

PROSPECTUS

Lump Sum Sale

Ashland RESOURCE AREA
Jackson MASTER UNIT

Medford Sale # ORM06-TS14-14
September 18, 2014

#1. Howard Timber Sale, Jackson County, (O&C) BID DEPOSIT REQUIRED: \$37,000.00

All timber designated for cutting in: W ½ NW ¼, SE ¼ NW ¼, SW ¼, W ½ SE ¼, Sec. 13; NE ¼ NE ¼, S ½ NE ¼, SE ¼ NW ¼, N ½ SE ¼, Sec. 23; NE ¼ SW ¼, N ½ SE ¼, SE ¼ SE ¼, Sec. 26, T. 38 S., R 03 E.. W ½ SE ¼, Sec. 1, T. 39 S., R 03 E. N ½ NE ¼, N ½ NW ¼, Sec. 7; W ½ NE ¼, NW ¼, Sec. 17; SE ¼ SW ¼, SE ¼, Sec. 19; W ½ NE ¼, SE ¼ NE ¼, E ½ NW ¼, SE ¼, Sec. 29, T. 38 S., R. 04 E... LOT 7, Sec. 5, T. 39 S., R. 04 E. Willamette Meridian.

Approx. Number Merch. Trees	Est. Volume MBF 32' Log	Species	Est. Volume MBF 16' Log	Appr. Price Per MBF*	Est. Volume Times Appraised Price
12,581	2,226	White fir	2,823	\$101.40	\$286,252.20
2,253	374	Douglas-fir	468	\$167.50	\$78,390.00
148	42	Ponderosa Pine	50	\$54.20	\$2,710.00
153	12	Incense Cedar	14	\$126.00	\$1,764.00
15,135	2,654		3,355		\$369,116.20

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

**Minimum stumpage values were used to compute the appraised price (10% of pond value).

TIMBER AUCTION LOCATION – The timber auction will be held at the Medford Interagency Office, located at 3040 Biddle Road, Medford, Oregon, at 9:00 a.m. on Thursday, September 18, 2014.

CRUISE INFORMATION - The conifer volume in all species have been cruised using the 3-P sampling method to select sample trees. The sample trees have been measured, utilizing the VOLT system of measurement, and the volume expanded to a total sale volume. A map showing the location and description of these sample trees is available at the Medford Interagency Office.

With respect to merchantable trees of all conifer species: the average tree is 16.0 inches DBHOB; the average gross merchantable log contains 79 bd. ft.; the total gross volume is approximately 3956 M bd. ft; and 85% recovery is expected.

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

LOG EXPORT AND SUBSTITUTION RESTRICTIONS - All timber sold to the Purchaser under the terms of the contract, except exempted species, is restricted from export from the United

States in the form of unprocessed timber and is prohibited from use as a substitute for exported private timber.

The 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.

CUTTING AREA – Sixteen (16) units containing 613 acres must be partial cut. Two (2) right-of-ways for temporary spurs containing 1 acre must be cut in its entirety.

CUTTING TIME - Contract duration will be 36 months for cutting and removal of timber.

ACCESS - Access to the sale area is available via existing BLM roads. Right-of-Way and Road Use Agreements as shown in Section 42 (C) (10) and (11). Among other conditions, these agreements require payments of road use fees between the Purchaser and Permittees.

ROAD MAINTENANCE –The Purchaser will be required to pay a road maintenance fee of \$1.08 per MBF or a total of \$3,628.71 for the use of these roads as shown in Section 42(C)(3). The Purchaser will be required to maintain 6.25 miles of existing roads.

SOIL DAMAGE PREVENTION - Pursuant to Section 26 of Form 5450-3, Timber Sale Contract, the Purchaser shall not operate or cause to have operated on the contract area any tractor-type logging equipment when soil moisture content is high as determined by the Authorized Officer. The Purchaser shall construct motor vehicle barricades on all primary skid roads which intersect any haul roads; water bar all skid trails; and mulch and seed fill slopes on the newly constructed landings fill slope.

EQUIPMENT REQUIREMENTS - LOGGING: A yarding tractor not greater than 12 feet wide as measured from the outer edges of standard width shoes and equipped with an integral arch and a winch for lining logs seventy-five (75) feet.

SLASH DISPOSAL - Slash disposal will consist of 519 acres of hand piling and ten acres of lop and scatter.

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, or protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Medford District Record of Decision (ROD) and Resource Management Plan (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.

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

OTHER -

1. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.
2. Hauling will not occur between November 15 of one calendar year and May 15 of the following calendar year, both days inclusive, for adequately surfaced roads. Hauling on natural surfaced roads is limited to June 1st to October 15th.

3. All major haul routes must be signed to control traffic and warn users of logging hazards. Additionally signs must be placed to warn users of logging hazards where trails intersect or parallel haul routes on Willow Prairie Road near cutting unit 1-1.
4. A BLM logging plan was prepared for the appraisal and is available for review. All logging units are to be harvested using ground based logging systems.
5. Winter logging would be allowed with permission from the authorized officer as conditions permit.
6. New temporary road construction will occur in four cutting units and will need to be decommissioned after harvest activities along with landings and skids.

NARRATIVE DESCRIPTION OF HOW TO GET TO THE TIMBER SALE AREA – From Medford, Turn Right onto I-5 on ramp, Travel 12.4 miles to exit 14 (South Ashland Exit). Turn Left onto OR-66 towards Klamath Falls and cross over I-5, continue for 0.7 miles. Turn Left onto Dead Indian Memorial Highway and proceed for 17 miles. The project area is located on four different roads and their respective spur road systems. Turn right onto Hyatt Prairie Road and continue South to reach Unit 23-1, 26-1, and 26-2. Continue south and turn left onto Willow Creek Road, continue around the south side of Howard Prairie lake to access unit 1-1 and 1-2. Or continue past Hyatt Prairie Rd for 1.4 miles and turn right on to Keno Access Road to access units 13-4, 13-5, 19-1, 19-2, 29-1, 29-2, 29-3, and 29-5. Or Continue past Hyatt Prairie Rd 3.4 miles to BLM road 38-4E-7.0 to access units 7-1, 17-1, and 17-4.

ENVIRONMENTAL ASSESSMENT - An environmental assessment (DOI-BLM-OR-M060-2013-0003-EA) was prepared for this sale, and a Finding of No Significant Impact has been documented. This document is available for inspection as background for this sale at the Medford Interagency Office.

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Howard Timber Sale
ORM06-TS-2014-0014

****Crosshatched areas are available for a waiver by contracting officer, see contract for guidelines.**

[illegible]

HOWARD TIMBER SALE
SPECIAL PROVISIONS

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

Section 41.

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

- (A) AR-1 All timber on the Reserve Area(s) as shown on Exhibit A and all orange painted and/or posted trees which are on or mark the boundaries of the Reserve Area(s).
- (B) IR-2 All timber except fifteen thousand one hundred thirty five (15135) trees marked for cutting heretofore by the Government with blue paint above and below stump height in units 1-1, 1-2, 7-1, 13-4, 13-5, 17-1, 17-4, 19-1, 19-2, 23-1, 26-1, 26-2, 29-1, 29-2, 29-3, and 29-5 as shown on Exhibit A.
- (C) IR-5 All young growth less than seven (7) inches D.B.H.O.B. not damaged in the normal course of logging in all units as shown on Exhibit A.
- (D) IR-6 All snags and course woody debris (CWD), except when determined to be a hazard during operations by the Authorized Officer as shown on Exhibit A. Snags felled for safety will be retained on site as course woody debris.
- (E) IR-10M Genetically superior trees marked with orange paint and seed trees tags in the contract area. These trees are selected, genetically superior trees and are specially valued as a component of the tree improvement program. Any damage to such reserve trees caused by Purchaser shall be charged for on the basis of the resulting total loss to the Government including any loss in value as a superior seed source.

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SPECIAL PROVISIONS

Section 42

(A) Log Exports

- (1) LE-1 All timber sold to the Purchaser under the terms of this contract is restricted from export from the United States in the form of unprocessed timber, and is prohibited from being used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as sawlogs, peeler logs and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three-quarters (8¾) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end-product uses; or (4) western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimension or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 Common or better. Thus, timber manufactured into the following will be considered processed: (1) lumber and construction timber, regardless of size, manufactured to standards and specifications suitable for end-product uses; (2) chips, pulp, and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacturing of eight and three-quarters (8¾) inches in thickness or less; (6) shakes and shingles.

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

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

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

HOWARD TIMBER SALE SPECIAL PROVISIONS

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

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

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

Unless otherwise authorized in writing by the Contracting Officer, the Purchaser shall brand clearly and legibly one end of all logs with a scaling diameter (small end inside bark) of over 10 inches, prior to the removal of timber from the contract area. All loads of 11 logs or more will have a minimum of 10 logs clearly and legibly branded on one end regardless of the diameter of the logs. All logs will be branded on loads of 10 logs or less. One end of all branded logs to be processed domestically will be marked with a 3 square inch spot of highway yellow paint. The purchaser will stop trucks for accountability monitoring at mutually agreed upon locations when notified by the Authorized Officer.

If multiple trailers (mule trains) are used, each bunked load shall be considered an individual load, and these guidelines will apply to each bunked load. If a flatbed stake trailer is used, each bundle will be treated as a separate load.

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

In the event of the Purchaser's noncompliance with this subsection of the contract, the Authorized Officer may take appropriate action as set forth in

HOWARD TIMBER SALE
SPECIAL PROVISIONS

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.

(B) 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-7MC Yarding on the areas designated herein and shown on Exhibit A shall be done in accordance with the yarding requirements or limitations for the designated area.

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SPECIAL PROVISIONS

<p>In Units 1-1, 1-2, 7-1, 13-4, 13-5, 17-1, 17-4, 19-1, 19-2, 23-1, 26-1, 26-2, 29-1, 29-2, 29-3, and 29-5</p>	<p>All ground-based yarding systems shall be approved by the Authorized Officer.</p> <p>Yarding tractor width will not be greater than twelve (12) feet as measured from the outer edges of standard width track shoes.</p> <p>Yarding tractors will operate only on tractor skid roads approved by the Authorized Officer. Skid road locations will be approved prior to felling of timber to be yarded over that skid trail and trees shall be felled to the lead. The location of the tractor skid roads must be clearly designated on the ground and spaced at approximately one hundred fifty (150) foot intervals where feasible. Existing skid roads will be utilized where possible. Ground based yarding systems shall be limited to slopes thirty-five (35) percent or less except as approved by the Authorized Officer. Disturbance to natural openings/meadows within tractor units shall be approved by authorized officer at the same time as approval for landings and skids. No yarding will be allowed up or down draw bottoms. Skid trails shall avoid areas with high water tables. Maximum area in skid trails used would be less than 12% of the harvest unit.</p> <p>Yarding tractors will be equipped with integral arches and winch systems capable of lining logs at least seventy five (75) feet.</p> <p>To minimize soil disturbance, mechanized ground-based yarding systems used off designated skid trails must have an arm capable of reaching at least 20 feet and must minimize turning by avoiding return trips to the same skid trail whenever feasible. Walk mechanized harvest equipment over slash on skid trails to the extent possible.</p> <p>During dry soil conditions, mechanized ground-based harvesting (harvester/forwarder or feller/buncher) would be allowed off of designated skid trails for one-to-two passes. These 1-to-2 pass trails must be spaced a minimum of 50 feet apart. Trails will be limited to a minimum of 50-foot spacing off of designated skid trails.</p>
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	<p>All other use of ground-based equipment must be restricted to designated skid trails. All operations off of designated skid trails would be limited to soil moisture conditions of 15% or less by weight, or snow-logging conditions listed below.</p> <p>Tractor yarding or other mechanized operations would be allowed over the snow when the snow pack is sufficient to protect the soil. Logging on snow would be allowed when snow depth is 18 inches or greater, and negligible ground surface exposure would occur during operations (USDI 1995, p. 166).* Skid trail spacing and soil moisture requirements would be waived if ground-based operations occur over sufficient snow pack (as described above). The intent is to minimize compaction and off-site erosion and sedimentation to local waterways.</p> <p>Landing size shall not exceed one-quarter (¼) acre.</p> <p>Trees shall be felled to the lead in respect to the skid trail. All trees shall be felled away from Riparian reserves, dry draws and property lines where they would cross into these areas.</p> <p>Yarding will be limited in accordance with Section 26 if detrimental soil damage is about to occur, as determined by the Authorized Officer.</p> <p>Where skid trails encounter coarse woody debris (CWD) sixteen (16) inches and larger at the small end, a section of the CWD is to be bucked out for equipment access. The bucked out portion shall be as narrow as operationally feasible, (maximum of fourteen (14) feet). The remainder of the CWD shall be left in place and not disturbed.</p> <p>Front end loaders shall not be used in units or on landings.</p> <p>No tractor yarding is permitted when soil moisture content is 30 percent or greater. Yarding will be limited in accordance with Section 26 if detrimental soil damage is about to occur, as determined by the Authorized Officer.</p>
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- (3) L-9 No ground disturbing activities are permitted in or through the reserve area as shown on Exhibit A.

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- (4) L-11 No new construction of landings or expansion of old landings shall be located within the riparian reserve of any stream as shown on Exhibit A.
- (5) L-18 No ground-based operations shall be conducted on the contract area between October 15th of one calendar year and June 15th of the following calendar year, both days inclusive. The purchaser may request in writing, a conditional waiver of this restriction. If soil moisture conditions are less than 30 percent moisture at 4-6 inches depth, Contracting Officer may approve a conditional waiver. If off-site erosion and sedimentation to local waterways has the potential to occur as a result from said conditional the Authorized Officer, can approve operations outside of the above dates.
- (6) L-18 No road construction, landing construction, or renovation shall be conducted on the contract area between October 15th of one calendar year and June 15th of the following calendar year, both days inclusive. The purchaser may request in writing, a conditional waiver of this restriction. If soil moisture conditions are less than 30 percent moisture at 4-6 inches depth and a specific erosion control plan is prepared and accepted (e.g. rocking, water barring, seeding, mulching, barricading), the Contracting Officer may approve a conditional waiver. Construction work will be stopped if a rain event of 0.2 inches or more within a 24-hour period occurs or resource damage occurs due to soil moisture conditions or rain events. If on-site information is inadequate, measurements from the nearest Remote Automated Weather Station would be used. Construction work may be allowed to resume after 48 hours if the authorized officer determines that construction activities will not result in road damage or transport of sediment due to soil moisture conditions or rain events. If road damage or transportation of sediment resulting from said conditional waiver are not acceptable as determined by the Authorized Officer, the waiver will be revoked.
- (7) L-18 No hauling shall be conducted on natural surface roads between October 15 of one calendar year and June 15th of the following calendar year, both days inclusive. A waiver may be granted by the Contracting Officer if dry conditions occur. Hauling on snow would be allowed on paved roads, adequately surfaced or exempted natural-surface roads when at least 2-4 inches of compacted snow is present on hauling roads. Snow plowing would maintain at least 2-4 inches of snow on hauling roads. In addition to paved roads the following roads may be considered for winter hauling when 2-4 inches of snow or frozen conditions are present with the approval on contracting officer. See table below;

Road Number*	Approximate Length (miles)
38-3E-13.05	0.22
38-4E-7	0.25 (from Dead Indian Mem. Hwy)
38-3E-13.06	0.49

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Road Number*	Approximate Length (miles)
38-3E-19	0.32
38-4E-29	1.65
38-3E-23.2	0.03 (landing only)
Non-GTRN (Non-System) Roads	
Non-System Spur A (T. 38S. R 3E. S. 13)	0.12
Non-System Spur B (T. 38S. R 3E. S. 13)	0.15

- (8) L-18 No decommissioning of roads shall be conducted between October 15 of one calendar year and June 15th of the following year, both days inclusive.
- (9) L-18 No hauling shall be conducted on roads surfaced of pit-run rock or crushed rock between November 15th of one calendar year and May 15th of the following calendar year. A waiver may be granted by the Contracting Officer if dry conditions occur.
- (10) L-18a No disturbance from management activities within units 29-3, and 29-5 shall be conducted between March 1 and September 30th the same calendar year, both days inclusive. This restriction will not apply if it can be shown from northern spotted owl protocol surveys conducted by the Bureau of Land Management in accordance with accepted standards that northern spotted owl presence or nesting activities are not occurring during the year of harvest.
- (11) L-18a No disturbance from management activities within units 1-1, 1-2, 13-4, 13-5, 17-4, 19-2, and 29-5 shall be conducted between March 1 and June 30 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from northern spotted owl, nesting roosting and foraging protocol surveys conducted by the Bureau of Land Management in accordance with accepted standards that northern spotted owl presence or nesting activities are not occurring during the year of harvest.
- (12) L-18a No disturbance from management activities within units 13-4, 13-5, 19-1, 23-1, 29-1, and 29-5 shall be conducted between March 1 and July 31st of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from great grey owl protocol surveys conducted by the Bureau of Land Management in accordance with accepted standards that great grey owl presence or nesting activities are not occurring during the year of harvest.
- (13) L-18a No disturbance from management activities within units 13-5, 19-1, and 23-1 shall be conducted between February 1 and August 15 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from bald eagle protocol surveys conducted by the Bureau of Land Management in accordance with accepted standards that bald eagle presence or nesting activities are not occurring during the year of harvest.

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- (14) L-21 The Purchaser shall provide sufficient warning signs to control traffic on all major haul roads where they pass through the contract area whenever harvest operations are occurring.
- (15) L-21 The Purchaser shall provide sufficient warning signs where haul parallels recreational trail (PCT) along Willow Prairie Road to warn hikers of logging activities in Unit 1-1.
- (16) L-23 Prior to the commencement of operations, the Purchaser shall obtain from the Contracting 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. Any requested changes to the terms and conditions of this contract (such as a change in logging systems) must be authorized by the Contracting Officer through bilateral modification of the contract. A prework conference between the Purchasers authorized representative and the Authorized Officer must be held at a location designated by the Contracting Officer before the logging plan will be approved.
- (17) L-26 In all units shown on Exhibit A, all trees designated for cutting shall be felled away from unit boundaries, property lines, fences, streams, draw bottoms, irrigation ditches, seed trees, cultural areas and reserve area. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (18) L-33 In accordance with the requirements of Sec. 8 of the contract, it has been determined that it is in the best interest of the Government and within the provisions of 43 CFR 5402.0-6 to sell additional timber located in the contract area which is hazardous to workers, severely damaged from the normal conduct of felling or to meet all applicable State safety laws, codes, or regulations. This timber must be cut or removed so that the Purchaser can continue active falling and yarding operations. The Purchaser is, therefore, authorized to cut and remove such additional timber in accordance with the provisions of Section 8 of the contract; provided, however, that:
 - (a) Trees reserved for the tree improvement program and trees reserved for the wildlife habitat objectives under Sec. 40 of the contract are not included in this authorization.
 - (b) The Purchaser shall identify each tree sold and cut in accordance with the provision by marking the cut surface of the stump immediately after falling with a large "X". The "X" shall be cut with a chain saw. The stump shall be marked by yellow flagging so that the stump can be visually located from a distance of not less than 100 feet.

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- (c) The volume and price for such timber shall be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures and paid for by the Purchaser in accordance with Sec. 3(b) or 3(d) of the contract as required by Sec. 8 of the contract.
- (d) No timber may be cut or removed under the terms of this provision if all contract payments required by Sec. 3(b) or 3(d) of the contract have been made.
- (e) The permission to cut and remove additional timber contained in this provision may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser:
 - 1. Failed to properly mark any stump with the "X" cut.
 - 2. Failed to identify the location of any stump.
 - 3. Cut any tree that was reserved for tree improvement and/or wildlife habitat.
 - 4. Cut any tree in or adjacent to cable yarding corridors that was not necessary to facilitate cable yarding.
 - 5. Cut any reserve tree in or adjacent to tractor skid roads that was not necessary to facilitate ground based yarding.
 - 6. Failed to properly segregate any pulled over tree that was yarded to the landing.
 - 7. Cut any reserve tree that was not severely (as defined during the prework conference and documented in the approved logging plan) damaged from felling and yarding operations.
 - 8. Cut more than the minimum number of trees necessary to properly serve as guyline anchor stumps.
 - 9. Cut or topped more than the minimum number of trees necessary to properly serve as tailhold trees.
 - 10. Cut more than the minimum number of trees necessary to properly serve as tiebacks for topped tailhold trees.
 - 11. Failed to maintain accurate and current (no more than 24 hours old) documentation of cut and removed timber.

If the permission to cut and remove additional timber provision is withdrawn, the Authorized Officer shall deliver to the Purchaser a written notice that additional sale of timber under this special provision is no longer approved.

If the permission to cut and remove additional timber provision is withdrawn, the Purchaser shall inform the Authorized Officer at least two working days prior to the need for cutting and yarding any guyline tree, tailhold tree, tieback tree, danger tree, corridor tree, pulled over tree, and severely damaged tree. All sales

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of additional timber shall comply with Section 8 of the contract. The Contracting Officer may order the Purchaser, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the Government to safely measure and mark additional timber.

All ground based equipment skid roads upon which timber may be cut and removed in accordance with this special provision must be needed for the removal of timber sold under this contract and shall be limited to the narrowest width necessary for the yarding of logs with minimum damage to reserved trees.

The Purchaser shall be liable for damages in accordance with Sec. 13 of the contract for any reserved timber cut or removed in violation of the terms of this special provision.

HOWARD TIMBER SALE SPECIAL PROVISIONS

(C) Road Construction - Maintenance - Use

1. RC-1a The Purchaser shall construct, improve and/or 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. RC-1b Prior to removal of any timber, except right-of-way timber, the Purchaser shall complete all construction, improvement, or renovation of structures and roads as specified in Exhibit C.
3. RC-2 The Purchaser is authorized to use the roads listed below and shown on Exhibit D-2 which are under the jurisdiction of the Bureau of Land Management for the removal of Government timber sold under the terms of this contract as required in Exhibit C, provided that the Purchaser pay the required maintenance obligations described in Section 42(C)(6). Any road listed below and requiring improvement or renovation in Exhibit C of this contract, shall be maintained by the Purchaser until receiving written acceptance of the improvement or renovation from the Authorized Officer. The Purchaser shall pay current Bureau of Land Management maintenance fees for the sale of additional timber under modification to the contract.

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
38-3E-13.06	0.49	BLM	ASC
38-3E-19.00 D	1.52	BLM	ASC
38-3E-25.00 A	0.18	BLM	ASC
38-4E-19.00	0.30	BLM	PRR
38-4E-19.04	0.20	BLM	ASC
38-4E-29.00	1.71	BLM	ASC
39-4E-6.03 A	0.66	BLM	ASC
39-7E-31.00	4.48	BLM	BST
Total	9.54		

4. RC-2a The Purchaser is authorized to use the roads listed below and shown on Exhibit D-2 which are under the jurisdiction of the Bureau of Land Management, Juniper Properties LLC and or Fred Robertson, for the removal of Government timber sold under the terms of this contract as required in Exhibit C, provided that the Purchaser comply with the conditions set forth in Section 42(C)(9). The Purchaser shall pay current Bureau of Land Management rockwear fees for the sale of additional timber under modification to the contract.

