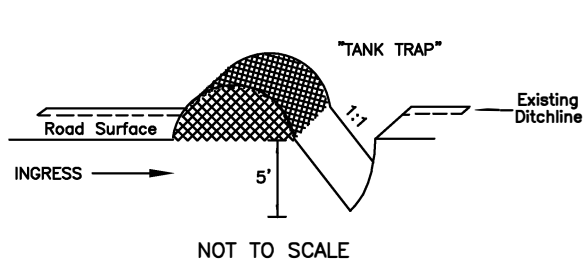
BARRIERS



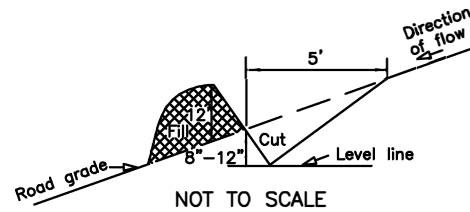
WATER BAR



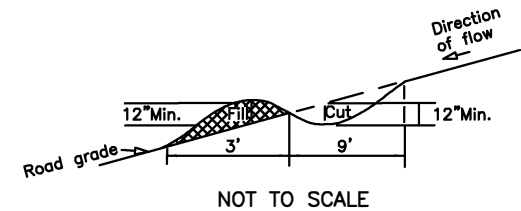
WATER DIP



NOT TO SCALE



NOT TO SCALE

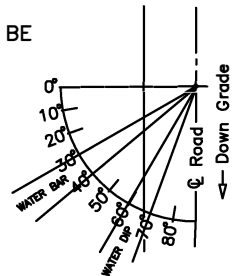


NOT TO SCALE

NOTES

1. ALL BARRIERS, WATER BARS, AND WATER DIPS AS REQUIRED SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATIONS WILL BE DIRECTED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER BARS SHALL BE SKEWED 30°-40°.
4. ALL WATER DIPS SHALL BE SKEWED 60°-70°.
5. ALL WATER BARS AND WATER DIPS SHALL BE CUT INTO THE ROADBED FROM THE DITCHLINE.
6. DITCHLINES SHALL BE BLOCKED WITH EXCAVATED MATERIAL (DITCHDAM) DOWNGRADE FROM ALL WATER BARS AND WATER DIPS.
7. EXCAVATED MATERIAL FROM BARRIER TRENCH (TANK TRAP) SHALL BE PLACED ON THE SIDE NEAREST THE BEGINNING OF THE ROAD.
8. OUTLETS OF WATER DIPS MUST BE ROCKED ON FILL SLOPE.
9. RIPRAP BARRIERS SHALL BE AT LEAST 4' HIGH, 4' DEEP, AND OF SUFFICIENT WIDTH TO COMPLETELY BLOCK THE ROADWAY AND ANY ADJACENT SHOULDERS THAT CAN BE TRAVELED WITH A VEHICLE.
10. ALL BERMS INCLUDING WATER BARS, WATER DIPS, AND EARTHEN BARRIERS SHALL BE COMPACTED TO 85% OF MAXIMUM DENSITY.

SKEW DIAGRAM



WATER DIP/BAR SPACING

ROAD GRADE	MAXIMUM SPACING
%	FEET
0-4	500
5-6	400
7-9	300
10-14	100
15-20	50

ON GRADES IN EXCESS OF 14%  
CONSTRUCT WATER BARS.



U. S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
LAKEVIEW DISTRICT OREGON

**BARRIER AND EROSION  
CONTROL DETAIL**

DESIGNED CAH

REVIEWED \_\_\_\_\_

APPROVED \_\_\_\_\_

DRAWN CAH SCALE: None

DATE AUG. 2019 STANDARD DRAWING

SHEET 2/7

## Exhibit D Barriers and Water Bar List

### Spur 24.0

0+00	Replace boulders at entrance.
0+75	Construct earthen barrier (See Sheet 2).
5+55	Construct water bar (See Sheet 2).
6+75	Construct water bar (See Sheet 2).
7+95	Construct water bar (See Sheet 2).
11+85	Construct water bar (See Sheet 2).
25+55	Construct water bar (See Sheet 2).
26+50	Construct water bar (See Sheet 2).