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Road No. and Segment	Length Miles Used	Road Control	Road Surface Type
38-3E-13.05	0.22	BLM	NAT
38-3E-23.01	1.04	BLM	NAT
38-3E-23.03	0.33	BLM	NAT
38-3E-25.02	0.75	BLM	NAT
38-3E-27.01A	0.07	BLM	NAT
38-3E-27.01B	0.53	PVT	NAT
38-3E-27.01C	1.15	BLM	NAT
38-4E-7.00 A-C	1.79	BLM	NAT
38-4E-7.07	0.13	BLM	NAT
38-4E-17.00	0.27	BLM	NAT
38-4E-19.03	0.50	BLM	NAT
39-4E-6.03 B	0.67	BLM	NAT
Total	6.25		

5. RC-2b With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users on road included in Section 42(C)(4) of this contract; provided, that such cooperative arrangement shall not relieve the Purchaser of his 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.

6. RC-2c The Purchaser shall pay the Government a road maintenance obligation in the amount of Three Thousand Six Hundred Twenty Eight and 71/100 dollars (\$3628.71) for the transportation of timber included in the contract price and for the transportation of any mineral material required under the terms of the contract over road or roads listed in Section 42(C)(3).

The above road maintenance amount is for use of 9.54 miles of road or less. Unless the total maintenance amount is paid prior to commencement of operations on the contract area, payments shall be made in installments of not less than Five hundred dollars (\$500.00); payable in the same manner as and together with payments required in Sec. 3 of this contract. The total maintenance amount shall be paid prior to the removal of timber from the contract area.

7. RC-2d The Purchaser shall be authorized to use other roads not included in Section 42(C)(3) and/or Section 42(C)(4) provided, that in the use of such road(s), the Purchaser shall pay the Government current Bureau of Land Management road maintenance fees for the particular surface type of the road(s) used.

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For administrative purposes the total maintenance and rockwear obligation due shall be based upon the estimated volume set forth in Exhibit B of this contract and mileage of roads used as determined by the Authorized Officer.

In the event logs are hauled over more than one route, the estimated volume set forth in Exhibit B shall be proportioned on the basis of actual volume removed. Prior to the use of such roads, the Purchaser shall give written notice to the Authorized Officer of the roads intended for use in the removal of the timber purchased under this contract, together with an estimate of the volume to be hauled over such roads.

Section 42(C)(6) of this contract shall be amended to include adjustments of fee obligations.

8. RC-2f The Authorized Officer may at any time by written notice, terminate the Purchaser's operator road maintenance obligations and require instead payment of current Bureau of Land Management road maintenance fees for the particular surface type of the road(s) involved. These fees will be applied to the remaining contract volume on the sale area to be transported over road or roads listed in Section 42(C)(4). The Purchaser shall pay the total maintenance amount for said road(s) within thirty (30) days following receipt of written notice; provided, however, that if the total amount exceeds five hundred and no/100 dollars (\$500.00), the Purchaser may elect to make payment in installments in the same manner as and together with payments required in Section 3 of this contract.
9. RC-2h 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.
10. RC-3 In the use of road No. 38-3E-27.01 B1 and B3 the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000D dated April 9, 2002 between the United States of America and Juniper Properties LLC. These conditions include: Payment to Juniper Properties LLC, a road use obligation of Three Hundred Twenty and 00/100 dollars (\$320.00) payable at the time indicated in the license agreement. This document is available for inspection at the Bureau of Land Management, Medford District Office, 3040 Biddle Road, Medford, Oregon 97504. Prior to the use of said road(s), the Purchaser shall furnish the Authorized Officer a copy of the executed License Agreement. Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid

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fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.

11. RC-3 In the use of road Nos. 38-3E-27.01 B2 the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-660 dated October 5, 1962, between the United States of America and Fred Robertson. This document is available for inspection at the Bureau of Land Management, Medford District Office, 3040 Biddle Road, Medford, Oregon 97504. Prior to the use of said road(s), the Purchaser shall furnish the Authorized Officer a copy of the executed License Agreement. Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
12. RC-3d The Purchaser 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, the Purchaser shall request and agree to the modification of this contract to provide for such use and for allowances for amortization of the Government's share of the capital investment of any such road.
13. RC-8 The Purchaser shall be required to secure written approval to use vehicles or haul equipment over Government owned or controlled roads and/or structures when that vehicle or equipment exceeds the maximum allowable weights or dimensions established by the State for vehicles operating without a permit.

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.)

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The Purchaser shall be responsible for repair of any damage to roads or structures caused by the use of overweight or over-dimension vehicles (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.

(D) Environmental Protection

- (1) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall:
 - (a) Construct earth and log motor vehicle barricades on all temporary roads which intersect any haul road. *See Exhibit A maps*
 - (b) Construct, use, and decommission temporary roads during the dry season of the year. Temporary roads shall be decommissioned the same year they are constructed.
 - (c) Water bar all skid trails and temporary roads utilized in the contract area in accordance with specifications shown on Exhibit W.
 - (d) Temporary roads identified for decommissioning would be closed by scarifying roads to a depth of six (6) inches, placing logs, slash, boulders, earthen berms, and other material at the entrance and throughout its length sufficient to preclude vehicle use. Waterbars would be constructed as determined by the authorized officer, and seed and mulch per Section 42(D)(4) of this contract. Refer to Exhibit A map and Exhibit C instructions.
 - (e) Abate dust created from hauling in accordance with Exhibit D.
 - (f) Block and camouflage road 38-3E-13.6 to prevent unauthorized access and unwanted OHV use.
 - (g) Construct earth and log motor vehicle barricades on all major skid roads which intersect any haul road. Lop and scatter slash along skid road in front of and behind barrier to prevent OHV use.
 - (h) Fill slope on all new roads and landings would be seeded with native or approved seed.
 - (i) Roadside noxious weed populations along haul routes and work areas would be treated prior to soil-disturbing activities, with subsequent treatments as necessary and as funding is available. Noxious weed populations in existing quarries or stockpiles used for road rocking would be treated prior to use.

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- (2) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall prepare a Spill Prevention, Control, and Countermeasure Plan for all hazardous substances to be used in the contract area, as directed by the Authorized Officer. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. Such plans must comply with the State of Oregon DEQ OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements.
- (3) E-1 In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall implement the following noxious weed control measures shall be implemented by the purchaser:
- (a) In order to prevent the potential spread of noxious weeds into the Medford District BLM, the operator would be required to clean all logging construction, rock crushing, and transportation equipment prior to entry on BLM lands.
 - (b) Cleaning shall be defined as removal of dirt, grease, plant parts, and material that may carry noxious weed seeds into BLM lands. Cleaning prior to entry onto BLM lands may be accomplished by using a pressure hose.
 - (c) Only logging and construction equipment inspected by the BLM would be allowed to operate on federal land within the contract area. All subsequent move-ins of logging and construction equipment as described above shall be treated the same as the initial move-in.
 - (d) Prior to initial move-in of any logging or construction equipment, and all subsequent move-ins, the operator shall make the equipment available for BLM inspection at an agreed upon location off Federal lands.
 - (e) Logging and construction equipment would be visually inspected by the Authorized officer to verify that the equipment has been reasonably cleaned.
- (4) E-1 Scarify and contour landings to provide for adequate drainage. Bare soil due to landing construction/renovation would be protected and stabilized prior to fall rains to reduce soil erosion and sediment potential. Straw mulch and seed exposed earth on temporary logging spurs and tractor landings with certified weed free straw and seed mixture as directed and approved by the Authorized Officer. Selected landings may be left "as is" where natural rock occurs or where vegetation/topography prevents movement of sediment, as determined by the Authorized Officer. The seed mix and straw shall be provided by the purchaser from an approved commercial source, or may be provided by the BLM if the purchaser is unable to locate and buy the certified seed and straw. The purchaser shall reimburse the government for the cost of seed and straw if provided by the government.

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The Purchaser shall furnish and apply to acres designated for treatment as directed by the Authorized Officer, a mixture of grass seed and mulch material at the following rate of application:

Grass seed	20 lbs./acre
Straw mulch	1000 lbs./acre (approx. 2 inches in depth)

The Purchaser shall furnish the following species of grass seed meeting corresponding germination, purity, and weed content requirements:

	Germination	Purity	Weed Content
<u>Species</u>	<u>Min. %</u>	<u>Min. %</u>	<u>Max. %</u>
California Brome	85	95	0.2
Blue Wild Rye	85	95	0.2

The grass seed furnished shall meet the minimum requirement for Blue Tag Seed as set forth in the latest edition of Oregon Certification Standards published by Oregon State University. Seed source shall be approved by the Authorized Officer and shall be from the general region where the project occurs. Straw mulch shall be from native grass or other approved grain crops which are certified weed free, and free of mold or other objectionable materials. Straw mulch shall be in an air-dry condition and suitable for placing in a uniform manner.

The Purchaser shall mix grass seed in the following proportions:

	Percent of	
<u>Species</u>	<u>Total by Wt.</u>	<u>Lbs. per Acre</u>
California Brome	50%	10
Blue Wild Rye	50%	10
TOTALS	100%	20 lbs./ac.

The Purchaser shall furnish the Authorized Officer a Seed Test result from a certified seed testing lab (i.e. Oregon State University), which shall include: date of test; lot number of each kind of seed; seed source; and results of tests as to name, percentages of purity and of germination, weed species and percentage of weed content, for each kind of seed furnished and, in case of mixture, the proportions of each kind of seed. The seed must have been tested within the last year to be accepted for use on this contract. The seed and straw mulch shall be applied between August 1 and October 15. The Purchaser shall notify the Authorized Officer at least 5 days in advance of the date he intends to commence the specified soil stabilization work.

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- (5) E-1 Purchaser will be responsible for two crushed rock approaches to limit the mud and debris on paved roadways from logging trucks and equipment moving. The approaches will be on temp roads and be a one hundred fifty (150) feet from paved roadway. Rock will need to be hauled and spread to correct distance before any hauling in of equipment or loading and hauling of logs. Temp roads are in Units 7-1 and 1-1, see exhibit A map.
- (6) 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 W or section C-9, which is attached hereto and made a part hereof.
- (7) E-4 The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Contracting Officer that:
- (a) threatened or endangered plants or animals protected under the Endangered Species Act of 1973, as amended, may be affected by the operation, and a determination is made that consultation or reinitiation of consultation is required concerning the species prior to continuing operation, or;
 - (b) when, in order to comply with the Endangered Species Act, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
 - (c) federal proposed, federal candidate, Bureau sensitive or State listed species protected under BLM Manual 6840 - Special Status Species Management - have been identified, and a determination is made that continued operations would affect the species or its habitat, or;
 - (d) other active raptor nests have been discovered, and a determination is made that continued operations under this contract would adversely affect the present use of the discovered nesting area by the raptor, or;
 - (e) when, in order to comply with a court order which enjoins operations on the sale or otherwise requires the Bureau of Land Management to suspend operations, or;
 - (f) when, in order to comply with a court order, the Contracting Officer determines it may be necessary to modify or terminate the contract, or;
 - (g) species have been discovered which were identified for protection through survey and manage and/or protection buffer standards and guidelines

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established in the ROD and RMP, and the Contracting Officer determines that continued operations would affect the species or its habitat, or;

- (h) when, in order to protect species which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP, the Contracting Officer determines it may be necessary to modify or terminate the contract.

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

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

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shall reimburse the Government the amounts refunded or transferred. The Purchaser may choose to pay this reimbursement at once or in installments payable at the same time as payments are due for the timber under the contract and in amounts approximately equal to the expenses associated with the timber for which payment is due.

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

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

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

The Purchaser specifically and expressly waives any right to claim damages, other than those described in the preceding paragraphs, based on an alleged breach of any duty to the Purchaser, whether express or implied, in regard to the manner in which the Government defended the litigation which resulted in the court order affecting the operation of the contract. This waiver also extends to any claims based on effects on the operation of the contract that arise from litigation against another agency. Furthermore, the Purchaser specifically acknowledges and agrees that a court ruling that the Government violated the Administrative Procedures

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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.

- (8) E-5 The Purchaser shall immediately discontinue specified construction or timber harvesting operations upon written notice from the Authorized Officer that a spotted owl has been located in the sale area. Discontinued operations may be resumed upon receipt of written instructions and authorizations by the Authorized Officer.
- (9) E-6 The Purchaser shall notify the Authorized Officer in writing by February 1 of each calendar year in which operations are expected to take place on the contract area as limited in section 42(B) L-18a of this contract, between March 1 and September 30 both days inclusive. If notification is not received by the Authorized Officer by February 1, felling, bucking, yarding, road construction, or any other activity with the potential to disturb nesting owls may not be allowed during this time period.

Upon receipt of a notice that the Purchaser expects to perform such operations during this time period, the Government will conduct surveys in units 29-3, 29-4, and 29-5 (northern spotted owl reserves) and units 1-1, 13-4, 13-5, 17-4, 19-2, 29-5 (northern spotted owl nesting, roosting, foraging) to determine whether spotted owls are nesting within 0.25 miles of the harvest units to be logged using ground based logging systems. If it is determined that spotted owls are not nesting or that no young have been produced, the Authorized Officer may lift the seasonal restriction on such operations in writing. Without this written approval, such operations are prohibited from March 1 through September 30 (March 1 through June 30 for NRF) of each year.

(E) Miscellaneous

- (1) M-2 The Government, at its option, may administratively check scale any portion of the timber removed from the contract area, and if necessary, conduct check scaling of independent scalers contracted to BLM for administrative check scaling purposes. The Purchaser hereby agrees to make such contract timber available for such scaling at a location or locations to be approved in writing by the Authorized Officer. At the approved location or locations, the Purchaser shall provide an area for logs to be safely rolled out for scaling, to unload logs from trucks, place logs in a manner so that both ends and three faces of each log are visible for scaling, and to reload or remove logs after scaling has been completed. In the event that BLM elects to administratively check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows: If the entire sale is check scaled, the purchase price of this contract

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shall be reduced by one thousand six hundred seventy seven and 50/100 dollars (\$1677.50). In the event that only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of one thousand six hundred seventy seven and 50/100 dollars (\$1677.50) which is equal to the percentage of timber sold which was actually scaled by the Government. For purposes of computing this price reduction, the percentage of timber sold which has been scaled shall be determined by the Government. Any reduction in purchase price under the terms of this provision shall be full compensation to the Purchaser for any expense or loss incurred as a result of such scaling. Scaling shall be conducted in accordance with the Northwest Log Rules Eastside Log Scaling Handbook, as amended, or supplemented by BLM before the first advertisement date of the sale, by BLM scalers, and/or independent scalers contracted to BLM. A copy of the scale report will be made available to the Purchaser upon request.

- (2) M-5 The Purchaser shall, without expense to the government, be responsible for obtaining any necessary licenses and permits and for complying with any and all Federal, State, County and municipal laws, codes, regulations, and administrative rules applicable to the performance of this contract. The Purchaser shall also be responsible for all damages to any persons or property that arise out of any operations under this contract and result from any breach of contract or wrongful or negligent act or omission of the Purchaser, its contractors, subcontractors, or employees of any of them.

(F) 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) 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 State of Oregon, Department of Forestry.
 - (b) Provide and maintain in good repair, on the contract area, the following equipment for use during closed fire season or periods of fire danger:
 - (1) F-2a Fire fighting tools shall be kept at each landing or at such other place as the Authorized Officer shall designate whenever people are working on the contract area. All fire fighting tools shall be kept in a sturdily constructed box which shall be painted red and lettered on the front or top in large letters, "For Fire Only."

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The box shall have a hinged lid and a hasp by which the lid can be sealed. One box may serve two landings not over six hundred (600) feet apart. When filled, the box shall not weigh over two hundred (200) pounds. The fire tools shall be in good condition, be tight on strong handles, and have sharp cutting edges. There shall not be less than four (4) tools in each box nor less than one (1) tool for each person working on the contract area. Three-fourths ($\frac{3}{4}$) of all fire tools shall be shovels, hazel hoes, or other scraping tools. The fire tools shall be used only for fighting fire.

- (2) F-2b A round pointed size "0" or larger shovel in good condition, shall be within fifty (50) feet of any power saw when in operation
- (3) F-2c At each landing during periods of operation one (1) tank truck. Each truck shall have three hundred (300) gallons minimum 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) 477.645 through ORS 477.670 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.
- (4) F-2d Serviceable radio or radio-telephone equipment able to provide prompt and reliable communication between the contract area and Medford, Oregon. Such communication shall be available during periods of operation including the time watch-service is required.
- (5) F-2g Two (2) back-pack pumps at each landing and one (1) at each tail block, all to be kept full of water and in good operating condition.
- (6) 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 on the contract area. Such fire extinguisher shall be filled and in effective

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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 "0" or larger shovel 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.

(G) Slash Disposal and Site Preparation

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:

- (1) SD-1c HAND PILING Hand pile all slash in all units specified in exhibit S in accordance with the following specifications: Slash, as defined for this section, shall mean all material (brush, limbs, tops, unmerchantable stems, and chunks) severed or knocked over as a result of purchasers operations under the terms of this contract.

Piling shall be accomplished by hand. Finished piles shall be tight and free of earth. Pile all slash which is between one (1) and six (6) inches in diameter on the large end and exceeds two (2) feet in length. A six (6) foot by six (6) foot sheet of six (6) mil. black plastic or equivalent material shall be placed in each pile in a manner such that approximately one-third of the pile lies above it to hold it in place and so that a two (2) foot by two (2) foot dry ignition point is maintained for one (1) year or until burned. The ignition point will consist of fine fuel material such as needles, small limbs, and branches less than one-half (1/2) inch in diameter and free of dirt. Piles shall be constructed by aligning individual pieces in the same direction and placing the heavier slash on top. Piles shall have a stable base to prevent toppling. The long axis of individual pieces shall be oriented up and down the slope. Protruding pieces shall be trimmed to allow covering in a manner that permits the pile to shed water. Height shall be no less than five (5) feet and no greater than eight (8) feet; width shall not exceed six (6) feet; piles shall be circular and not windrowed. No pile shall be located in any stream channel or bottom of dry draws; on

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down logs or stumps, within twenty-five (25) feet of any other pile, unit boundary or the trunk of the nearest living tree. No portion of the pile will be under the crown of any living tree.

Operations required by this provision shall be kept current with yarding as directed by the Authorized Officer and shall be conducted as follows:

- (a) Piling shall be completed in each unit or portion thereof, within four (4) weeks after completion of yarding that unit, or portion thereof.
 - (b) Slash in 10 acres of unit 13-4 as shown in Exhibit S, will not be handpiled as per section 42(G)(2) for Lop and scatter instructions.
- (2) SD-1f LOP AND SCATTER Lop and scatter all slash as directed by the Authorized Officer , concurrently with normal felling operations. All tops and side branches must be free of the central stem so that such slash is reduced to the point that it is within twelve (12) inches of the ground at all points.
 - (a) Slash in 10 acres in unit 13-4 as shown in Exhibit S, will be lop and scatter to a Height of not more than twelve (12) inches off the ground. Slash shall be spread evenly to prevent any unauthorized ATV use through the area.
- (3) SD-1i LANDING PILES Pile all slash located within one hundred (100) feet on each side of log landing. Slash shall be piled by hand or machine. Finished piles shall be tight and free of earth.
 - (a) A ten (10) foot by ten (10) foot cover of six (6) mil. black plastic or equivalent material shall cap each landing pile to maintain a dry ignition point. The cover shall be firmly fixed to each pile to hold it in place. Maximum pile size shall be twenty (20) feet in diameter by fifteen (15) feet in height.
- (4) SD-5 Perform logging residue reduction and site preparation work on Approximately five hundred twenty nine (529) acres of harvest area located in the harvest units as shown on Exhibit A.
 - (a) The required work shall consist of any treatment or combination of treatments listed in the table below, as determined by the Authorized Officer and specified in writing by the Contracting Officer. The number of acres of each treatment shall be determined by the Authorized Officer.

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(b) The Total Purchase Price set forth in Section 2 shall be adjusted by the amount that the total cost of the site preparation treatments designated pursuant to Section 42(G)(1)(a) differs from \$199,941.00 as calculated by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 42(G)(1)(a). Actual acres treated may vary considerably from the estimated acres shown in Section 42(G)(1)(b).

Handpile and Cover	Cost/Acre
Level I	\$287.00
Level II	\$376.00
Level III	\$507.00
Lop and Scatter	Cost/Acre
Lop and Scatter 12" high	\$41.00

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

Handpile and Cover Appraised Treatment	Acres	Cost/Acre	Total Cost per Treatment
Level I	14	\$287.00	\$4,018.00
Level II	462	\$376.00	\$173,712.00
Level III	43	\$507.00	\$21,801.00
Total Appraised Cost	519		\$199,531.00

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

Lop and Scatter	Acres	\$/Acre	Total \$
Lop and scatter 12 " high	10	\$41.00	\$410.00

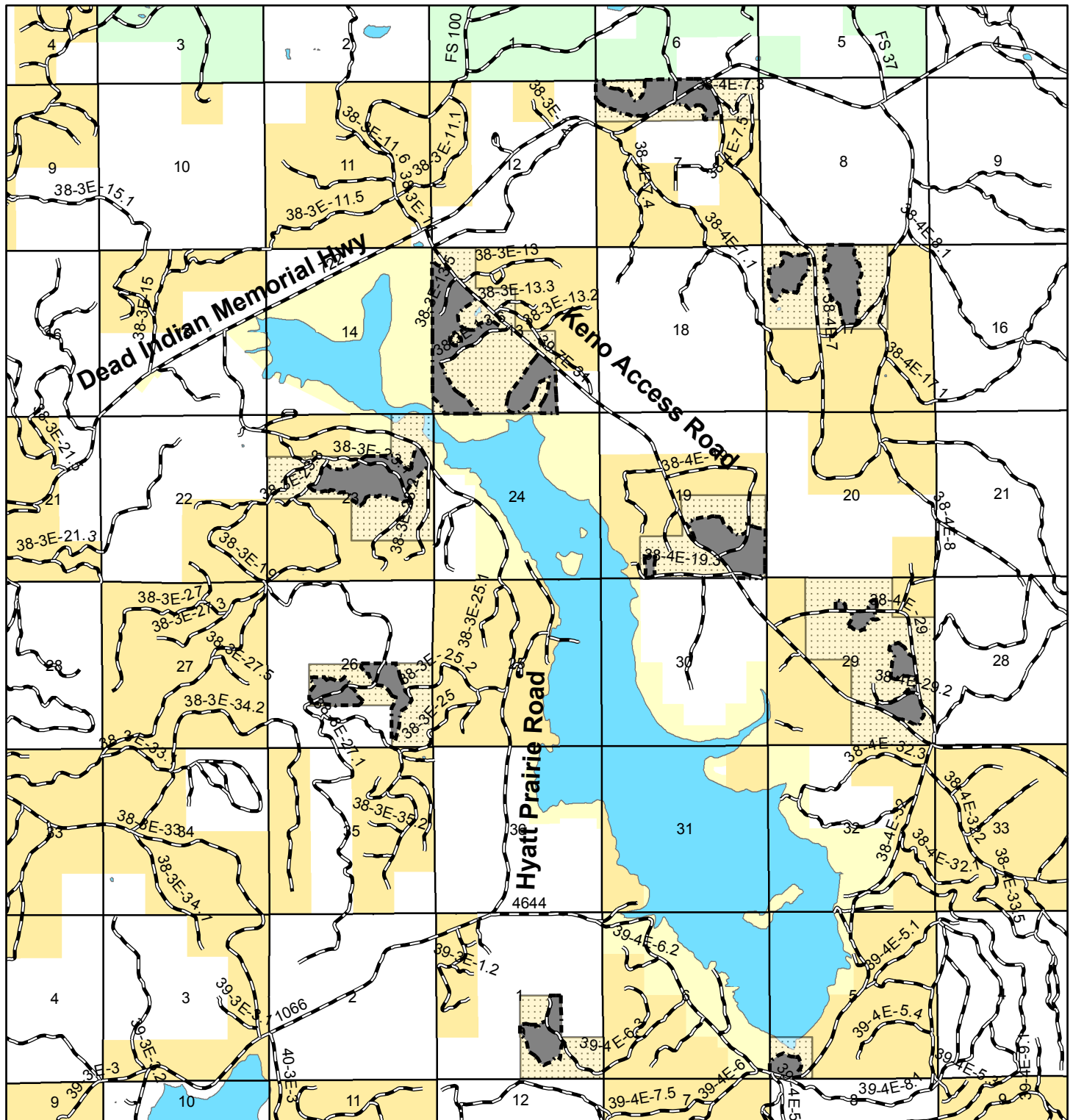
Total Fuels Treatment cost of \$199,941.00

(H) Equal Opportunity in Employment

Certification of Nonsegregated Facilities attached hereto and made a part hereof.

U.S.D.I. BLM MEDFORD DIST. SALE NO. 14-14
 T. 38 S. R. 03 E. SEC. 13, 23, 26; T. 39 S. R. 03 E. SEC. 01
 T. 38 S. R. 04 E. SEC. 7, 17, 19, 29; T. 39 S. R. 04 E. SEC. 05
 HOWARD TIMBER SALE

TIMBER SALE CONTRACT MAP
 CONTRACT NO. ORM06-TS14-14
 EXHIBIT A



0 0.475 0.95 1.9 Miles

1 inch = 4,500 feet

— Road

Howard Timber Sale Units

Howard Contract 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.

U.S.D.I. BLM MEDFORD DIST. SALE NO. 14-14
T. 38 S R. 03 E SEC. 13, 23, 26; T. 39 S. R. 03 E. SEC. 01
T. 38 S R. 04 E SEC. 7, 17, 19, 29; T. 39 S. R. 04 E. SEC. 05
HOWARD TIMBER SALE

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM06-TS14-14
EXHIBIT A












TRACTOR YARDING SYSTEMS BLUE MARKED UNITS

UNITS 13-4, 13-5, 23-1, 26-1, 26-2, 7-1,
17-1, 17-4, 19-1, 19-2, 29-1, 29-2, 29-3,
29-5, 1-1, 1-2613 AC.

TOTAL RESERVE AREA.....1587 AC.

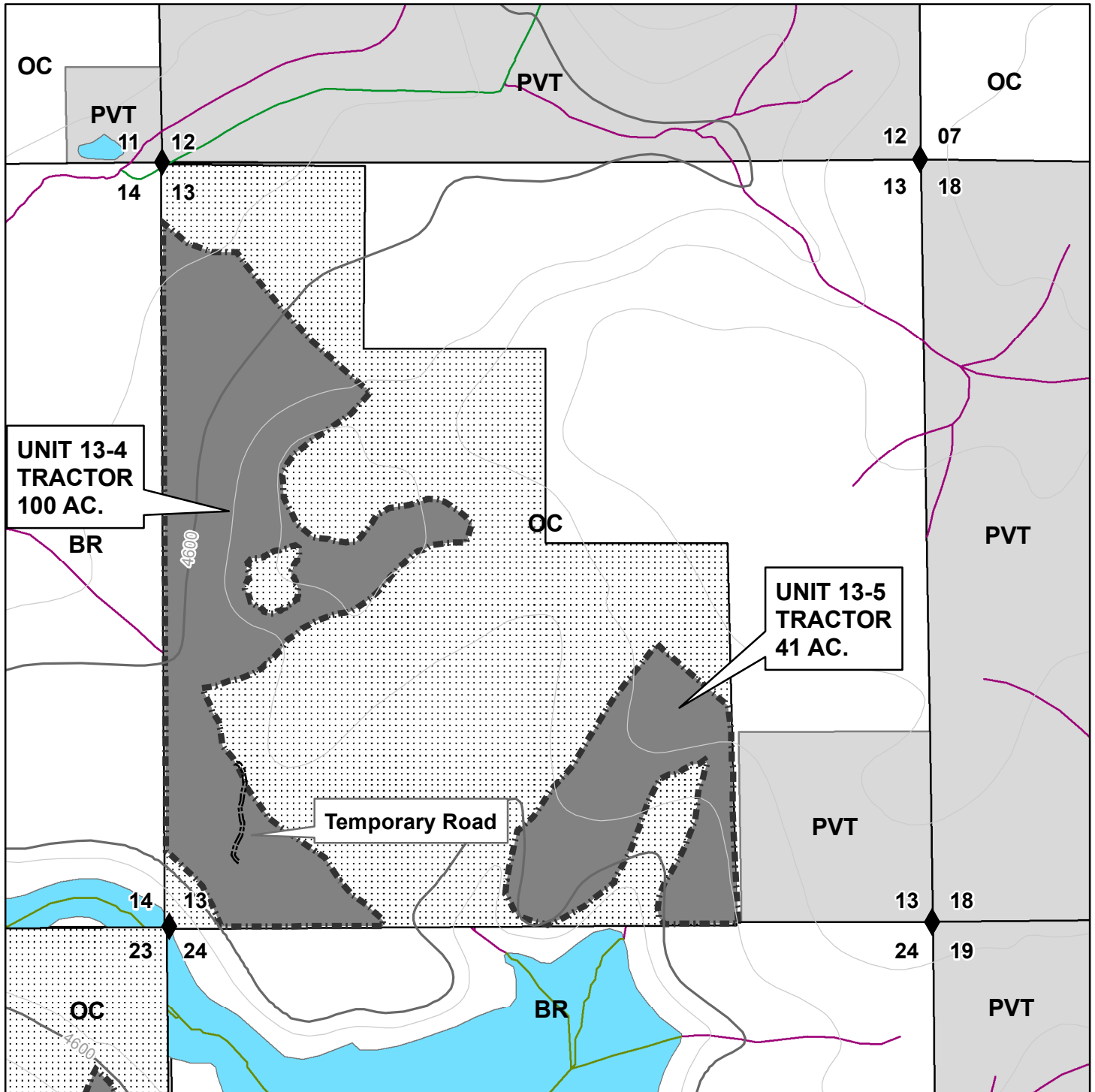
TOTAL CONTRACT AREA2200 AC.

Legend

-  Road
-  cadastral
-  Stream
-  Index
-  Intermediate
-  Temp_Roads
-  Howard Timber Sale Units
-  Howard Contract Area
-  Section
-  GovtLots
-  Quarry



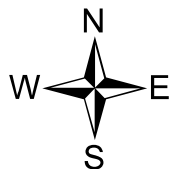
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



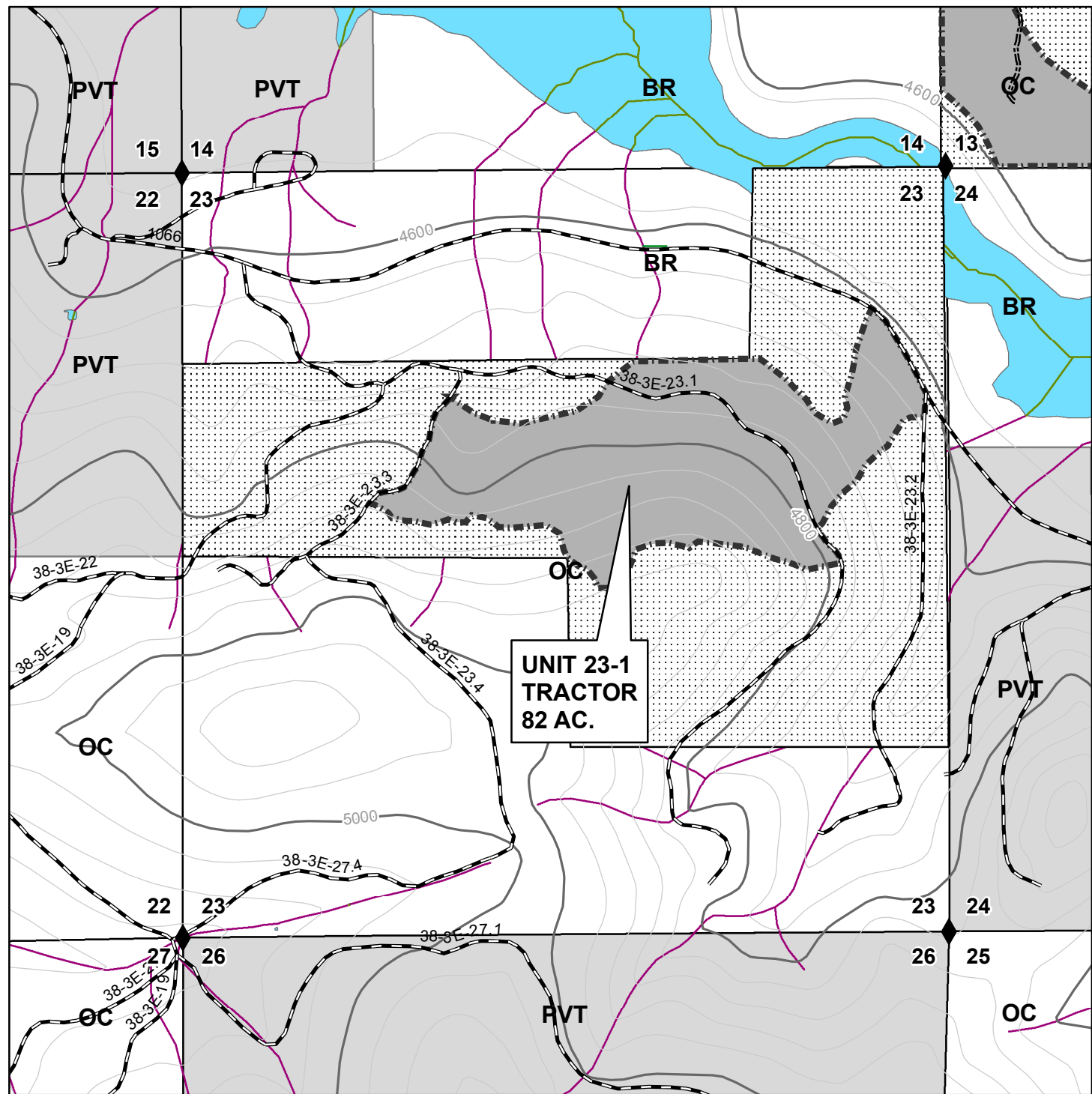
40 FOOT CONTOURS

0 0.1 0.2 0.4 Miles

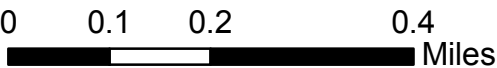
1 inch = 1,000 feet



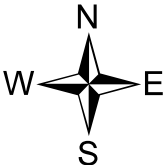
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



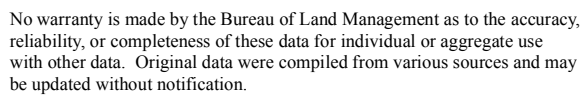
40 FOOT CONTOURS

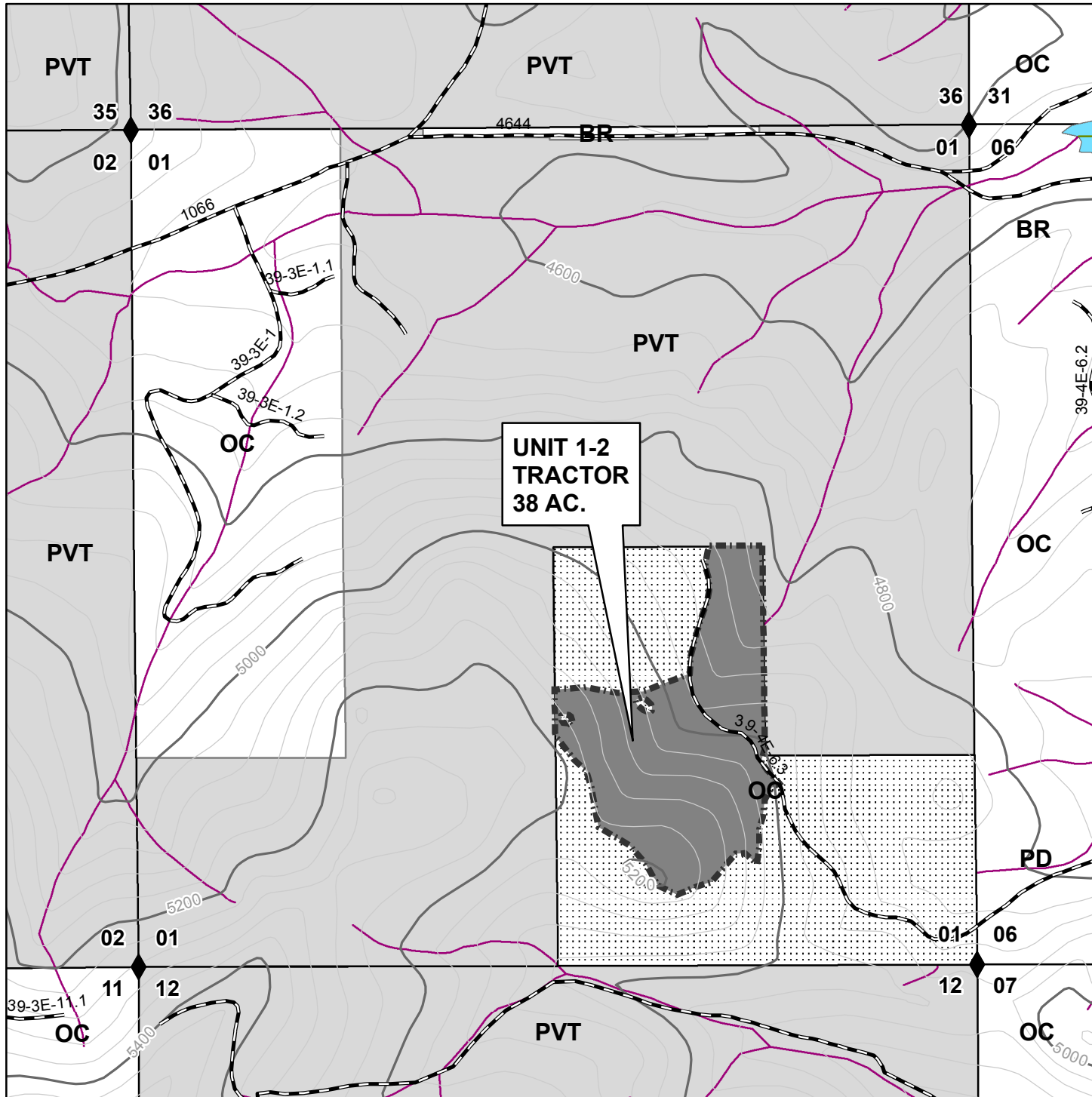


1 inch = 1,000 feet



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





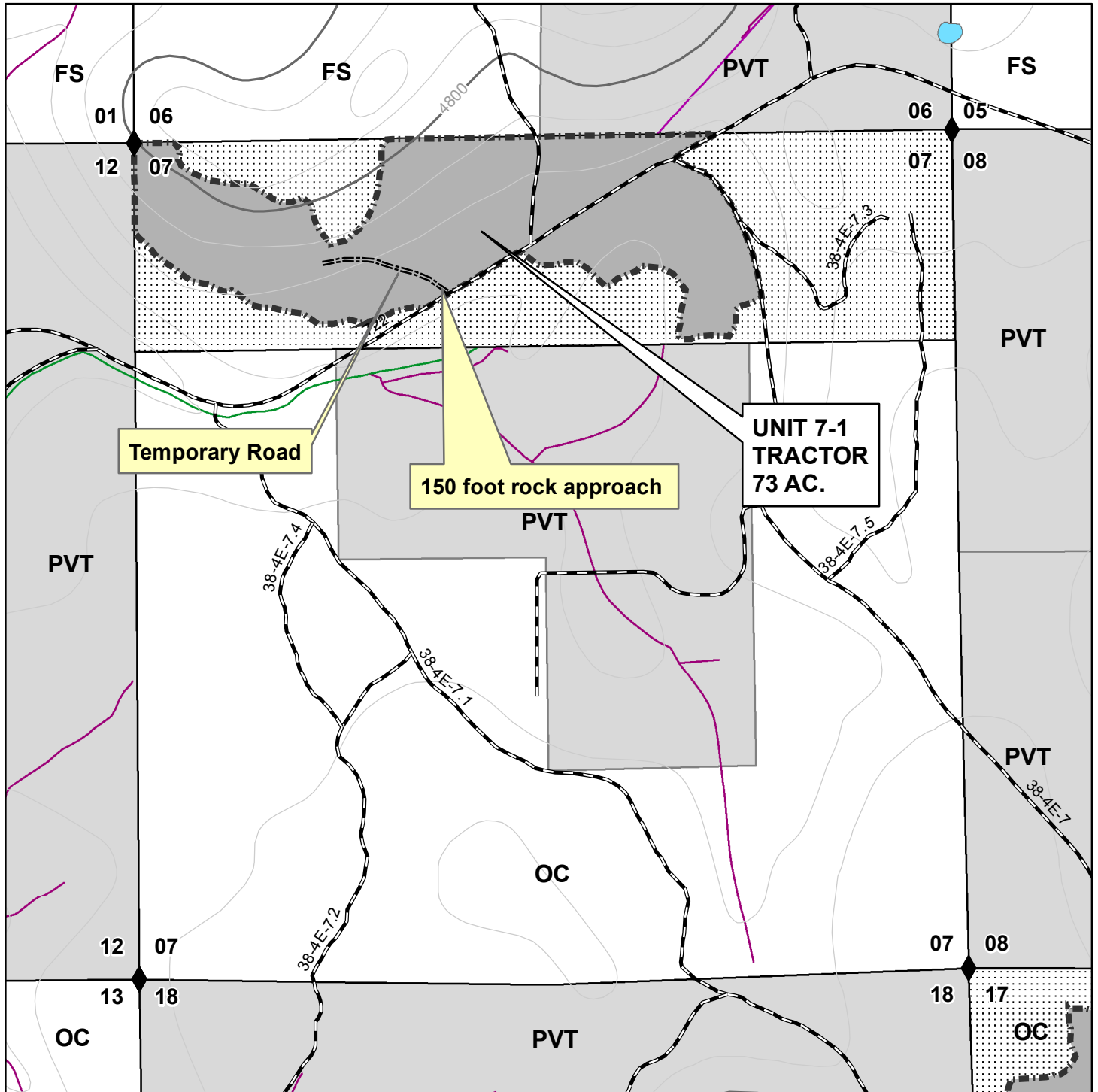
40 FOOT CONTOURS

0 0.1 0.2 0.4
Miles

1 inch = 916.666667 feet



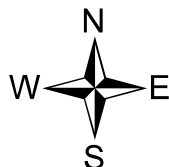
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



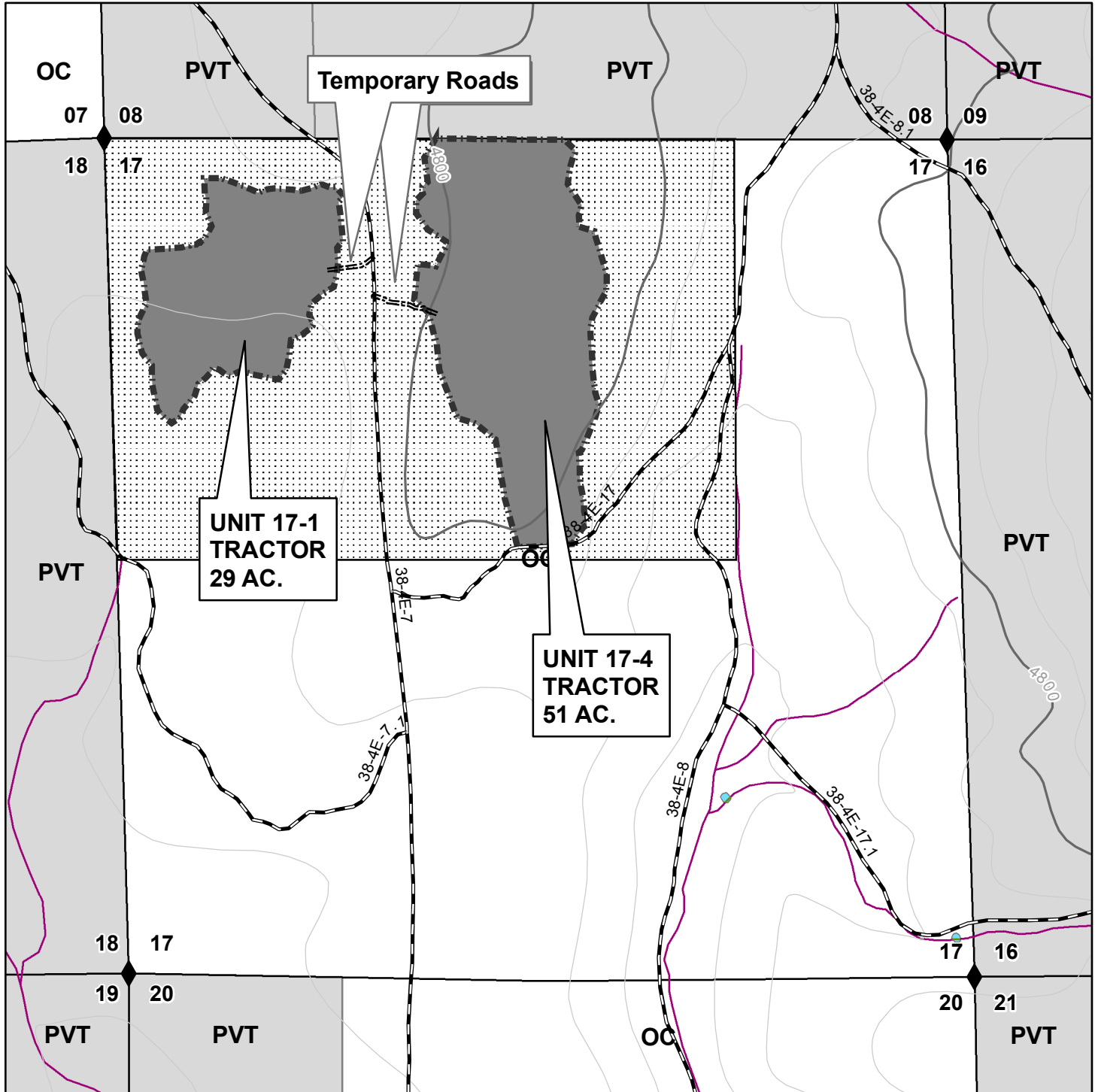
40 FOOT CONTOURS

0 0.1 0.2 0.4
Miles

1 inch = 916.666667 feet



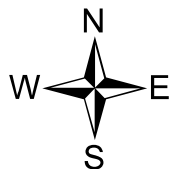
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