## ROAD MAINTENANCE SPECIFICATIONS

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

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

## **ROAD MAINTENANCE SPECIFICATIONS**

### **GENERAL - 3000**

- 3001 The Purchaser shall be required to maintain roads referenced in section 42.(C)(3) and as shown on the Exhibit D map of this contract in accordance with Sections 3000, 3100, 3200, 3300, 3400, and 3500 of this exhibit.
- 3001a The Purchaser shall be required to provide maintenance on roads in accordance with Subsections 3403 and 3404.
- 3002 The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards. Any roads required to be renovated under terms of this contract shall be maintained to the geometric standards required in Exhibit C of this contract.
- 3003 The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.
- 3004 The Purchaser shall be responsible for providing timely maintenance and cleanup on any roads with logging units substantially completed prior to moving operations to other roads. The maximum length of non-maintained or non-cleanup of the road prism shall not exceed the sum of one 1 mile at any time. Release of maintenance requirements may be granted, upon written request, when the conditions specified in Sections 3300 and 3400 are met satisfactorily.

### **OPERATIONAL MAINTENANCE - 3100**

- 3101 The Purchaser shall blade and shape the road surface and shoulders with a motor grader. Banks shall not be undercut. Back blading with tractors or similar equipment will be allowed only around landings and other areas when approved by the Authorized Officer.
- 3103 The purchaser shall maintain established berms and place additional berms using adjacent material where needed to protect fills as directed by the Authorized Officer.
- 3104 The purchaser shall perform other road cleanup including removal of debris, fallen timber, bank slough, and slides which can practicably be accomplished by a motor grader, rubber tired front end bucket loader, rubber tired backhoe or comparable equipment, and by the use of hand tools.
- 3105 The Purchaser shall be responsible for maintaining normal flow in drainage structures. This includes cleaning out drainage ditches, catch basins, clearing pipe inverts of sediment and other debris lodged in the barrel of the pipe, and maintaining water dips and water-bars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.
- 3107 The Purchaser shall cut or trim trees and brush which obstructs vision or prevents the safe

## **ROAD MAINTENANCE SPECIFICATIONS**

passage of traffic along the traveled way when directed by the Authorized Officer.

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

- 3108 The Purchaser shall avoid fouling gravel or bituminous surfaces through covering with earth and debris from side ditches, slides or other sources. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway. Skidding of logs on the roadway in or outside designated logging units is not authorized without prior written approval by the Authorized Officer. Repair required caused by such skidding activity is not considered maintenance and shall be repaired at the Purchaser's expense.

### **SEASONAL MAINTENANCE - 3200**

- 3201 The Purchaser shall perform preventative maintenance at the end of Purchaser's hauling each season and during non-hauling periods which occur between other operations on the contract area. This includes requirements specified in Section 3100.
- 3202 The purchaser shall perform and complete maintenance specified in Sections 3000, 3100, and 3200 on all roads maintained by him, prior to October 15 each year, except as specified in Subsection 3203, after initial commencement of construction or logging operations. Thereafter, all roads shall have continuous preventive maintenance and road cleanup until suspension of seasonal operations. This includes all roads used and not used during the proceeding operating seasons.
- 3203 The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any roads located in an area separate from the area where logging activities will resume.
- 3204 The Purchaser shall be responsible for performing post storm inspections and maintenance during the winter season to minimize erosion and potential road or watershed damage.

### **FINAL MAINTENANCE - 3300**

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

## **ROAD MAINTENANCE SPECIFICATIONS**

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

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

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

### **OTHER MAINTENANCE - 3400**

- 3401 The Purchaser shall repair any damage to road surfaces that was specified under Subsection 3108. This repair includes restoring the roadway to the designed standard and replacement of surfacing with approved surface material. This repair is not limited to use of equipment specified in Subsection 3104.

- 3402 The Purchaser shall be permitted to remove ice and snow from roads authorized for use under this contract only when prior written approval has been secured from the Authorized Officer. The Purchaser shall submit a written request for permission to remove ice and snow in advance of the date operations are to begin.