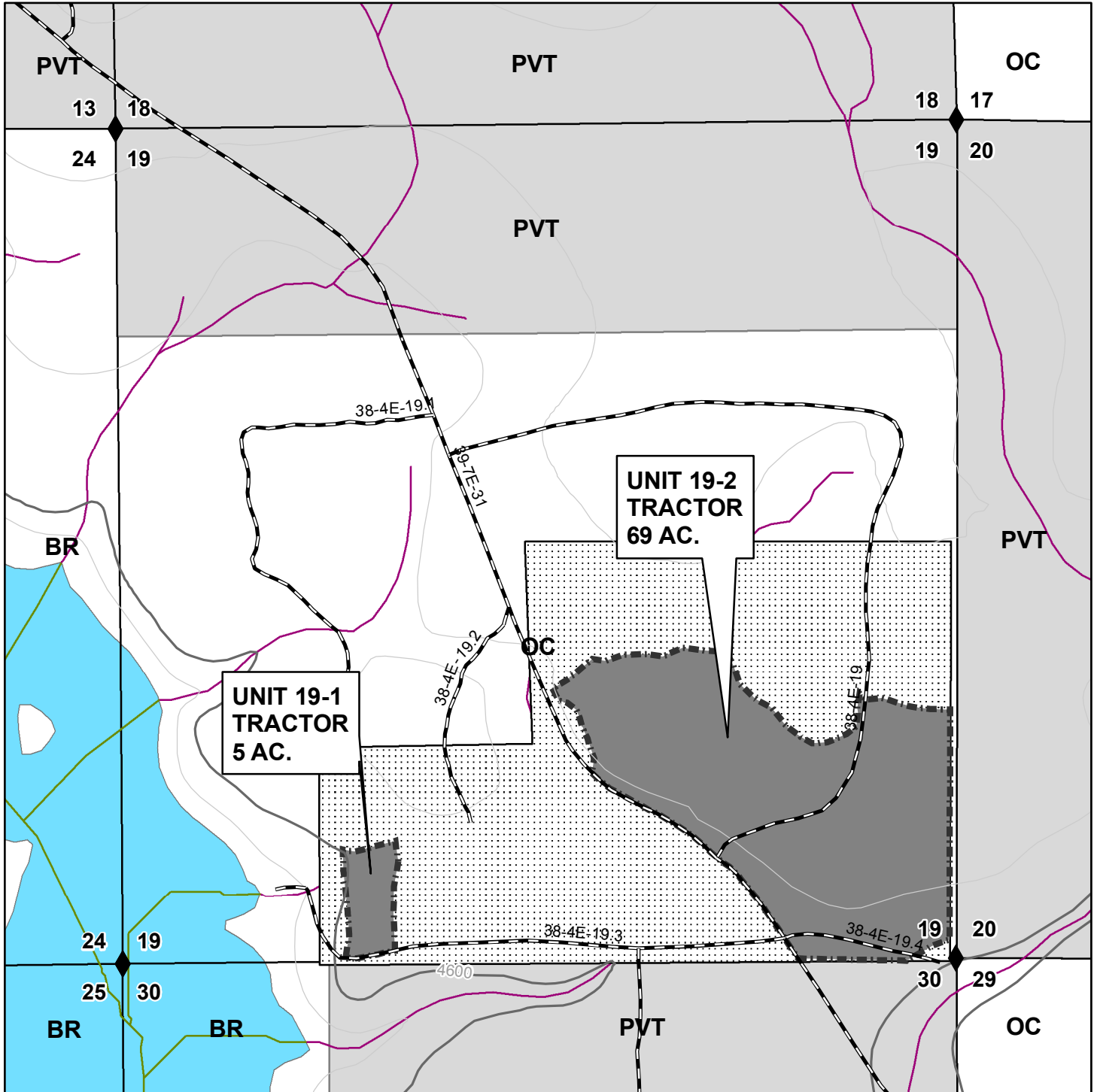
40 FOOT CONTOURS

0 0.1 0.2 0.4
Miles

1 inch = 916.666667 feet



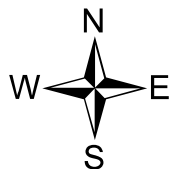
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



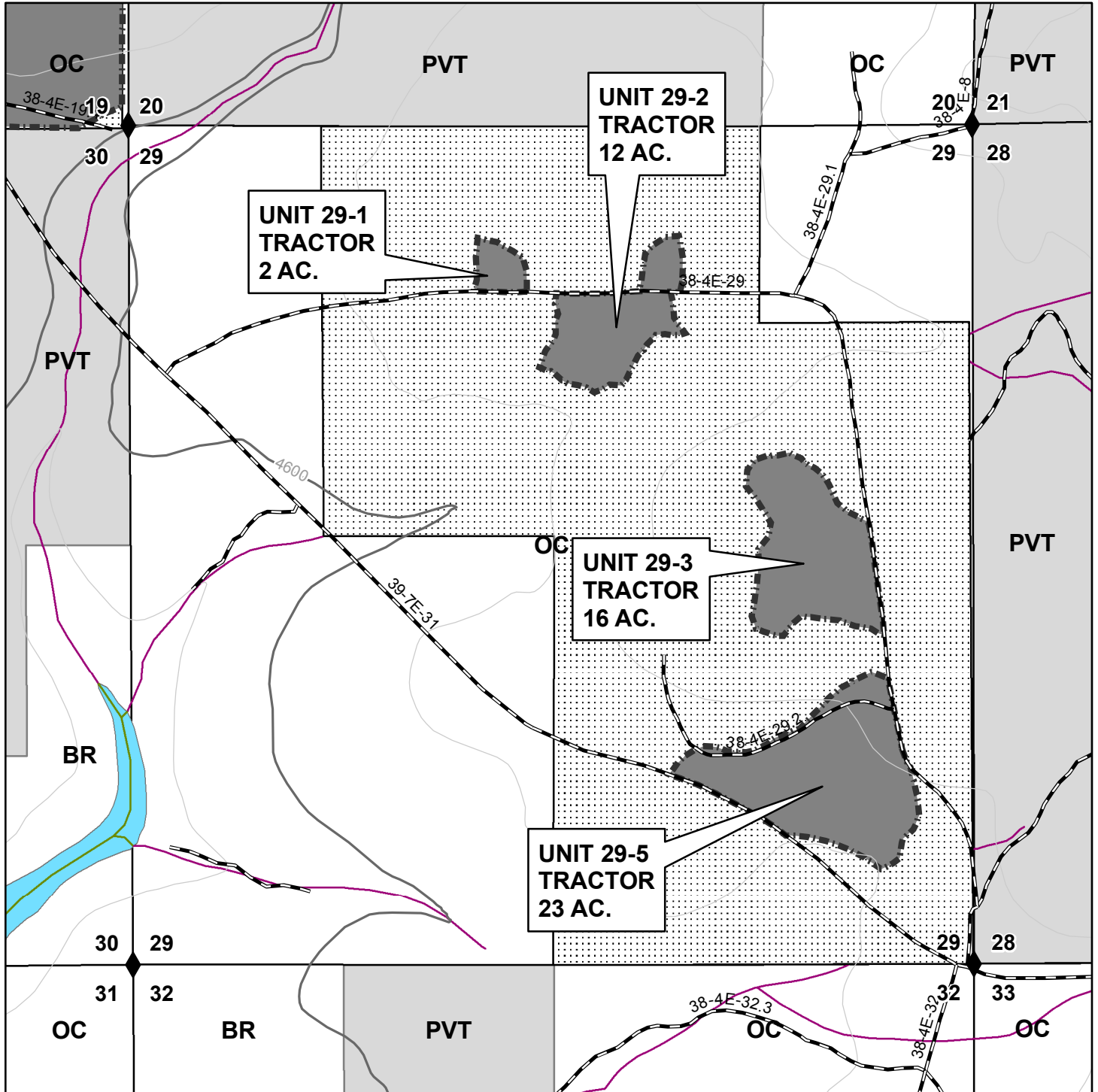
40 FOOT CONTOURS

0 0.1 0.2 0.4
Miles

1 inch = 916.666667 feet



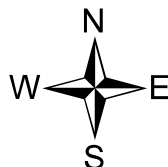
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



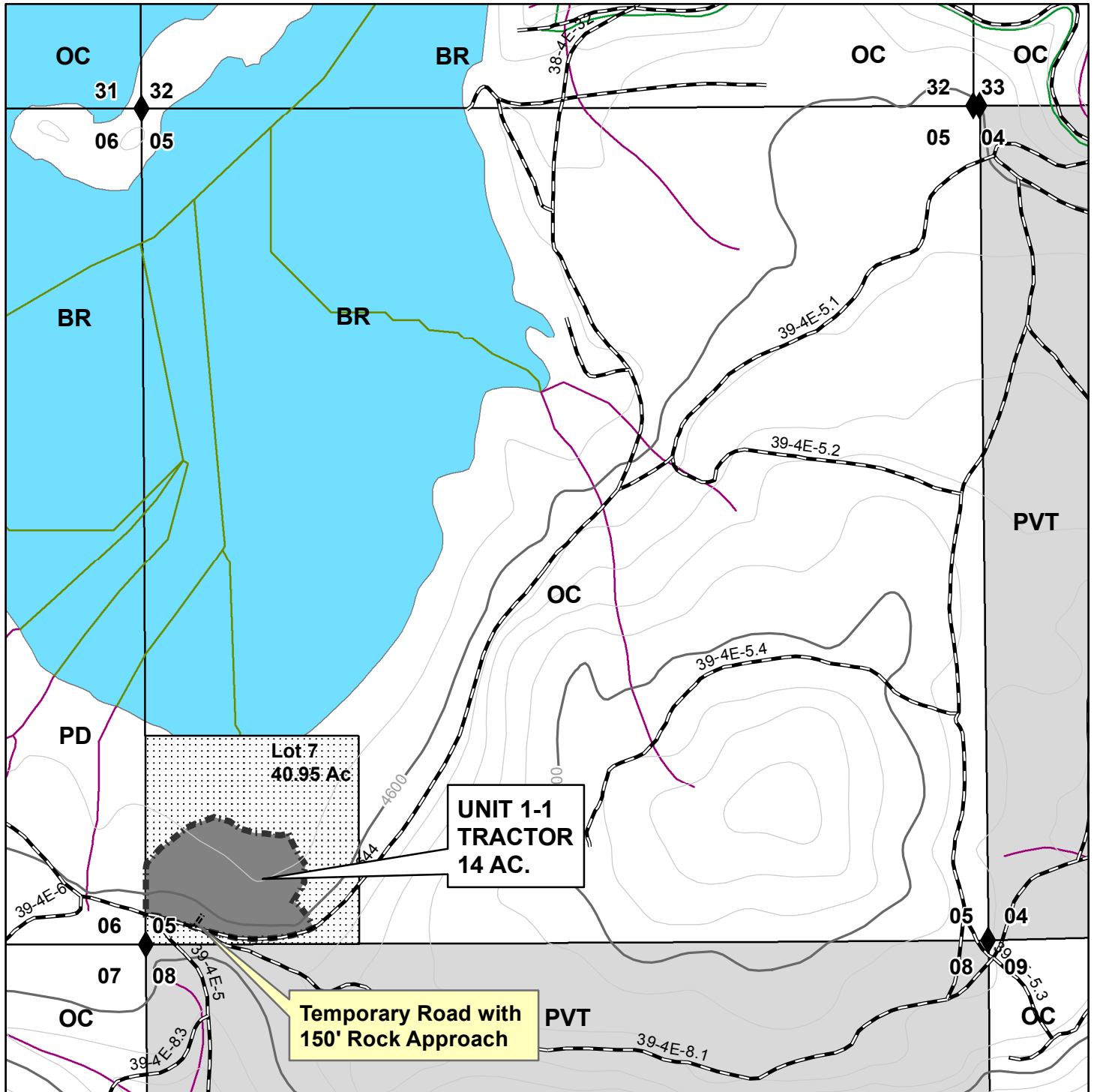
40 FOOT CONTOURS

0 0.1 0.2 0.4
Miles

1 inch = 916.666667 feet



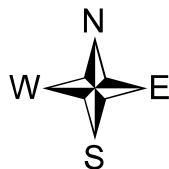
No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data. Original data were compiled from various sources and may be updated without notification.



40 FOOT CONTOURS

0 0.1 0.2 0.4
Miles

1 inch = 916.666667 feet



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 of America
Department of the Interior
Bureau Of Land Management
Timber Sale Appraisal

District : Medford
Sale Name : Howard
Sale Date : 08/28/2014
Appraisal Method : 16' MBF

Contract # : ORM06-TS-14-14
Job File # : 14
Master Unit : Jackson
Planning Unit : Ashland

Contents

Exhibit B	2
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**UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

Medford
Howard
ORM06-TS-14-14

Exhibit B

The following estimates and calculations of timber sold are made solely as an administrative aid for determining: (1) Adjustments made or credits given in accordance with Sections 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 provided in Section 2, Purchaser shall be liable for the total purchase price even though the 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 the Exhibit A.

Sale Totals (16' MBF)

Species	Net Volume	Bid Price	Sale SubTotal
White Fir	2,823		
Douglas-fir	468		
Ponderosa Pine	50		
Incense-cedar	14		
Sale Totals	3,355		

Unit Details (16' MB)

Unit 1-1 14 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	14		
Ponderosa Pine	2		
White Fir	33		
Unit Totals	49		

Unit 1-2 38 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	8		
Incense-cedar	6		
White Fir	108		
Unit Totals	122		

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

Medford
Howard
ORM06-TS-14-14

Unit 13-4 100 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	50		
Incense-cedar			
Ponderosa Pine	25		
White Fir	592		
Unit Totals	667		

Unit 13-5 41 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	49		
Incense-cedar			
Ponderosa Pine	11		
White Fir	294		
Unit Totals	354		

Unit 17-1 29 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	8		
White Fir	105		
Unit Totals	113		

Unit 17-4 51 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	21		
Incense-cedar	1		
Ponderosa Pine			
White Fir	212		
Unit Totals	234		

Unit 19-1 5 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	14		
Ponderosa Pine	1		
White Fir	13		
Unit Totals	28		

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

Medford
Howard
ORM06-TS-14-14

Unit 19-2 69 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	25		
Ponderosa Pine			
White Fir	348		
Unit Totals	373		

Unit 23-1 82 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	45		
Incense-cedar			
White Fir	298		
Unit Totals	343		

Unit 26-1 27 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	59		
Incense-cedar	1		
Ponderosa Pine			
White Fir	107		
Unit Totals	167		

Unit 26-2 31 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	69		
Incense-cedar	6		
Ponderosa Pine	1		
White Fir	90		
Unit Totals	166		

Unit 29-1 2 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	21		
Ponderosa Pine			
White Fir	5		
Unit Totals	26		

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

Medford
Howard
ORM06-TS-14-14

Unit 29-2 12 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	5		
White Fir	68		
Unit Totals	73		

Unit 29-3 16 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	5		
White Fir	92		
Unit Totals	97		

Unit 29-5 23 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	7		
Ponderosa Pine	5		
White Fir	146		
Unit Totals	158		

Unit 7-1 73 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	68		
Ponderosa Pine	5		
White Fir	312		
Unit Totals	385		

EXHIBIT C-1

SHEET 1 OF 1

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

MEDFORD DISTRICT

HOWARD TIMBER SALE

TRACT NO. 14-14

PROJECT LOCATION

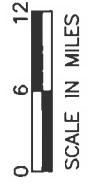
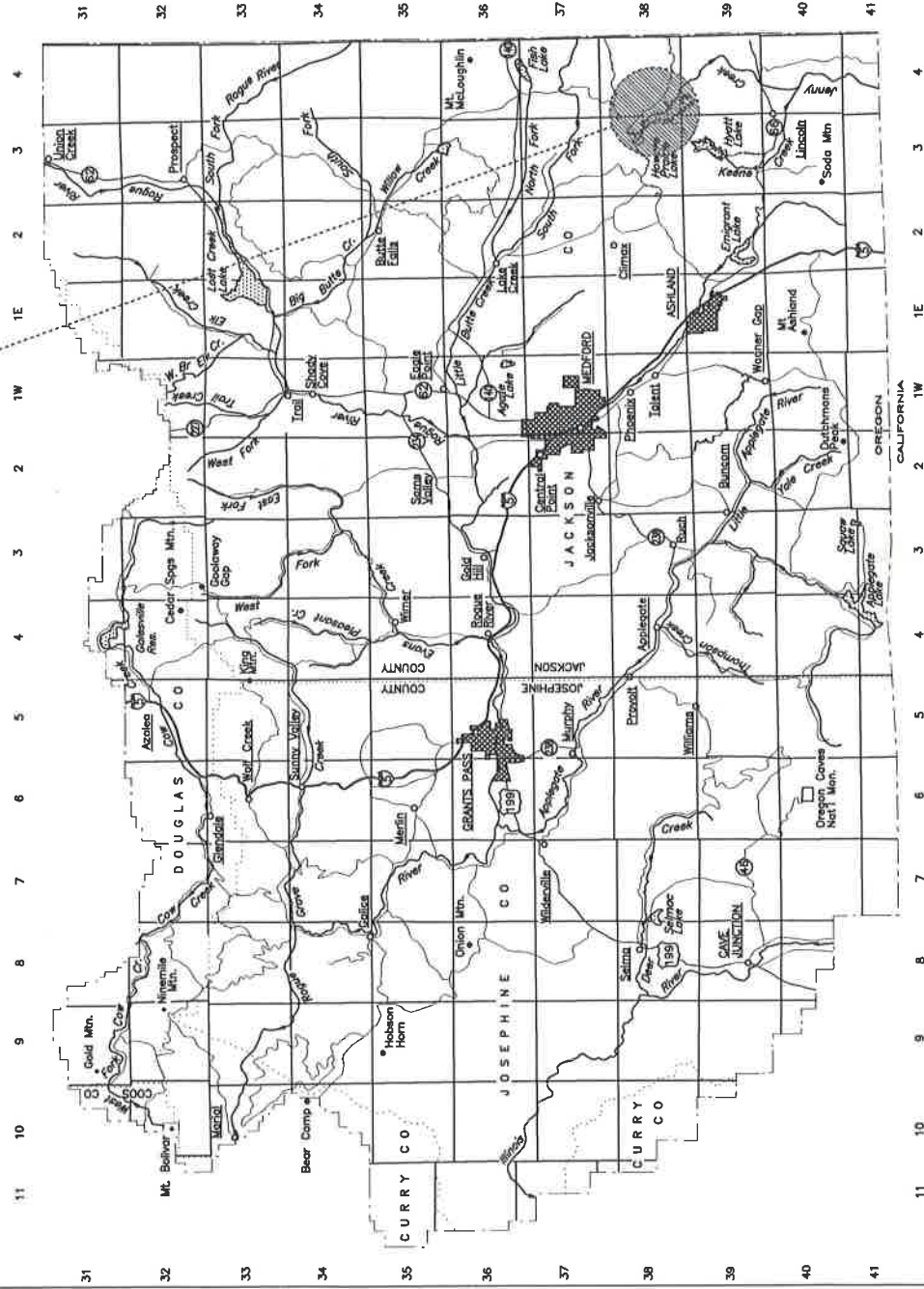


Exhibit No.	Description
C 1	TITLE SHEET
C 2	ROAD LOCATION MAP
C 3	ESTIMATE OF QUANTITIES
C 4	SPECIFICATION SHEET
C 5	TYPICAL ROAD SURFACING SECTIONS
C 6	CULVERT INSTALLATION DETAILS
C 7	CULVERT BAND DETAILS
C 8	CULVERT LIST
C 9	DRAINAGE AND EROSION CONTROL
C 10	ROADSIDE BRUSHING DETAIL
C 11	ROAD RENOVATION WORKLIST
C 12	TYPICAL ROAD CAMOUFLAGE
C 13	TYPICAL ROAD DECOMMISSION
C 14	CONSTRUCTION SPECIFICATIONS
C 15	STOCKPILE LOCATION MAP
D 1	ROAD MAINTENANCE SPECIFICATIONS
D 2	ROAD MAINTENANCE MAP

ALWAYS
THINK
SAFETY

REV.	NO.	DESCRIPTION	DATE	APPROV.
		UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON		
		TITLE SHEET		
		DESIGNED		
		REVIEWED		
		APPROVED		
		DRAWN BY JWR		
		SCALE AS SHOWN		
		DATE June 2014		
		SHEET 1 OF 1		
		DRAWING NO.		

OR-110-TS14-14-C1

HOWARD TIMBER SALE
ROAD LOCATION MAP
EXHIBIT C-2; PAGE 1 OF 1

U.S.D.I. BLM MEDFORD DISTRICT

T.38S., R.3E. WILL. MER.
T.38S., R.4E. WILL. MER.
T.39S., R.3E. WILL. MER.
T.39S., R.4E. WILL. MER.

EXISTING GATE

PUMP CHANCE

ROAD PROJECTS

EXISTING ROAD

EXISTING PAVED ROAD

EXISTING PRIMITIVE ROAD

ROAD TO BE BRUSHED
AND RENOVATED

ROAD TO BE RENOVATED,
BRUSHED, AND SPOT
ROCKED

ROAD TO BE RENOVATED
AND SPOT ROCKED

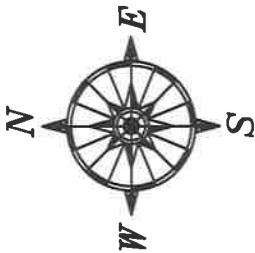
ROAD TO BE BRUSHED
ONLY

ROAD TO BE DECOMMISSIONED
UPON COMPLETION OF LOG
HAUL

ROAD TO BE CAMOUFLAGED
UPON COMPLETION OF LOG
HAUL

BLM LAND

TS UNITS



SCALE IN MILES



T.38S.

T.39S.

R.3E. | R.4E.

ROAD NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		CORRUGATED METAL PIPE										ROAD WIDENING	AGGREGATE**					ROADSIDE BRUSHING	ROAD DECOMMISSION	ROAD CAMOUFLAGE	TRENCH BARRICADE	REMOVE GATE
					ROCK	COMMON	SIZE				ELBOWS	DOWNSPOUT															
							18"	24"	36"	48"		12" Poly	Full	Half	Rect.												
SPECIFICATION NO.	MP/STA	MP/STA	MILE/STA	ACRE	300 C.Y.	300 C.Y.	400 L.F.	400 L.F.	400 L.F.	400 L.F.	400 L.F.	400 L.F.	400 L.F.	400 L.F.	500 MILE	700 C.Y.	900 C.Y.	1000 C.Y.	1200 C.Y.	STOCKPILE	1800 ACRE	2100 MILE	MILE	MILE	EA	EA	
UNIT																											
38-3E-13 Spur A	0.00	0.12	0.12												0.12							0.12					
38-3E-13 Spur B	0.00	0.15	0.15								20				0.15							0.15			1		
38-3E-13.05	0.00	0.22	0.22								20				0.22			10				0.22			1		
38-3E-13.06	0.00	0.49	0.49												0.49			10				0.49			1		
38-3E-19.00 D	0.00	1.52	1.52												1.52							1.52					
38-3E-23.01	0.00	1.04	1.04												1.04				100			1.04					
38-3E-23.02	0.00	0.03	0.03																						0.03		
38-3E-23.03	0.00	0.33	0.33												0.33							0.33					
38-3E-25.00 A	0.00	0.18	0.18												0.18							0.18					
38-3E-25.02	0.00	0.75	0.75												0.75							0.75					
38-3E-27.01 A	0.00	0.07	0.07																			0.07					
38-3E-27.01 B	0.07	1.22	1.15												1.15							1.15					
38-3E-27.01 C	1.22	1.75	0.53												0.53				100			0.53					
38-4E-7.00 C	1.20	1.79	0.59												0.59				200								
38-4E-7.07	0.00	0.13	0.13												0.13				50			0.13			1		
38-4E-17.00	0.00	0.27	0.27												0.27				20			0.27					
38-4E-19.00	0.00	0.30	0.30																			0.30					
38-4E-19.03	0.00	0.50	0.50												0.10				160			0.50					
38-4E-19.04	0.00	0.20	0.20												0.20				50								
38-4E-29.00	0.00	1.71	1.71												0.25							1.71					
39-4E-6.03 A	0.00	0.66	0.66												0.66							0.66				1	
39-4E-6.03 B	0.66	1.33	0.67				34								0.67				130			0.67					
39-7E-31.00 A1	0.00	1.99	1.99																			1.99					
39-7E-31.00 A2	1.99	4.48	2.49												9.35				830			15.27	0.27	0.52	4	1	
TOTAL			16.09				34				40																

REV. NO.	DATE	APPROV.
U. S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT MEDFORD, OREGON		
ESTIMATE OF QUANTITIES*		
DRAWN: JWR	SCALE NONE	
DATE June 2014	SHEET 1 OF 1	
DRAWING NO.	OR-110-TS14-14-C3	

ALWAYS
THINK
SAFETY* FOR INFORMATIONAL USE ONLY,
QUANTITIES SHOWN ARE NOT PAY ITEMS.
** Indicate gradation.

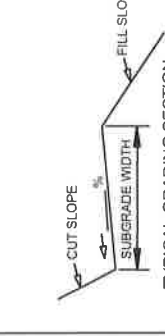
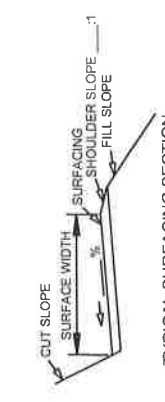
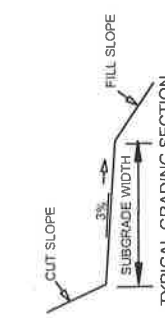
ROAD NUMBER	STATION OR MILE POST	TO STATION OR MILE POST	LENGTH MILE OR STATION	TYPICAL SECTION TYPE	ALIGNMENT MAXIMUM DEGREE OF CURVE	ROAD WIDTH (1-3)		GRADIENT		CLEARING WIDTH				SURFACING (4)						REMARKS
						SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	BEYOND		EXISTING ROAD(S)		BASE COURSE		SURFACE COURSE				
										TOP CUT	TOE FILL	L	R	MINIMUM WIDTH	COMP DEPTH	TYPE (2)	GRADING	MINIMUM WIDTH	COMP WIDTH	
38-3E-13 Spur A	0.00	0.12	0.12	3		12						4	4	Decommission Upon Completion of Log Haul						
38-3E-13 Spur B	0.00	0.15	0.15	3		12						4	4	Decommission Upon Completion of Log Haul Install Trench Barricade						
38-3E-13.05	0.00	0.22	0.22	3		12						4	4	Install Trench Barricade Upon Completion of Log Haul						10 CY for Spot Rock
38-3E-13.06	0.00	0.49	0.49	6		14	3					4	4	Camouflage Upon Completion of Log Haul Install Trench Barricade						10 CY for Spot Rock
38-3E-19.00 D	0.00	1.52	1.52	6		16	3					4	4							
38-3E-23.01	0.00	1.04	1.04	5		14	3					4	4							
38-3E-23.02	0.00	0.03	0.03	3		12								Camouflage Upon Completion of Log Haul						100 CY for Spot Rock
38-3E-23.03	0.00	0.33	0.33	3		12						4	4							
38-3E-25.00 A	0.00	0.18	0.18	6		17	3					4	4							
38-3E-25.02	0.00	0.75	0.75	5		12	3					4	4							
38-3E-27.01 A	0.00	0.07	0.07	4		14						4	4							
38-3E-27.01 B	0.07	1.22	1.15	3/4		14						4	4							
38-3E-27.01 C	1.22	1.75	0.53	3		14						4	4						50 CY for Spot Rock	
	1.22	1.75	0.59	3/4		14						4	4						50 CY for Spot Rock	
38-4E-7.00 C	1.20	1.79	0.59	3/4		12						4	4						200 CY for Spot Rock	
38-4E-7.07	0.00	0.13	0.13	3		14						4	4	Install Trench Barricade Upon Completion of Log Haul						50 CY for Spot Rock
38-4E-17.00	0.00	0.27	0.27	3		14						4	4						20 CY for Spot Rock	
38-4E-19.00	0.00	0.30	0.30	4		14						4	4							
38-4E-19.03	0.00	0.50	0.50	3		14						4	4						160 CY for Spot Rock	
38-4E-19.04	0.00	0.20	0.20	4		14						4	4						50 CY for Spot Rock	
38-4E-29.00	0.00	1.71	1.71	4		16						4	4							
39-4E-6.03 A	0.00	0.66	0.66	4		15						4	4							
39-4E-6.03 B	0.66	1.33	0.67	3/4		15						4	4						130 CY for Spot Rock	
39-7E-31.00 A1	0.00	1.99	1.99	6		20	3					4	4							
39-7E-31.00 A2	1.99	4.48	2.49	6		20	3					4	4							

3. TURNOUTS
A. WIDTH 10 FT. IN ADDITION TO SUBGRADE WIDTH OR AS SHOWN ON THE PLANS
B. INTERSECTED BY THE ROAD PLANS
C. INTERSECTED AND NOT MORE THAN 10 FT. APART

4. SURFACING
TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED.

5. CLEARING WIDTH
SEE SUBSECTION 2100

**ALWAYS
THINK
SAFETY**



1. EXTRA SUBGRADE WIDTHS
ADD TO EACH FILL SHOULDER 1 FT. FOR FILLS OF 1-5 FT. & 2 FT. FOR FILLS OVER 6 FT. WIDEN THE INSIDE SHOULDER OF ALL CURVES AS FOLLOWS:
MINIMUM CURVE OF CURVE EQUALS
7.51 ADD 1 FT.
22.35 ADD 2 FT.
38.48 ADD 3 FT.
49.64 ADD 4 FT.
65.96 ADD 5 FT.

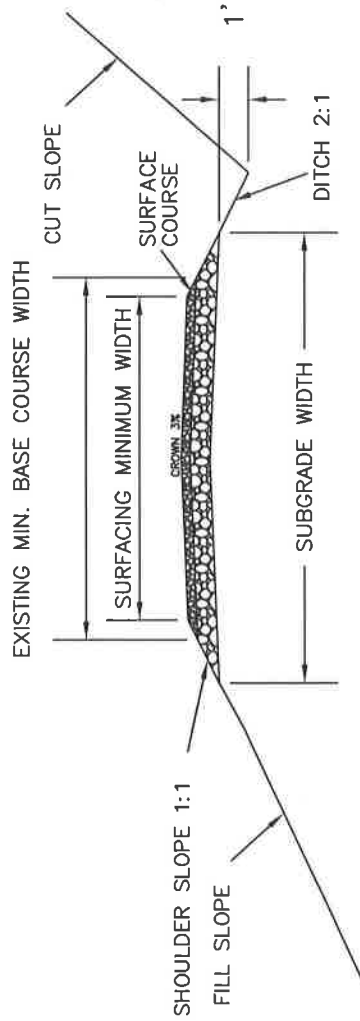
NOTES

2. SURFACING TYPE
A. CRUSHED ROCK MATERIAL
B. GRID ROLLED ROCK MATERIAL
C. SCREENED ROCK MATERIAL
D. CRUSHED ROCK MATERIAL

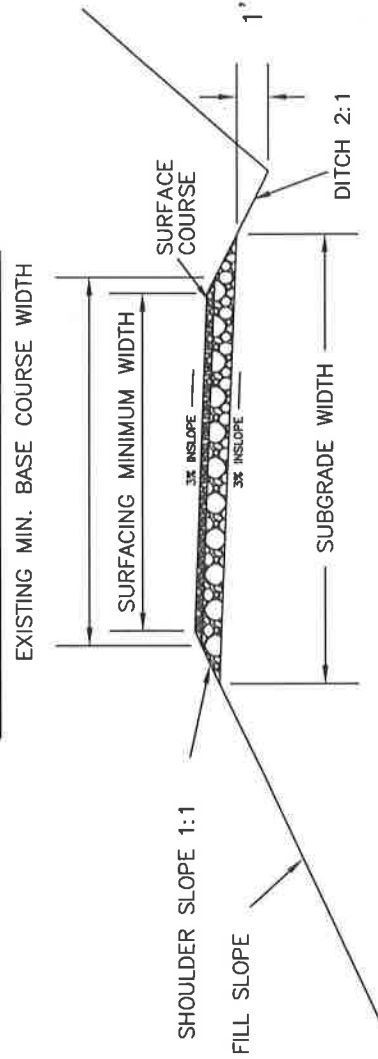
REV. NO.	DESCRIPTION	DATE	APPROV.
	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT MEDFORD, OREGON		
SPECIFICATION SHEET			
DRAWN: JS	SCALE: NONE		
DATE	SHEET 1 OF 1		
DRAWING NO.	OR-110-TS14-14-C4		

TYPICAL CROWNED SURFACE

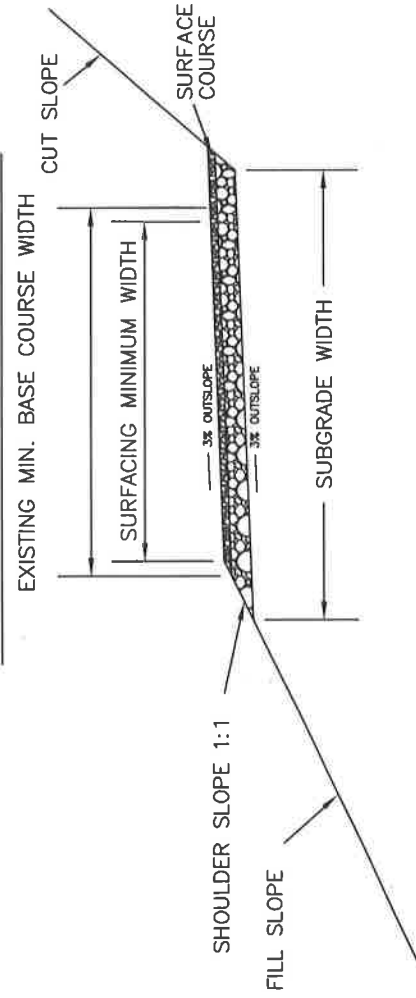
EXHIBIT C-5
SHEET 1 OF 1



TYPICAL INSLOPED SURFACE



TYPICAL OUTSLOPED SURFACE

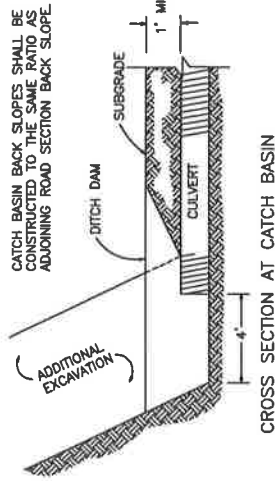


NOTE: All roads receiving spot rocking shall receive one layer of surfacing at 6" in depth.

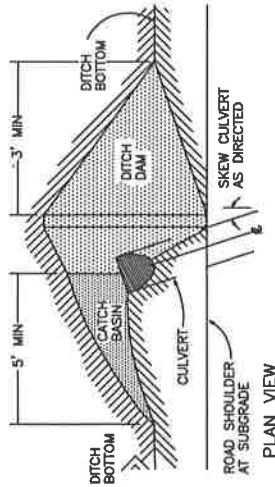
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT - MEDFORD, OREGON

TYPICAL ROAD SURFACING SECTIONS

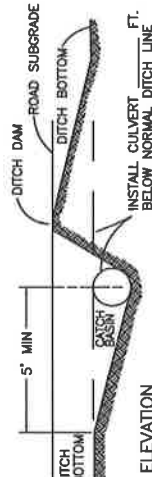
DRAWN: JWR	SCALE: AS SHOWN
DATE: JUNE 2009	SHEET 1 OF 1
DRAWING NO. OR-110-TS14-14-C5	



CROSS SECTION AT CATCH BASIN

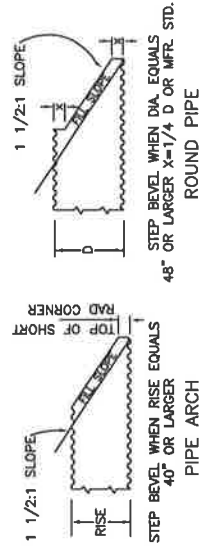


PLAN VIEW



ELEVATION

CATCH BASIN



BEVELED END DETAIL

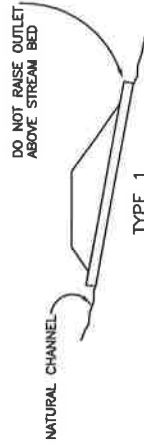


BEDDING OF CULVERTS ON STABLE NATURAL GROUND FOUNDATION OR COMPACTED EMBANKMENT

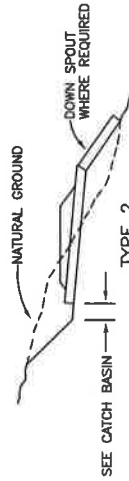
BEDDING OF CULVERTS ON STABLE NATURAL GROUND FOUNDATION OR COMPACTED EMBANKMENT

BEDDING OF CULVERTS ON STABLE NATURAL GROUND FOUNDATION OR COMPACTED EMBANKMENT

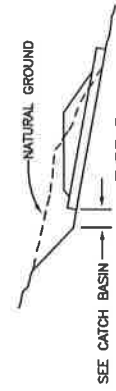
BEDDING OF CULVERTS



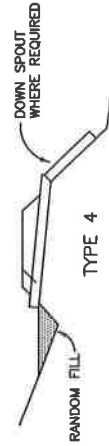
TYPE 1



TYPE 2

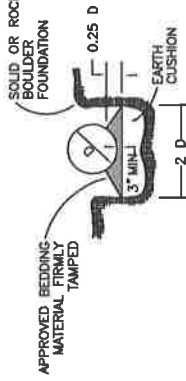


TYPE 3



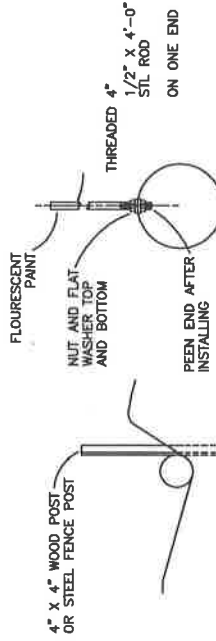
TYPE 4

CULVERT INSTALLATION TYPES



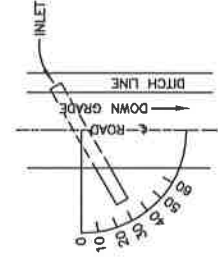
BEDDING OF CULVERT IN SOLID ROCK OR BOULDER FOUNDATION

BEDDING OF CULVERT IN SOLID ROCK OR BOULDER FOUNDATION



INSTALL MARKERS NOT MORE THAN 6" BACK FROM END OF CULVERT

CULVERT MARKER INSTALLATION



THE GRADE OF CULVERTS SHALL BE AT LEAST 2% GREATER THAN THE GRADE OF THE DITCH.

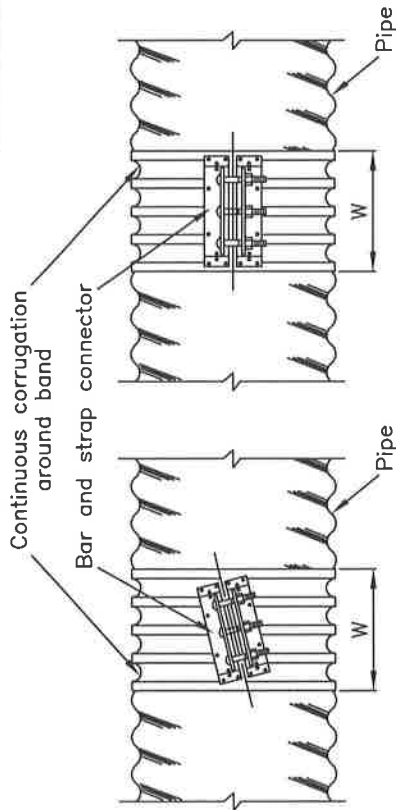
SKEW DIAGRAM

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT — MEDFORD, OREGON

CULVERT INSTALLATION
DETAILS

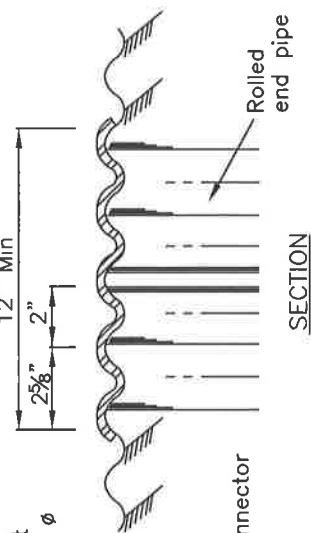
DRAWN	JWR	SCALE	NONE
DATE	July 2014	SHEET	1 OF 1
DRAWING NO.	OR-110-TS14-14-C6		

FULL CORRUGATED BAND

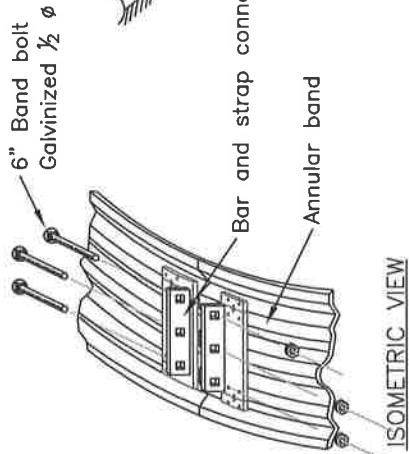


HELICAL COUPLING

ANNULAR COUPLING

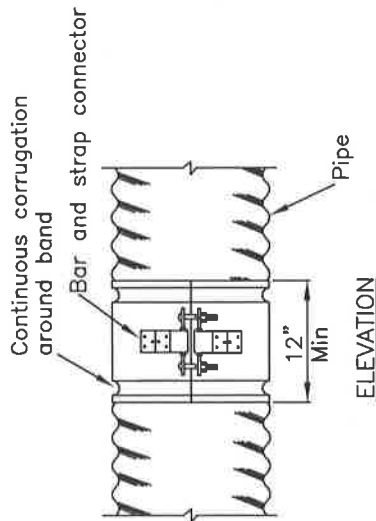


SECTION

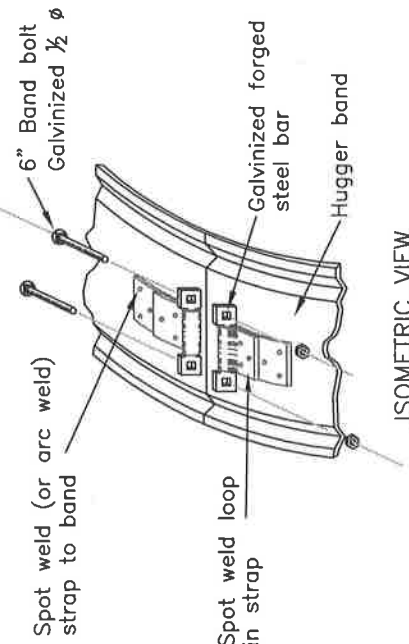


ISOMETRIC VIEW

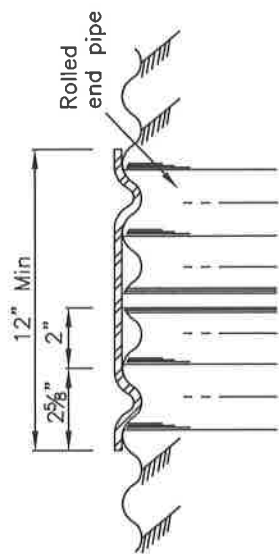
"HUGGER" BAND



ELEVATION



ISOMETRIC VIEW



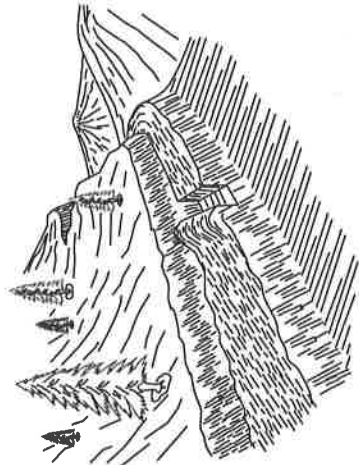
SECTION

2 5/8" x 1/2" CORRUGATIONS				3" x 1" CORRUGATIONS			
PIPE DIAMETER (in)	W (in)	# of 1/2" Bolts		PIPE DIAMETER (in)	W (in)	# of 1/2" Bolts	
6-10	7	2	ANN. HEL.	36-84	14	14	3
12-15	7	12	2-3	36-120	26	26	5
18-84	12	12	3				
24-84	24	24	5				

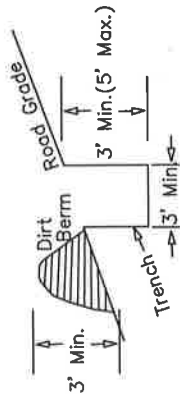
Standard construction is 1 piece 12" thru 48" and 2 piece 54" and above.

The hugger coupler band or an approved equivalent coupler band shall be made of the same material and finish as the pipes joined. The coupler bands shall have a minimum width of 12 inches and may be two numerical thicknesses lighter than the gage or thickness designated for the conduit joined. The band shall be designed to be drawn together with two 1/2 inch bolts through the use of a bar and strap suitably welded to the band. The band shall engage and mesh with the second annular corrugation inward from the end of each of the conduit sections joined.

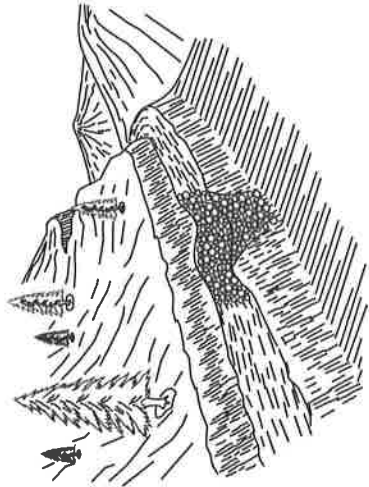
Annular corrugated couplers for pipe shall cover at least two outside crest corrugations on each re-corrugated end.



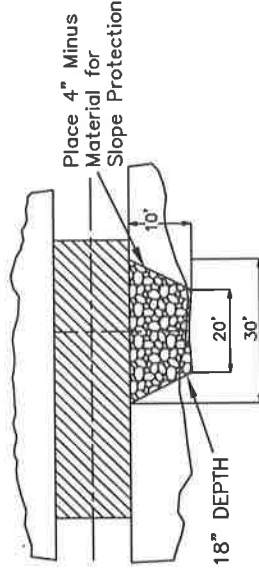
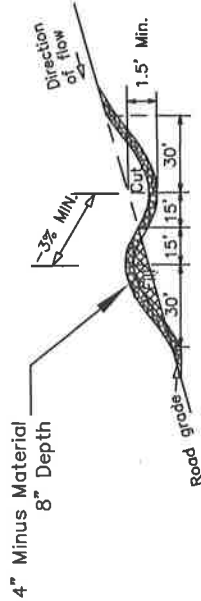
TRENCH BARRICADE



1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.
3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.