Upon receiving written authorization for ice or snow removal, the Purchaser will perform the work according to the conditions and equipment requirements set forth in the authorization.

### **DECOMMISSIONING – 3500**

- 3509 Access shall be blocked with barricades as shown on the typical SHEET 2 of Exhibit D and at locations as shown on Exhibit D maps.

## **SELECTION CRITERIA DESIGNATION BY PRESCRIPTION EXHIBIT E**

The Selection Criteria shown below shall be used by the Purchaser in determining which trees are to be selected for snags creation. The operator will have responsibility to select trees as described below to create snags in a safe manner for workers on site.

The selection of trees for snag creation shall comply with Sec 43. The Purchaser shall leave all boundary trees marked with orange paint and/or poster tags and all orange marked trees within cutting units. For the Bryant Timber Sale 219 snags shall be created using the selection criteria below.

### **TREE SELECTION CRITERIA**

- Purchaser shall select trees to become snags and mark each tree with white paint above DBH height (4.5 feet) and at stump height. All snags shall be created within one (1) year of completion of skidding operations.
- Any tree species (including western juniper).
- No orange marked reserve trees shall be selected.
- Minimum diameter of twenty (20) inches measured at DBH (4.5 feet above ground level).
- Within all cutting units, snags shall not be created within falling distance of power lines, structures, or roads that will remain open after harvest operations are completed.
- Fifty (50%) per cent of the trees shall be topped at fifty (50') feet above ground level or above the lowest three (3) live limbs whichever is greater. All snags created shall have a minimum of three (3) live limbs below the cut.
- Fifty (50%) per cent of the trees shall be topped at a minimum of fifteen (15') feet above ground level.
- Top of all trees shall be severed and removed from the tree. Tops of trees are not reserved and can be skidded.
- Snags can be individual or grouped.
- All tree locations shall be mapped by GPS.

Section 15 of this contract provides that the Authorized Officer may, under certain conditions, require fire prevention and control measures in addition to those required by applicable (State) laws and regulations. Accordingly:

- (A) The Authorized Officer may by written notice require the Purchaser to restrict operations in accordance with the industrial fire precaution levels below (however, purchaser may also be required to restrict operations in accordance with closures on lands protected by Oregon Department of Forestry (ODF) which include those within the Klamath Falls Field Office located west of Langell Valley. During declared fire season the industrial fire precaution level will be determined by the Lakeview District Office and will be available daily.

IFPL LEVEL

- |     |                  |  |
|-----|------------------|--|
| I   | Closed Season    | -Fire precaution requirements are in effect.<br>-Watch person is required for one (1) hour.  |
| II  | Partial hoot owl | - the following may operate from only between the hours of 8:00 P.M. and 1:00 P.M. local time:<br><br>Power saws, except at loading sites;<br>Cable yarding;<br>Blasting;<br>Welding or cutting metal.   |
| III | Partial shutdown | - the following are prohibited except as indicated:<br><br>Cable yarding - except that gravity operated logging systems employing non-motorized carriages may operate between the hours of 8:00 p.m. and 1:00 p.m. local time when all blocks and moving lines are ten (10) feet or more above the ground, except the line between the carriage and the choker.<br><br><u>Power saws</u> - except power saws may be used at loading sites and on tractor/skidder operations between the hours of 8:00 p.m. and 1:00 p.m. local time.<br><br>In addition, the following are permitted to operate between the hours of 8:00 p.m. and 1:00 p.m. local time: <ul style="list-style-type: none"><li>▪ Tractor/skidder operations;</li><li>▪ Mechanized loading and hauling of any product or material;</li><li>▪ Blasting;</li><li>▪ Welding or cutting metal;</li><li>▪ Any other spark-emitting operation not specifically mentioned.</li></ul> |
| IV  | General shutdown | - All operations are prohibited.   |

(B) The Purchaser will provide fire watchman services for three (3) hours after daily shutdowns of areas of operation, including truck haul routes through the sale area and other areas where Purchaser's employees or contractors have worked on or with power driven equipment, whenever any of the following conditions apply:

- (1) the BLM industrial fire precaution level is II or greater;
- (2) directed in writing by the Authorized Officer;
- (3) required by State law.