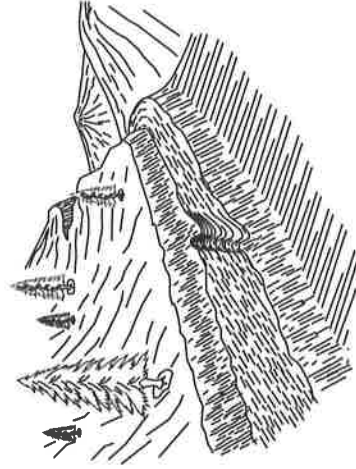
ARMORED WATER DIP



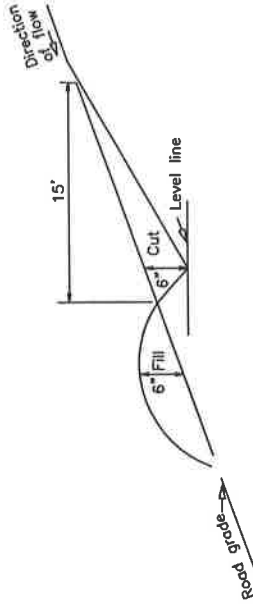
1. WATER DIPS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER DIPS SHALL BE SKEWED 30 DEGREES.
4. THE WATER DIP INVERT SHALL BE SMOOTH AND FREE DRAINING.
5. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE AND BE READILY CROSSED BY HIGH CLEARANCE TYPE VEHICLES.
6. MATERIAL SOURCE FOR 4\" MINUS CRUSHED MATERIAL SHALL BE FROM A COMMERCIAL SOURCE.
7. EXCAVATED MATERIAL SHALL BE UTILIZED IN CONSTRUCTION OF WATER DIP. NO SIDECASTING IS ALLOWED.

NOTE:

1. All armored water dips shall be rocked the entire width & length to a depth of 8\".

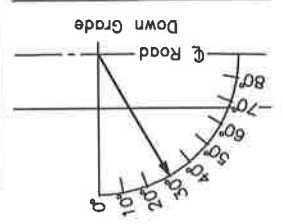


CROSS-RAIN



1. CROSS-DRAINS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL CROSS DRAINS SHALL BE SKEWED 30 DEGREES.
4. THE CROSS-DRAINS INVERT SHALL BE SMOOTH AND FREE DRAINING.

SKEW DIAGRAM



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
DRAINAGE & EROSION CONTROL INSTALLATION			
DRAWN JWR	SCALE NONE	SHEET 1 OF 1	
DATE July 2014			
DRAWING NO. OR-110-TS14-14-C9			

Cutting Limit = C + D + B + H + F

B = Basic lane width (includes turnouts)
Width shall be determined by the PI

C = 4 ft - Distance to be brushed on cut slope
beyond centerline of ditch

D = Centerline of ditch to inside shoulder

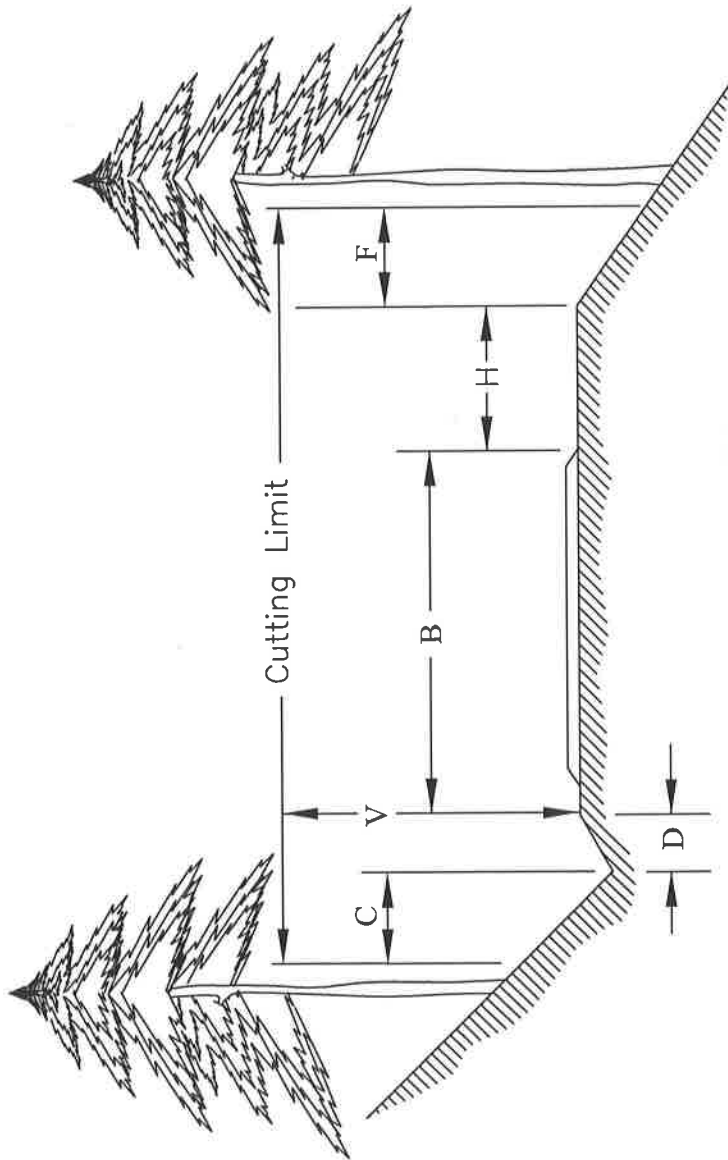
H = Variable distance between edge of basic lane and
outside shoulder (does not include turnout widths)

F = Distance to be brushed on fill slope beyond outside shoulder
(F = 4 when H is 4 ft or less)
(F = 0 when H is greater than 4 ft)

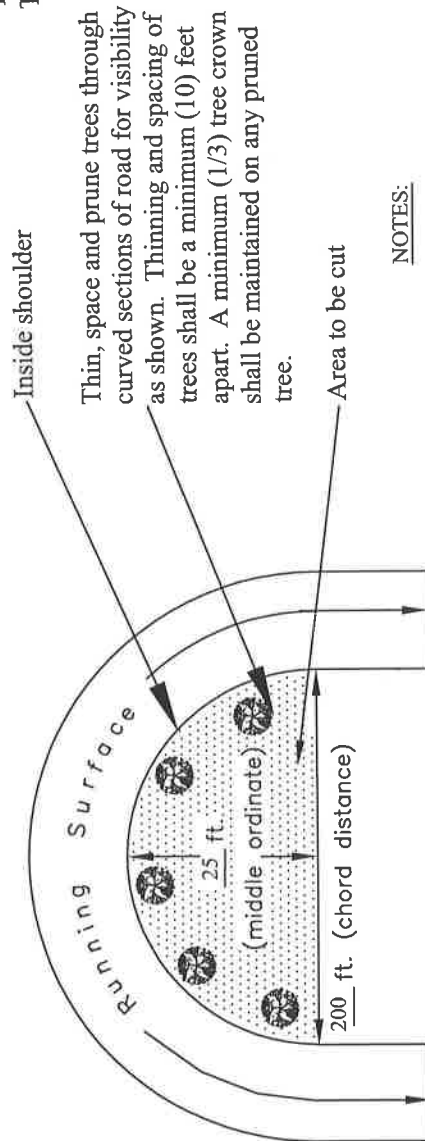
V = 14 ft - Height of vertical cutting limit

Typical Basic lane widths

One lane low traffic volume 12 to 16 ft
One lane medium traffic volume . . 16 to 20 ft
Two lane high volume traffic 20 to 40 ft
Turnouts 10 ft



Brushing Diagram



NOTES:

Cutting and Removal of vegetation
from ditches and roadway is incidental
to brushing within cutting limits.
All distances shown are horizontal except for V

Sight Distance Diagram

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT - MEDFORD, OREGON			
ROADSIDE BRUSHING DETAIL			
DRAWN	JWR	SCALE	NONE
DATE	July 2014	SHEET	1 OF 1
DRAWING NO.	OR-110-TS14-14-C10		

HOWARD TIMBER SALE Road Renovation Worklist

Renovation: This consists of road work to be performed on the road prior to its use. The work includes, but not limited to blading the road surface, brushing, cleaning catch basins, cleaning ditches, and placing crushed aggregate on approved road bed..

Crushed aggregate shall come from BLM stockpile located on Exhibit C-2 Road Location Map.

Road barricades removed during timber operations shall be replaced immediately after use. For activities that are not finished in one dry season, barricades shall be re-installed before the wet season, October 15th.

CMP – Corrugated Metal Pipe
Jct.– Junction

BST – Bituminous Surface Treatment

Spur A in T38S R3E Sec 13

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with road 38-3E-13.06. Begin blading. Begin brushing. Decommission entire length of spur after completion of timber harvest.
0.12	End blading. End brushing.

Spur B in T38S R3E Sec 13

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 39-7E-31.00. Begin blading. Begin brushing. Decommission and camouflage entire length of road with slash and debris, upon completion of log haul.
0.01	Install temp culvert, Remove berm. Install trench barricade and remove culvert upon completion of log haul.
0.15	End blading. End brushing.

Road 38-3E-13.05 (Keno Spur)

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 39-7E-31.00. Rock approach to Keno Access Road with stockpile from Nameless Springs quarry, 10 yds ³ . Begin blading. Begin brushing.
0.01	Install temp culvert, Remove berm. After harvest replace berm and remove culvert.

0.22 End blading. End brushing.

Road 38-3E-13.06 (Keno Spur)

Aggregate

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 39-7E-31.00. Begin blading. Begin brushing. Spot rock. After harvest remove culvert at approach.
0.01	Install trench barricade and camouflage entire length of road with slash and debris, upon completion of log haul.
0.04	Spot Rock with crushed rock 10 yds ³ from Nameless Springs stockpile.
0.05	18" Cross drain CMP .
0.25	Drain dip .
0.40	18" Cross drain CMP .
0.43	Drain dip .
0.49	End blading. End brushing.

Road 38-3E-19.00 D (Buck Prairie)

Old Chip Seal/ Aggregate

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Hyatt Prairie Road. Begin blading. Begin brushing.
0.15	18" Cross drain CMP.
0.28	Junction with 38-3E-23.1 road.
0.44	18" Cross drain CMP.
0.55	18" Draw Pipe CMP.
0.71	18" Draw Pipe CMP .
1.52	Junction with 38-3E-27.1 road. End blading. End brushing.

Road 38-3E-23.01

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 38-3E-19.00. Begin blading. Begin brushing. Begin spot rocking 100 yds ³ from Table Mt. stockpile
0.15	18" Cross drain CMP.
0.24	Gate.
0.37	18" Cross drain CMP.
0.67	18" Cross drain CMP.
0.75	End of unit.
1.04	Turn Around. End blading. End brushing.

Road 38-3E-23.02

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Hyatt Prairie Road. Camouflage road with slash and debris to landing, upon completion of log haul.
0.03	Landing.

Road 38-3E-23.03

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 38-3E-23.01. Begin blading. Begin brushing. Blade out water bars, replace after harvest.
0.26	End blading. End brushing. Turn around at road junction with un-numbered spur.

Road 38-3E-25.00 (Willow Creek Road)

Aggregate

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Hyatt Prairie Road. Begin blading. Begin brushing.
0.18	Jct. with 38-3E-25.02 End blading. End brushing.

Road 38-3E-25.02 (Willow Creek Spur)

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 38-3E-25.00. Begin blading. Begin brushing.
0.11	Ditch out to pass water from un-numbered spur right.
0.12	18" Cross drain CMP.
0.29	24" Draw Pipe CMP.
0.50	18" Cross drain CMP.
0.59	18" Cross drain CMP.
0.75	End blading. End brushing.

Road 38-3E-27.01 (Wilson Trespass)

Aggregate/ Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 38-3E-19.00. Begin Brushing.
0.06	12" Draw Pipe Corrugated Plastic Pipe.
0.07	Begin blading.
0.10	Dip, ditch out.
0.18	12" Draw Pipe Corrugated Plastic Pipe.
0.25	Dip.
0.95	Road Junction, surface changes from heavy spot rocking to natural surface. Begin continuous blading.
1.47	Spot Rock from Table Mt. stockpile. Place 100 yds ³ in large holes.
1.75	End blading. End brushing.

Road 38-4E-07.00 (Guard Station Rd)

Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Dead Indian Memorial Road.

0.06	18" Cross drain CMP
0.20	18" Cross drain CMP
0.29	Private Drive Way right.
0.46	Private Drive Way right.
0.58	18" Cross drain CMP
1.20	Begin blading. Begin brushing.
1.48	Start spot rocking 200 yds ³ from Nameless Springs stockpile
1.79	Junction with 37-4E-17.1 left. End blading. End brushing.

Road 38-4E-07.07 FS Access Spur
Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Dead Indian Memorial Highway. Remove berm, Begin blading. Begin brushing. Rock Approach with 50 yds of crushed rock from Nameless Springs stockpile. Clear ditch line and replace berm after harvest is completed.
0.13	End blading. End brushing.

Road 38-4E-17.00
Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with 38-4E-07.00. Begin blading. Begin brushing. Spot Rock.
0.18	Spot rock over large stones in roadbed. Place 20 yds ³ of crushed from Nameless Springs stockpile.
0.27	End blading. End brushing.

Road 38-4E-19.00 (Hoxie Creek)
PRR

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Keno Access Road 39-7E-31 south end of loop road. Begin brushing.
0.30	End Brushing. Turn around left.

Road 38-4E-19.03 (Hoxie Creek Sp)
Natural

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Keno Access Road 39-7E-31. Begin spot blading. Begin brushing. Spot rock with material from Nameless Springs stockpile.
0.09	Spot Rock 10 yds ³ .
0.14	Begin rocking 100 yds ³
0.26	End rocking.
0.37	Spot Rock 10 yds ³ .
0.38	Spot Rock 10 yds ³ .
0.40	Spot Rock 10 yds ³ .
0.45	Spot Rock 10 yds ³ .
0.47	Spot Rock 10 yds ³ .
0.50	End spot blading. End brushing.

Road 38-4E-19.04

Aggregate

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Keno Access Road 39-7E-31. Road is access to residence. Begin blading. Begin brushing. After harvest is complete placement of spot rock 50 yds ³ . Location shall be determined by Authorized Officer.
0.20	End blading. End brushing.

Road 38-4E-29.00 (Hoxie Beaver)

Aggregate

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Keno Access Road 39-7E-31. Begin brushing. Begin spot blading.
0.78	Road junction with 38-4E-29.1.
1.13	Aggregate ends and BST begins. End spot blading.
1.71	Road end at Keno Access Road 39-7E-31. End brushing.

Road 39-4E-06.03 (Howard Willow)

Aggregate / Natural

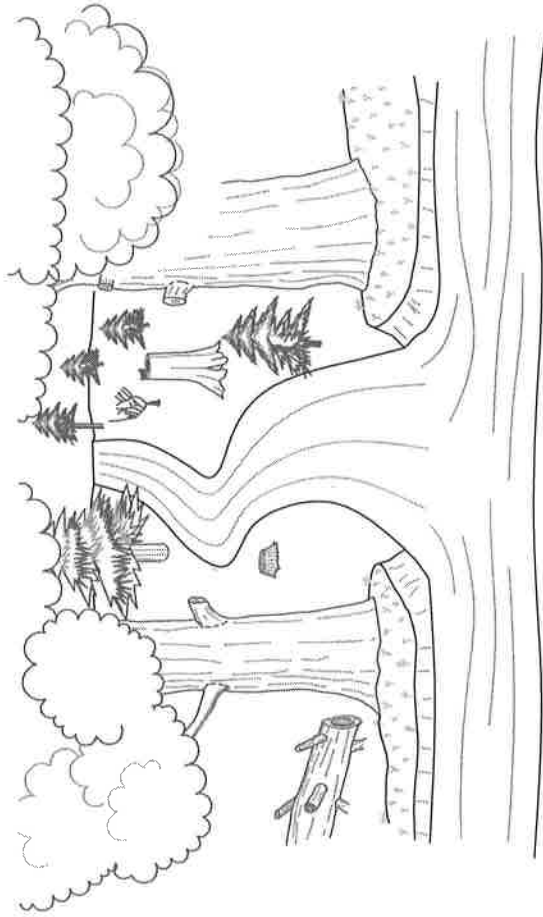
<u>MP</u>	<u>Remarks</u>
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0.00	Jct. with Willow Creek Road 39-7E-31. Begin blading. Begin brushing. Rocking will be from stockpile at Table Mt. quarry.
0.19	36" Draw Pipe CMP.
0.31	Dip.
0.36	Gate posts to remove from guard rail gate.
0.38	Junction with 39-4E-6.4 road.
0.69	Dip.
0.75	Dip.
0.83	Natural surface begins.
0.88	Start rocking over large stones.
0.92	Stop rocking
0.95	Start rocking over large stones.
1.08	Stop rocking
1.16	Dip.
1.20	Dip.
1.25	18" CMP rusted. Replace with 18"X34' galvanized CMP.
1.33	End blading. End brushing.

Road 39-7E-31.00 (Keno Access)

BST

<u>MP</u>	<u>Remarks</u>
0.00	Jct. with Dead Indian Memorial Highway. Begin brushing.
4.48	End brushing.



Typical Entrance - Before



Typical Entrance Camouflaged - After

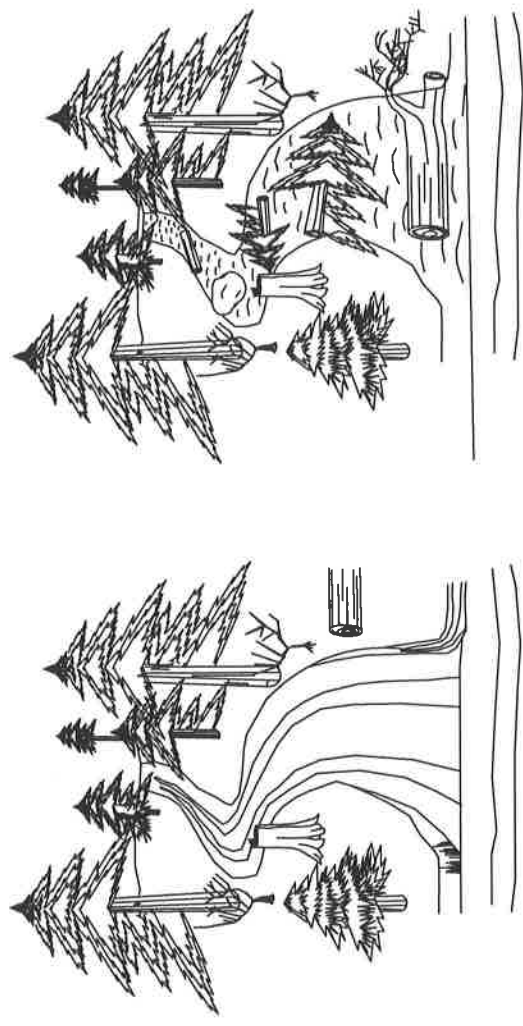
Notes:

1. The Purchaser will block and Camouflage the road prism and disguise the roadbed so that the road entrance and roadway are indiscernible from the intersecting road. This requirement will include but not be limited to disguising the full length of the road. An Earth Berm or equivalent barricade shall be constructed at road entrance as approved by the Authorized Officer.
2. Where multiple entrances exist, the work shall include obscuring all road entrances. Ditchlines at intersecting roads will be restored as indicated on plan view.
3. The Purchaser shall use woody debris, brush, stumps, and other material available on site to disguise the road prism to the extent possible within the clearing limits as shown. No live trees should be used without approval of the Authorized Officer.
4. See Section 1800 for Seeding Specifications.

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT — MEDFORD, OREGON

Typical Road
Camouflage

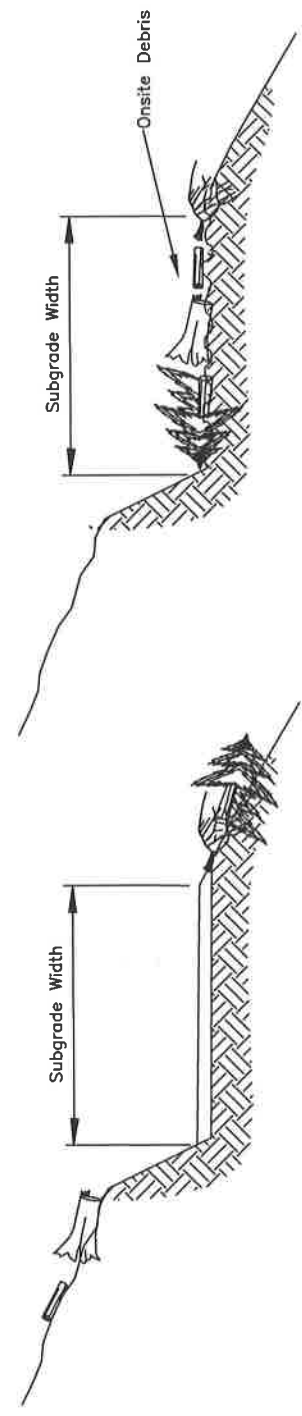
DRAWN	JWR	SCALE	NONE
DATE	July 2014	SHEET	1 OF 1
DRAWING NO. OR-110-TS14-14-C12			



Typical Entrance Decommission - Before Typical Entrance Decommission - After

Notes:

1. The Purchaser will block and decommission the road prism and disguise the roadbed so that the road entrance and roadway are indiscernible from the intersecting road. This requirement will include but not be limited to loosening the compacted layer of the road surface along entire road width and length at a 4-6" depth and disguising the full length of the road. An Earth Berm or equivalent barricade shall be constructed at road entrance as approved by the Authorized Officer.
2. Where multiple entrances exist, the work shall include decommissioning of all road entrances. Ditchlines at intersecting roads will be restored as indicated on plan view.
3. The Purchaser shall use woody debris, brush, stumps, and other material available on site to disguise the road prism to the extent possible within the clearing limits as shown. No live trees should be used without approval of the Authorized Officer.
4. See Section 1800 for Seeding Specifications.



Road Surface Before Road Surface After

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT -- MEDFORD, OREGON			
<i>ROAD DECOMMISSION</i>			
DRAWN	JWR	SCALE	NONE
DATE	July 2014	SHEET 1 OF 1	
DRAWING NO. OR-110-TS14-14-C13			

SPECIAL PROVISIONS

1. All road segments not completed during dry weather periods shall be winterized, by providing a well-drained roadway by water barring, maintaining drainage and any additional measures necessary to minimize erosion and other damage to the roadway, as directed by the Authorized Officer. Any portion of road not having surfacing rock in place will be blocked or barricaded to prevent vehicular traffic.
2. Before beginning road construction operations for the first time or after a shutdown of seven or more days, the Purchaser shall notify the Authorized Officer of the date he plans to begin operations. The Purchaser shall also notify the Authorized Officer if he intends to cease operations for any period of 30 or more days.
3. Proposed rock source: Nameless Springs, Table Mountain, or Commercial Source
4. Seed mix and Straw sources: At agency discretion
 - A) Provided from BLM: based on availability
 - OR
 - B) Purchased from approved Commercial source:
5. The application of dust abatement materials such as Lignin or approved petroleum based dust abatement products shall be restricted from application just after wet weather or at stream crossings or other locations that could result in direct delivery to a water body.
6. Water sources/ Pump chances – Listed are approved water sources. Other water sources shall be approved by the Authorized Officer prior to use. The Purchaser is responsible for all permits and fees from water sources on private or commercial sources.

Location:		
ROAD # and NAME		MP
38-4E-35.00	Nameless Springs Quarry	2.14
39-7E-31.00	Skinny Dip Quarry	0.64
38-2E-27.00	Sharon Lakes Quarry	0.53
38-3E-17.00	Conde Creek Road	2.52

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ROAD SPECIFICATIONS

Willamette Meridian

Jackson County Oregon

INDEX

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2100	ROADSIDE BRUSHING
2600	POST HARVEST WORK

GENERAL - 100

*101 - Prewrite Conference(s):

A prework conference will be held prior to the start of new construction, improvements, reconstruction, quarry development, surfacing, and soil stabilization. The Purchaser shall request the conference at least 72 hours prior to the time it is to be held. The conference will be attended by the Purchaser and/or his representatives, subcontractors and/or his or their representatives and the Authorized Officer and/or his representatives.

The purpose will be to review the required work, exhibits and specifications, and to establish a work schedule and a list of the Purchaser's representatives and subcontractors. A Prewrite conference shall be scheduled at the work site for quarry development.

*102 - Definitions:

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

ASTM - American Society for Testing and Materials.

Base Course - Surfacing structure consisting of crushed gravel or stone, crushed sandstone, pit run 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.

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).

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.

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

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

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.

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

Road Centerline - Longitudinal center of roadbed.

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

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

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.

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.

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 pit run 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.

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.

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.

102a - Tests Used in These Specifications:

AASHTO T 11 Quantity of rock finer than No. 200 sieve.

AASHTO T 27 Sieve analysis of fine and coarse aggregate using sieves with square openings; gradation.

AASHTO T 89 Liquid limit of material passing the No. 40 sieve.
Water content at which the soil passes from a plastic to a liquid state.

AASHTO T 90 Plastic limits and plasticity index of soil.
a. Plastic limit - lowest water content at which the soil remains plastic.
b. Plasticity index - range of water content, within which the material is in a plastic state. Numerical difference between the liquid and plastic limits of the soil.

AASHTO T 96 Resistance to abrasion of small size coarse aggregate by use of the Los Angeles machine.

AASHTO T 99 Relationship between soil moisture and maximum density of soil.
Method A - 4" mold, soil passing a No. 4 Sieve.
25 blows/layer & 3 layers.
Method D - 6" mold, soil passing a 19.00mm 3/4
inches sieve. 56 blows/layer & 5
layers.

AASHTO T 176 Shows relative portions of fine dust or claylike materials in soil or graded aggregate.

AASHTO T 180 (OSHD 106-71) moisture density relationship of soil same as AASHTO T 99 proctor but uses a 10-lb rammer & 18-in drop.

AASHTO T 191 Sand Cone. Density of soil in place: For subgrade use 6-inch or 12-inch cone. For rock surfacing for 1-1/2-inch minus to 3-inch minus use 12-inch cone.

AASHTO T 205 Rubber balloon. Density of soil in place. Use for compacted or firmly bonded soil.

AASHTO T 210 Durability of aggregates based on resistance to produce fines.

AASHTO T 224 Correction for coarse particles in the soil.

AASHTO T 238 Determination of density of soil and soil aggregates in place by nuclear methods.

AASHTO T 248 Reducing field samples of aggregate to testing size by mechanical splitter, quartering, or miniature stockpile sampling.

DES. E-12 Determination of relative density of cohesionless soils.

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

103 - Compaction equipment shall meet the following requirements:

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

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

103g - Vibratory compactor. Vibratory compactors shall consist of multiple or gang-type compacting units or pads with a minimum variable width of 2 feet. It shall be self-contained and capable of compacting material as required.

103h - Other. Compaction equipment approved by the Authorized Officer.

PIPE CULVERTS – 400

401 - This work shall consist of furnishing and installing pipe culverts, and downspouts in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Individual lengths and locations are approximate; final lengths and locations will be determined by the Authorized Officer upon completion of the roadbed. Additional pipe and erosion control devices may be required at the option of the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost of furnishing and installing such items. Costs will be based upon the unit prices set forth in the current BLM Timber Appraisal Production Cost Schedule.

403 - Grade culverts shall have a gradient as of from 2 % to 4% greater the adjacent road grade, and shall be skewed down grade 30 – 45 degrees, as per Culvert List as measured from the perpendicular to the centerline, unless otherwise specified on the plans.

404 - Damage to the spelter, or burn back in excess of 3/8 inch, shall be wire brushed and painted with two coats of aluminum-rich paint on aluminum-coated pipe.

- 405 - Corrugated steel riveted and helical pipe culverts and pipe-arch culverts and special sections shall conform to the requirements of AASHTO M 274 as specified on the plans.
- 405a - Corrugated-steel-welded pipe culverts and pipe-arch culverts and special sections shall conform to the requirements of AASHTO M 274 as specified on the plans.
- 406 - Coupling bands shall conform to the requirements of AASHTO M 274 with the exception of band widths and the "Hugger"-type band, which shall conform to the details, dimensions, and typical diagram shown on the plans.
- 406a - "Hugger"-type coupling bands shall only be used with annular corrugated which shall consist of two 2 annular corrugations.
- 406b - Coupling bands produced from flat steel sheets with impressed dimples will be permitted only for connecting annular corrugated steel pipe to helically corrugated steel pipe. Such coupling bands shall conform to the width requirements shown on the plans.
- 406f - Channel-type or flanged-end coupling bands may be used on helical pipe with reformed rolled ends and flanged specifically to receive these bands. Such coupling bands shall conform to the requirements shown on the plans.
- 407 - Special sections, such as elbows, branch connections, and flared-end sections, shall be of the same gauge as the pipe to which they are joined, and shall conform to the requirements of AASHTO M 274.
- 407b - Full round culvert downspouts conforming to the material and construction requirements as shown on as shown on the plans shall be constructed at specified locations.
- 408 - Pipe culverts shall be placed on the bed starting at the downstream end with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points. Coupling bands of the types required under these specifications shall be installed so as to provide the circumferential and longitudinal strength necessary to preserve the pipe alignment, prevent separation of the pipe sections, and minimize infiltration of fill material.
- 410 - Pipe shall be unloaded and handled with reasonable care. If the Authorized Officer determines any structure is damaged to the extent that it is unsuitable for use in the road construction, it shall be replaced at the Purchaser's expense.
- 411 - Trenches necessary for the installation of pipe culverts shall conform to the lines, grades, dimensions and typical diagram shown on Exhibits, and the Culvert Installation Detail Sheet.
- 412 - Where ledge rock, boulders, soft, or spongy soils are encountered, they shall be excavated a minimum of 24 inches below the invert grade for a width of at least one pipe diameter or span on each side of the pipe and shall be backfilled with selected granular or fine readily compactible soil material.
- 414 - The invert grade of the bedding shall be cambered in accordance with the requirements and details shown on the plans and as directed by the Authorized Officer.

- 417 - For CMP culverts fill material shall be placed and compacted under the haunches of the pipe, and shall be brought up evenly and simultaneously on both sides of the pipe to 1 foot above the pipe, in layers not exceeding 6 inches in depth and 1 pipe diameter/span, or a minimum of 2 feet in width each side of, and adjacent to, the full length of the pipe barrel. Each layer shall be moistened or dried to uniform moisture content suitable for maximum compaction and compacted by approved hand or pneumatic tampers.
- 418 - The final subgrade shall be compacted to full width with compacting equipment conforming to the requirements of Subsections 103f, 103g, and 103h.
- 421 - Trenches and bedding rock necessary for the installation of perforated pipe shall conform to the lines, grades, dimensions and typical diagram shown in the plans.
- 423 - Construction of catch basins and ditch dams conforming to lines, grades, dimensions and typical diagrams shown on the plans, shall be required for grade culverts.
- 424 - Construction of splash pads conforming to lines, grades, dimensions and typical diagram shown in the plans, shall be required for all culverts.
- 425 - Where pervious materials are used for backfill and bedding, collars consisting of selected impervious material shall be placed at the inlet and at various intervals along the pipe barrel as shown on the plans, and as directed by the Authorized Officer.
- 427 - The Purchaser shall record culvert sizes, lengths and location actually installed on a copy of the culvert list. This culvert list shall be furnished to the Authorized Officer.
- 427a - All existing culverts removed as specified in the plans or as directed by the Authorized Officer' Rep. shall be hauled away and properly disposed of by the Purchaser.

RENOVATION OF EXISTING ROADS - 500

- 501 - This work shall consist of reconditioning and preparing the roadbed and shoulders, cleaning and shaping drainage ditches, trimming vegetation from cut and embankment slopes, and cleaning and repairing drainage structures of existing roads in accordance with these specifications, as shown on the plans, and as marked on the ground with stakes or metal tags.
- 501a - This work shall include the removal and disposal of slides in accordance with these specifications (and as marked on the ground with stakes or metal tags).

- 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 locations:

Road No.	From	To
38-3E-13 Spur A	0.00	0.12
38-3E-13 Spur B	0.00	0.15
38-3E-13.05	0.00	0.22
38-3E-13.06	0.00	0.49
38-3E-19.00 D	0.00	1.52
38-3E-23.01	0.00	1.04
38-3E-23.03	0.00	0.33
38-3E-25.00 A	0.00	0.18
38-3E-25.02	0.00	0.75
38-3E-27.01 B	0.07	1.22
38-3E-27.01 C	1.22	1.75
38-4E-7.00 C	1.20	1.79
38-4E-7.07	0.00	0.13
38-4E-17.00	0.00	0.27
38-4E-19.03	0.00	0.50
38-4E-19.04	0.00	0.20
38-4E-29.00	0.00	1.71
39-4E-6.03 A	0.00	0.66
39-4E-6.03 B	0.66	1.33

- 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.
- 506 - The inlet end of all existing drainage structures shall be cleared of vegetative debris and boulders that are of sufficient size to obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of all pipe structures shall be cleared of rock and vegetative obstructions which will impede the structure's designed outflow configuration.
- 507 - The finished grading shall be approved in writing by the Authorized Officer. The Purchaser shall give the Authorized Officer 5 days notice prior to final inspection of the grading operations.

WATERING - 600

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

AGGREGATE SURFACE COURSE - 1200
CRUSHED ROCK MATERIAL

- 1201 - This work shall consist of hauling, and placing one or more layers of crushed rock materials on the approved in accordance with these specifications and conforming to the lines, grades, 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.
- 1202 - Crushed rock materials used in this work shall consist of quarry rock, stone, gravel, or other approved materials obtained from stockpile sources shown on the plans.
- 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 these 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 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 requirement.

TABLE 1204
AGGREGATE SURFACE COURSE
CRUSHED ROCK MATERIAL

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

<u>GRADATION</u>	
<u>Sieve</u> <u>Designation</u>	<u>D</u>
1-1/2 inch	-
1 inch	100
3/4 inch	-
1/2 inch	-
No. 4	30-60
No. 8	-
No. 30	-
No. 40	5-30
No. 200	3-15
1205 -	Crushed rock material retained on the No. 4 sieve shall have a percentage of loss of not more than 35 at 500 revolutions, as determined by AASHTO T 96.
1206 -	Crushed rock material shall show a durability value of not less than 35 as determined by AASHTO T 210.
1207 -	That portion of crushed rock material passing the No. 40 sieve, including blending filler, shall have a liquid limits 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:

<u>Sand Equivalent</u>	<u>Percent Passing</u> <u>#200 Sieve AASHTO T 27</u>
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.

- 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 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.
- 1211 - Crushed rock material shall be compacted by routing construction and hauling equipment over the full width of each layer placed.
- 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 Subsections 103f, 103g, and 103h. Minimum compaction shall be 1 hour of continuous compacting for each 150 cubic yards or fraction thereof, of crushed rock material placed per layer.
- 1215 - The Purchaser is authorized to remove crushed rock material, truck measure, from BLM stockpiles, for placement on the roads, in accordance with the requirements and details shown on the plans, and as follows:

<u>Stockpile</u>	<u>Willamette Meridian</u>			<u>Legal</u>	<u>Road Number</u>
	<u>Section</u>	<u>T.</u>	<u>R.</u>		
Table Mountain	8	39 S.	3 E.	SW¼SE¼	39-3E-8.01
Nameless Springs	35	38 S.	4 E.	SE¼SE¼	38-4E-35.00

The Purchaser shall maintain records of material removed from each of the stockpile sites designated above. These records shall be submitted to the Authorized Officer upon completion of the surfacing operation.

EROSION CONTROL - 1700

- 1708a- Road segments not completed during dry weather periods shall be winterized, by providing a well-drained roadway by water barring, maintaining drainage, and performing additional measures necessary to minimize erosion and other damage to the roadway, as directed by the Authorized Officer. Portions of roads not having surface rock in place will be blocked or barricaded to prevent vehicular traffic.

SOIL STABILIZATION - 1800

1801 - This work shall consist of seeding and mulching on designated cut, fill, borrow, disposal, and special areas in accordance with these specifications and as shown on the plans.

1802a- Soil stabilization work consisting of seeding and mulching shall be performed on all disturbed portions of roads shown in Section 2601, landings, new road construction, and all disturbed areas in accordance with these specifications and as shown on the plans.

1803 - Soil stabilization work as specified under Subsection(s) 1802a shall be performed during the following seasonal periods:

From: August 1 to: October 31

1804 - The Purchaser shall furnish the following species of grass seed meeting corresponding germination, purity, and weed content requirements:

<u>Species</u>	<u>Germination</u>	<u>Purity</u>	<u>Weed Content</u>
	<u>Min. %</u>	<u>Min. %</u>	<u>Max. %</u>
California Brome	85	95	0.2
Blue Wild Rye	85	95	0.2

The grass seed furnished shall meet the minimum requirement for Blue Tag Seed as set forth in the latest edition of Oregon Certification Standards published by Oregon State University. Seed source shall be approved by the Authorized Officer and shall be from general region where the project occurs.

The Purchaser shall furnish the Authorized Officer a Seed Test Result from a certified seed testing lab (Oregon State University), which shall include: date of test; lot number of each kind of seed; seed source; and results of tests as to name, percentages of purity and of germination, weed species and percentage of weed content, for each kind of seed furnished and, in case of mixture, the proportions of each kind of seed. The seed must have been tested within the last year to be accepted for use on this contract.

Genetically appropriate native plant species (seed or other native plant materials) shall be selected as a first choice for project work. If native grass/forb seed or (other plant materials) is not available, non-native species to be used shall be approved by the appropriate resources specialist (botanist, native plant coordinator, etc.) and authorized officer prior to application on the ground.

1805 - The Purchaser shall mix grass seed specified under Subsection 1804 in the following proportions: Seed Mixture "A":

<u>Species</u>	<u>Percent of Total by Wt.</u>	<u>Lbs. per Acre</u>
California Brome	50%	10
Blue Wild Rye	50%	10
TOTALS	100	20 lbs./ac.

1809d - Straw mulch shall be from native grass or other approved grain crops which are certified weed free, and free from noxious weeds, mold, or other objectionable materials. Straw mulch shall be in an air-dry condition and suitable for placing in a uniform manner. Straw mulch shall be applied evenly in treatment areas to a depth of 2 inches (approximately 1000 lbs/ac), or as directed by the Authorized Officer.

- 1810 - Mulch material shall be delivered to the work area in a dry state. Material found to be wet will not be accepted. Material to be used in the mulching operation may be stockpiled along the road designated for treatment provided it is maintained in a dry state and has the approval of the Authorized Officer.
- 1811 - Bulk mulching material required under these specifications shall be delivered to the work area bound either by twine, string, or hemp rope. Wire binding and plastic twine will not be permitted.
- 1812 - The Purchaser shall furnish and apply to acres designated for treatment as shown on the plans, a mixture of grass seed and mulch material at the following rate of application:

Grass seed	20 lbs./acre
Mulch	1000 lbs./acre
- 1816b - Dry Method - Blowers, mechanical seeders, seed drills, landscape seeders, cultipaker seeders, or other approved mechanical seeding equipment may be used when seed is to be applied in dry form.
- 1820 - The Purchaser shall notify the Authorized Officer at least 5 days in advance of the date he intends to commence the specified soil stabilization work.
- 1822 - Mulch that collects at the ends of culverts or accumulates to excessive depths on the slopes shall be evenly spread by hand methods, as directed by the Authorized Officer's Rep.
- 1823 - No material shall be applied when wind velocities would prevent a uniform application of the mix or slurry or when winds would drift the mix or slurry spray outside of the designated treatment area.
- 1826 - Twine, rope, sacks, and other debris resulting from the soil-stabilization operation shall be picked up and disposed of to the satisfaction of the Authorized Officer.

ROADSIDE BRUSHING - 2100

- 2101 - This work shall consist of the removal of vegetation from the road prism - variable distance, and inside curves in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the Roadside Brushing Detail Sheet of this exhibit, at designated locations as shown in the plans.
- 2102 - Roadside brushing may be performed mechanically with self powered, self-propelled equipment or manually with hand tools, including chain saws.
- 2103 - Vegetation cut manually and or mechanically less than 6 inches in diameter when measured at DBH shall be cut to a maximum height of 2 inches above the ground surface or above obstructions such as rocks or stumps on cut and fill sloped and all limbs will be severed from the trunk.
- 2103a - Vegetation shall be cut and removed from the road bed between the outside shoulders and the ditch centerline and such vegetation shall be cut to a maximum height of 1 inch above the ground and running surface. All limbs will be severed from the trunk. Sharp pointed ends will not be permitted. Cuts shall be parallel to the ground line or running surface.

- 2104 - Trees in excess of 6 inches in diameter at DBH shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of 14 feet above the running surface of the roadway on cut and fill slopes, within the road prism-variable distance. Limbs shall be saw cut to within 1 inch of the trunk to produce a smooth vertical face. Removal of trees larger than (6) inches in diameter for sight distance or safety may be directed by the Authorized Officer.
- 2105 - Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within 14 feet in elevation above the running surface shall be cut, to within 1 inch of the trunk to produce a smooth vertical face.
- 2106 - Vegetative growth capable of growing (1) foot in height or higher shall be cut, within the road prism-variable distance or as directed by the Authorized Officer.
- 2107 - Inside curves shall be brushed out for a sight distance of 200 feet chord distance and a middle ordinate distance of 25 feet. Overhanging limbs and vegetation in excess of 1 foot in height, shall be cut within these areas.
- 2108 - Self propelled equipment shall not be permitted on cut and fill slopes or in ditches.
- 2109 - Debris resulting from this operation shall be scattered downslope from the roadway. Debris shall not be allowed to accumulate in concentrations. Debris in excess of (1) feet in length and (2) inches in diameter shall not be allowed to remain on cut slopes, ditches, roadways or water courses, or as directed by Authorized Officer.
- 2113 - Roadside brushing shall be accomplished as specified on the plans on the roads listed below:

Road No.	From	To
38-3E-13 Spur A	0.00	0.12
38-3E-13 Spur B	0.00	0.15
38-3E-13.05	0.00	0.22
38-3E-13.06	0.00	0.49
38-3E-19.00 D	0.00	1.52
38-3E-23.01	0.00	1.04
38-3E-23.03	0.00	0.33
38-3E-25.00 A	0.00	0.18
38-3E-25.02	0.00	0.75
38-3E-27.01 A	0.00	0.07
38-3E-27.01 B	0.07	1.22
38-3E-27.01 C	1.22	1.75
38-4E-7.07	0.00	0.13
38-4E-17.00	0.00	0.27
38-4E-19.00	0.00	0.30

Road No.	From	To
38-4E-19.03	0.00	0.50
38-4E-29.00	0.00	1.71
39-4E-6.03 A	0.00	0.66
39-4E-6.03 B	0.66	1.33
39-7E-31.00 A1	0.00	1.99
39-7E-31.00 A2	1.99	4.48

- 2116 - Mechanical brush cutters shall not be operated when there are people and occupied vehicles within 400 feet of the immediate operating area.
- 2117 - Traffic warning signs shall be required at each end of the work area. Signs shall meet the requirements of the Manual on Uniform Traffic Devices.

POST HARVEST ROAD WORK - 2600

- 2601 - Decommission roads after use during same operating season:

Road # and Name	From	To
38-3E-13 Spur A	0.00	0.12
38-3E-13 Spur B	0.00	0.15
TOTAL STATIONS		0.27

- 2601a - Camouflage road after use during same operating season:

Road # and Name	From	To
38-3E-13.06	0.00	0.49
38-3E-23.02	0.03	0.03
TOTAL STATIONS		0.52

2601b - Construct trench barricades on the following roads after use during same operating season:

Road # and Name
38-3E-13 Spur B
38-3E-13.05
38-3E-13.06
38-4E-7.07

2602 - Post harvest road work shall consist of the following treatments:

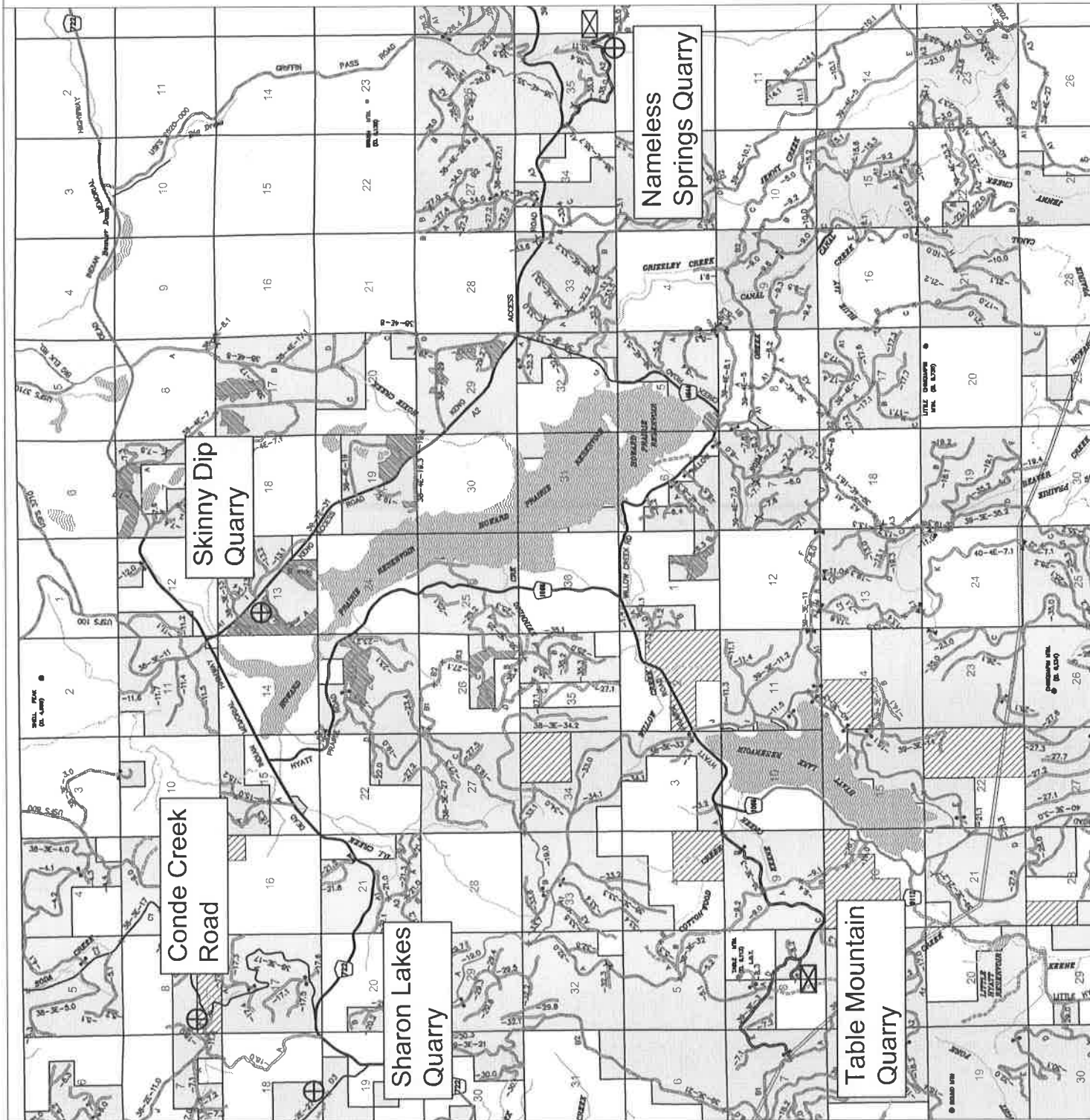
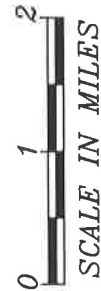
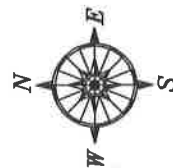
- a. Decommissioned roads shall consist of loosening compacted layers of road surface along the entire road width and length at a depth of 4-6 inches. Compacted layers of road surface shall be loosened mechanically with a machine equipped with a bucket with teeth and thumb suitable for breaking up soil and scattering debris. The purchaser shall use soil, boulders, brush, dead material, stumps, and other debris to disguise the entire length of the road prism to the extent possible.
- b. Camouflaged roads shall consist of using boulders, brush, dead material, stumps, and other debris to disguise the entire length of the road prism to the extent possible. No live trees should be used without approval by the Authorized Officer.
- c. Construct cross-drains at 150' spacing, or as staked or directed by the Authorized Officer's Representative.
- d. Construct trench barricades near the beginning of roads. The final locations will be staked by the Authorized Officer's Rep.