The fire watchman shall be physically capable, alert and have adequate experience to perform the following duties:

- (1) operate Purchaser's communications and fire fighting equipment specified in the contract;
- (2) direct the Purchaser's personnel on forest fires;
- (3) report any fire detected to the Bureau of Land Management or Oregon State Division of Forestry;
- (4) move throughout the operation area constantly on the lookout for fires and take suppression action on any fire detected.

### Fire Prevention and Control Equipment Requirements

The Purchaser shall provide and maintain in good repair, in the contract area, the following equipment for use during closed fire season or periods of fire danger:

- (a) **F-2** Fire fighting tools shall be kept at each landing or at such other place as the Authorized Officer shall designate whenever people are working in the contract area. All fire fighting tools shall be kept in a sturdily constructed box which shall be painted red and lettered on the front or top in large letters, "FOR FIRE ONLY".

The box shall have a hinged lid and a hasp by which the lid can be sealed. One box may serve two landings not over six hundred (600) feet apart. When filled, the box shall not weight 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 not be less than four (4) tools in each box not less than one (1) tool for each person working in the contract area. The fire tools shall be used only for fighting fire.

- (b) **F-2b** A round pointed shovel in good condition which has a face at least 8" wide with a handle at least 26" long, shall be within fifty (50) feet of any power saw when in operation.
- (c) **F-2c** At each landing during periods of operation one (1) tank truck or fire trailer. Each truck shall have three hundred (300) gallons minimum capacity or a fire trailer with a minimum of 500 gallons capacity. with five hundred (500) feet minimum of hose and a nozzle acceptable to the Authorized Officer and a mounted or portable pump conforming to the standards set forth in Oregon Revised Statute (ORS) 476.410 through ORS 476.440 and any rule promulgated pursuant to those statutes. All hose couplings shall have the standard thread adopted by the State Fire Marshall pursuant to ORS 476.410 as amended or be provided with suitable adapters. At the close of each working day, all bulldozers and tank trucks shall be filled with fuel and made ready for immediate use. All tank trucks and portable tanks shall be filled with water and made available for immediate use.
- (d) **F-2d** Serviceable radio or radio-telephone equipment able to provide prompt and reliable communication between the contract area and Klamath Falls, Oregon. Such communication shall be available during periods of operation including the time watch-service is required.

- (e) **F-2e** During declared fire season and if and when harvested chip material is curing on the sale, one dozer complete with qualified operator, angle blade, lowboy, and transport shall be located within one (1) hour transport time, fifteen (15) minute dispatch time during daylight hours, two (2) hours dispatch time nighttime hours, for the suppression of wildfire in the contract area. The Dozer and Transport shall be fueled and equipped for immediate use.

In addition, a pair of headlights capable of being quickly attached to each dozer used in the contract area shall be required. The headlights shall be adequate to provide illumination sufficient to allow use of the dozers for fire fighting and construction of fire trails at night.

- (f) **F-2h** A chemical fire extinguisher of at least eight (8) ounces minimum capacity of a type approved by the Oregon State Forester shall be carried during the closed fire season or periods of fire danger by each saw operator using a power saw in 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. A size shovel specified above or larger shall be available with each gas can when refueling. 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.

**Older Juniper Definition**

Older juniper: Juniper that originated in the “presettlement” period, before 1870. It is assumed that these trees are growing on sites that they are adapted to, since they began growing there under “natural conditions” when natural processes (including lightning fires) determined vegetation patterns. Older junipers are usually found in rocky areas where vegetation is sparse and natural fire frequency is low. Some typical characteristics of older juniper are:

- Crown is flat, rounded, broad at top, or irregular (as opposed to the more pointed tops of younger trees)
- Spike top
- Numerous dead branches
- Branches covered with a coarse, bright yellow-green lichen (*Letharia*, or wolf lichen)
- Large diameter lower branches
- Large diameter trunk relative to height
- Trunk has spirally twisted bark, deep furrows
- Hollow trunk

It is rare for an older juniper to have all the above features, but more commonly will have at least three or four. Also, older junipers are not always the largest trees; on drier, rocky sites, they can be short, stubby, gnarly trees.