HOWARD TIMBER SALE STOCKPILE AND WATER SOURCE LOCATION MAP EXHIBIT C-15; PAGE 1 OF 1

U.S.D.I. BLM MEDFORD DISTRICT

T.38S., R.3E. WILL. MER.
T.38S., R.4E. WILL. MER.
T.39S., R.3E. WILL. MER.
T.39S., R.4E. WILL. MER.

- EXISTING GATE
- PUMP CHANCE
- STOCKPILE



R.3E. | R.4E.

T.38S.

T.39S.

**SPECIFICATION
TABLE OF CONTENTS**

Section 3000	General	Sheet 2
Section 3100	Operational Maintenance	Sheet 2
Section 3200	Seasonal Maintenance	Sheet 4
Section 3300	Final Maintenance	Sheet 5
Section 3400	Other Maintenance	Sheet 5

GENERAL - 3000

- 3001 - The Purchaser shall be required to maintain all roads listed and/or referenced in Section 42(C)(4) Special Provisions of this contract in accordance with Sections 3000, 3100, 3200, 3300, and 3400 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.
- 3003 - The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.
- 3004 - The Purchaser shall be responsible for providing timely maintenance and cleanup on any road(s) with logging units substantially completed prior to moving operations to other roads. The maximum length of non-maintained or non-cleanup of the road prism, shall not exceed the sum of one (1) mile at any time. Release of maintenance requirements may be granted, upon written request, when the conditions specified in Sections 3300 and 3400 are met satisfactorily.

OPERATIONAL MAINTENANCE - 3100

- 3101 - The Purchaser shall blade and shape the road surface and shoulders with a motor patrol 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 practically be accomplished by a motor patrol grader, rubber-tired front-end bucket loader, rubber-tired backhoe or comparable equipment, and by the use of hand tools.

- 3104a - Removal of bank slough and slide material includes placement of material at the nearest suitable turnout or disposal site where material cannot erode into streams, lakes, or reservoirs or cause undue damage to road fill slopes which have been planted or mulched to control soil erosion.
- 3104b - The Purchaser shall be responsible for removal of all slides or slough, up to fifteen (15) station yards in quantity, at any one site. This work includes unlimited multiple sites on all roads required to be maintained by the Purchaser.
- Prior to removal of any slough or slide material exceeding fifteen (15) station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, method of disposal, and the disposal site. Work may commence immediately after agreement.
- Upon completion of agreed-upon work, a reduction in timber sale purchase price will be made to offset the cost of work, based on current BLM Timber Appraisal Production Cost Schedules. Adjustments in purchase price for completed work shall be made as necessary and no less than once per year when actual work is ongoing.
- 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 waterbars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.
- 3106 - The Purchaser shall be responsible for repair and replacement of all materials eroded from road shoulders and fill slopes, up to fifteen (15) station yards in quantity, at any one site. The work includes unlimited multiple sites on all roads required to be maintained by the Purchaser. Prior to repair and replacement of eroded material exceeding fifteen (15) station yards at any one site, the Purchaser and the Authorized Officer or their Authorized Representatives shall agree in writing, in the field, to the quantity of material, borrow source, and method of repair. Work may commence immediately after agreement.
- Upon completion of agreed-upon work, a reduction in timber sale purchase price will be made to offset the cost of the work, based on current BLM Timber Sale Appraisal Production Cost Schedules. Adjustments in purchase price for completed work shall be made as necessary, and no less than once per year when actual work is ongoing.
- 3107 - The Purchaser shall cut or trim trees and brush which obstructs vision or prevents the safe passage of traffic along the traveled way, when directed by the Authorized Officer.

The Purchaser shall also cut trees or brush encroaching on the road prism that are a result of his activities or winter damage during the contract period. Disposal of such vegetative material shall be by scattering below the road.

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.

3108a - The Purchaser shall perform logging operations on gravel bituminous roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. Repair of the road shall be as specified in Subsection 3401.

SEASONAL MAINTENANCE - 3200

3201 - The Purchaser shall perform preventive maintenance at the end of Purchaser's hauling each season and during nonhauling periods which occur between other operations on the contract area. This includes cross ditching, removing ruts or other surface irregularities, and all other requirements specified in Section 3100.

3202 - The Purchaser shall perform and complete maintenance, specified in Sections 3000, 3100, and 3200, on all roads maintained by him, prior to October 1 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 preceding operating seasons.

3203 - The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any road(s) 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 30 calendar days following the completion of hauling and in accordance with Sec. 16(b) of this contract. This work shall include any maintenance and/or damage repairs specified in Sections 3000, 3100, and 3200 necessary to meet the conditions specified in Subsection 3002 and shall be executed in accordance with Subsection 3302 of this section. 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. 16(b), 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 3108a. This repair includes restoring the roadway to the designed standard and replacement of surfacing with approved surface material. This repair is not limited to use of equipment specified in Subsection 3104.

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 and snow removal, the Purchaser will perform the work according to the conditions and equipment requirements set forth in the Authorization.

- 3403 - The Purchaser shall be required to furnish and apply non-saline water during dry hauling periods, when directed by the Authorized Officer, for the purpose of laying dust and to prevent loss of surface material. The first application of water shall be made at the rate of one-half gallon per yd² of road surface traveled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds² of rock hauled. Subsequent waterings may be done at a rate less than one-half gallon per yd² when a specified lesser rate is approved by the Authorized Officer.

The following roads shall be watered:

Road No.	From M.P./STA	To M.P./STA
38-3E-13 Spur A	0.00	0.12
38-3E-13 Spur B	0.00	0.15
38-3E-13.05	0.00	0.22
38-3E-13.06	0.00	0.49
38-3E-19.00 D	0.00	1.52
38-3E-23.01	0.00	1.04
38-3E-23.03	0.00	0.33
38-3E-25.00 A	0.00	0.18
38-3E-25.02	0.00	0.75
38-3E-27.01 A	0.00	0.07
38-3E-27.01 B	0.07	1.22
38-3E-27.01 C	1.22	1.75
38-4E-7.00 C	1.20	1.79
38-4E-7.07	0.00	0.13
38-4E-17.00	0.00	0.27
38-4E-19.00	0.00	0.30

Road No.	From M.P./STA	To M.P./STA
38-4E-19.03	0.00	0.50
38-4E-19.04	0.00	0.20
38-4E-29.00	0.00	1.71
39-4E-6.03 A	0.00	0.66
39-4E-6.03 B	0.66	1.33

During drought periods when the transportation of water from the source to the roads noted above exceeds 10 miles, a reduction shall be made in the total purchase price to reflect the additional haul or the substitution of other acceptable dust palliatives in lieu of watering, based on equipment rental rates from current BLM Timber Appraisal Production Cost Schedules.

3403a - During dry hauling conditions when the authorized officer determines watering is not required, the Purchaser shall reduce hauling speeds to 5 MPH and/or restrict the number of loads hauled to 2 per day on the following road:

Road No.	From M.P./STA	To M.P./STA
38-3E-13 Spur A	0.00	0.12
38-3E-13 Spur B	0.00	0.15
38-3E-13.05	0.00	0.22
38-3E-13.06	0.00	0.49
38-3E-19.00 D	0.00	1.52
38-3E-23.01	0.00	1.04
38-3E-23.03	0.00	0.33
38-3E-25.00 A	0.00	0.18
38-3E-25.02	0.00	0.75

Road No.	From M.P./STA	To M.P./STA
38-3E-27.01 A	0.00	0.07
38-3E-27.01 B	0.07	1.22
38-3E-27.01 C	1.22	1.75
38-4E-7.00 C	1.20	1.79
38-4E-7.07	0.00	0.13
38-4E-17.00	0.00	0.27
38-4E-19.00	0.00	0.30
38-4E-19.03	0.00	0.50
38-4E-19.04	0.00	0.20
38-4E-29.00	0.00	1.71
39-4E-6.03 A	0.00	0.66
39-4E-6.03 B	0.66	1.33

Adjustments to the above schedules may be made by the Authorized Officer at his option as hauling conditions improve. The Purchaser, at his option and expense, may elect to substitute watering or other dust palliatives in lieu of the above hauling requirements provided that written approval is received from the Authorized Officer. Such authorization shall include the approval of product specifications for the application and the product to be used.

- 3404 - The Purchaser may at his option and expense, substitute lignin sulfonate, or bituminous dust palliatives for water on any or all road segments listed in Subsection 3403 or 3403a provided that written approval is received from the Authorized Officer. Such authorization shall include approval of product specifications for the application of the product to be used. Multiple applications may be required to maintain the conditions specified in Subsection 3403.

HOWARD TIMBER SALE
ROAD LOCATION MAP
EXHIBIT D-2; PAGE 1 OF 1

U.S.D.I. BLM MEDFORD DISTRICT

T.38S., R.3E. WILL. MER.
T.38S., R.4E. WILL. MER.
T.39S., R.3E. WILL. MER.
T.39S., R.4E. WILL. MER.

EXISTING GATE

PUMP CHANGE

ROAD PROJECTS

EXISTING ROAD

EXISTING PAVED ROAD

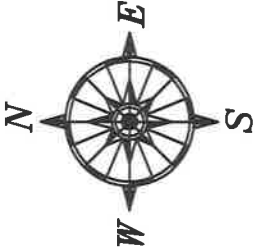
EXISTING PRIMITIVE ROAD

OPERATOR MAINTENANCE

BLM MAINTENANCE

BLM LAND

TS UNITS



SCALE IN MILES

T.38S.

T.39S.

R.3E. | R.4E.

TIMBER SALE CONTRACT MAP
CONTRACT NO. ORM06-TS14-14
EXHIBIT S



Fuels_Trea



Level 2



No HP



Howard Contract 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.

Legend

- Road
- cadastral
- Stream
- Index
- Intermediate
- Temp_Roads
- Howard Timber Sale Units
- Howard Contract Area

Land Administration
juriscode

- PVT
- Section
- GovtLots

Howard_TS_Fuels

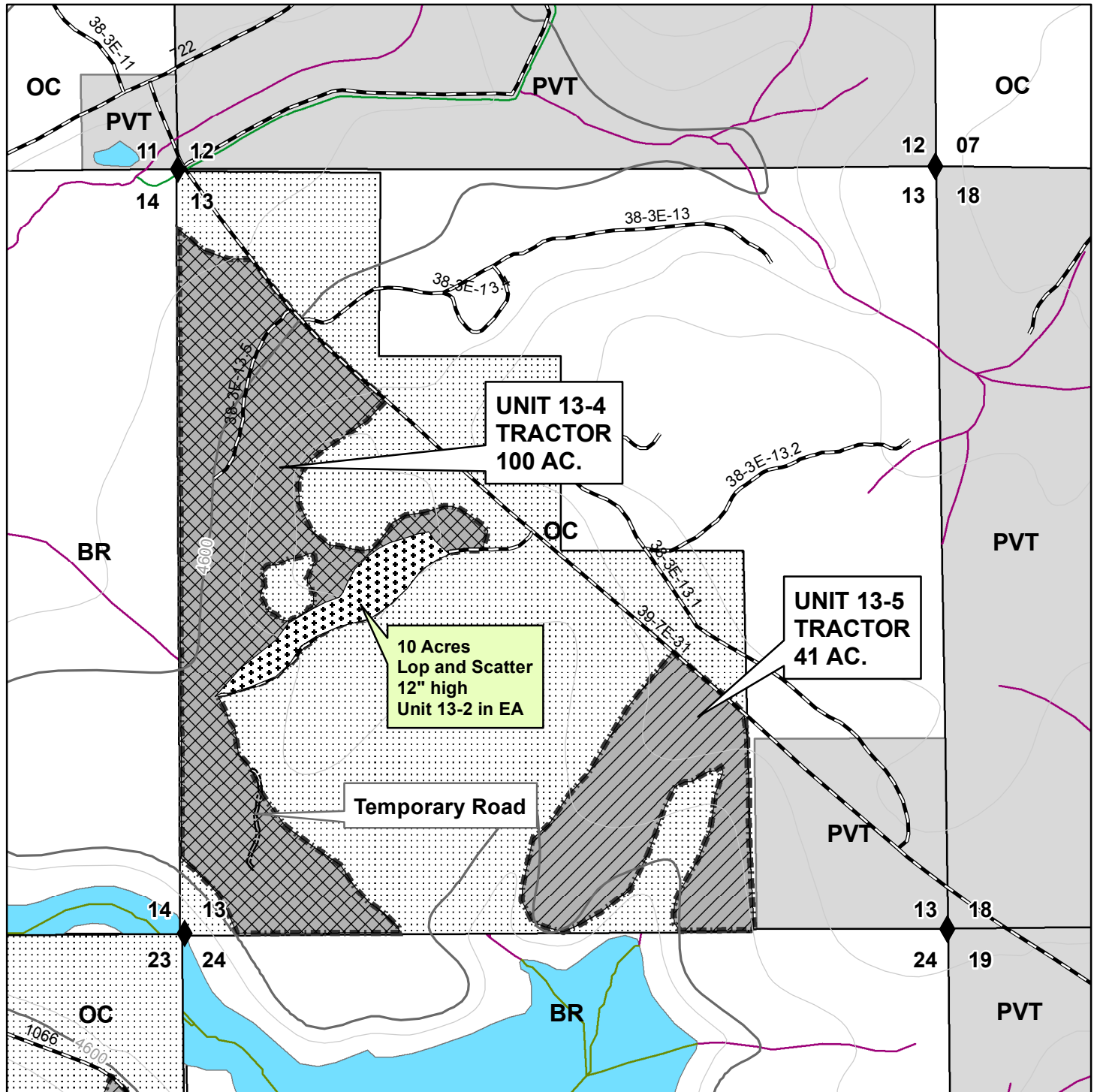
Fuels_Trea

- Level 1
- Level 2
- Level 3
- No HP

LEVEL 1 HANDPILE 0-20 PILES/ACRE	
UNIT 1-1.....	14 ACRES
LEVEL 2 HANDPILE 21-40 PILES/ACRE	
UNIT 7-1, 13-5, 17-4, 19-2, 23-1, 26-1, 26-2, 29-3, 29-5....	472 ACRES
LEVEL 3 HANDPILE 41-60 PILES/ACRE	
UNIT 13-4, 29-1.....	43 ACRES
NO HANDPILES/NO FUELS TREATMENT	
UNIT 1-2, 17-1, 19-1, 29-2.....	84 ACRES



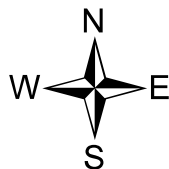
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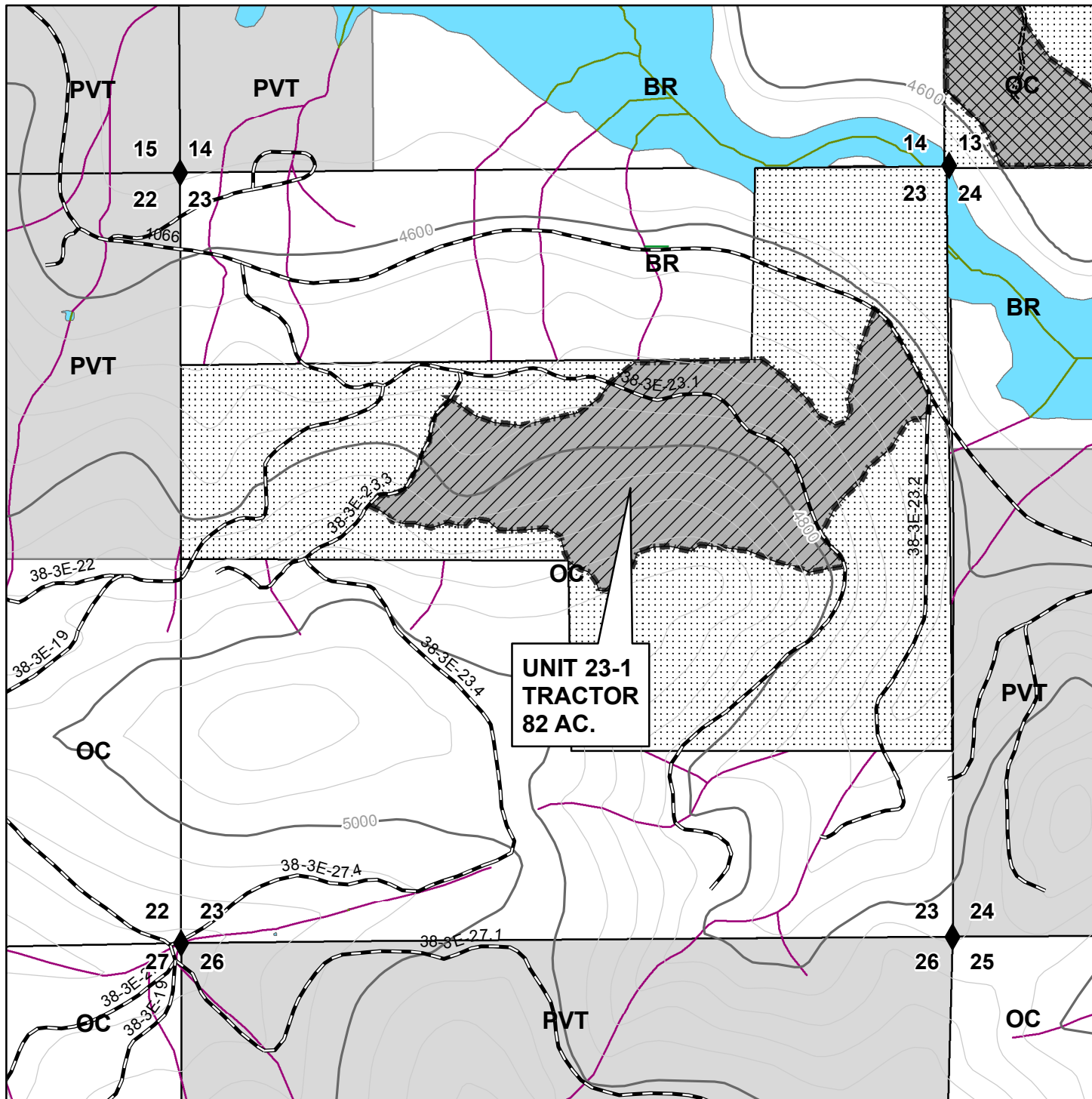
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Miles

1 inch = 1,000 feet



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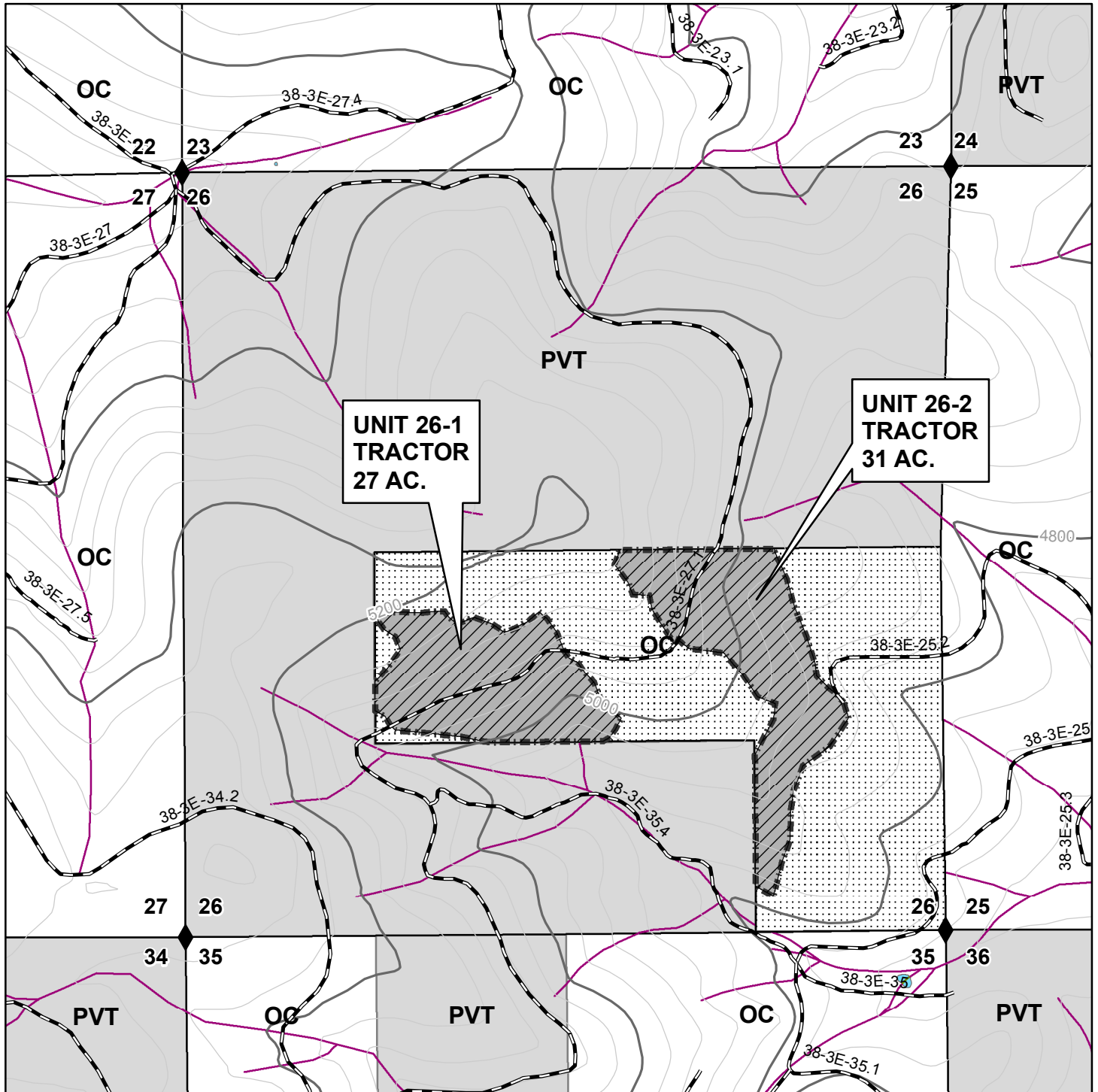
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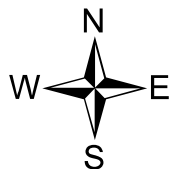
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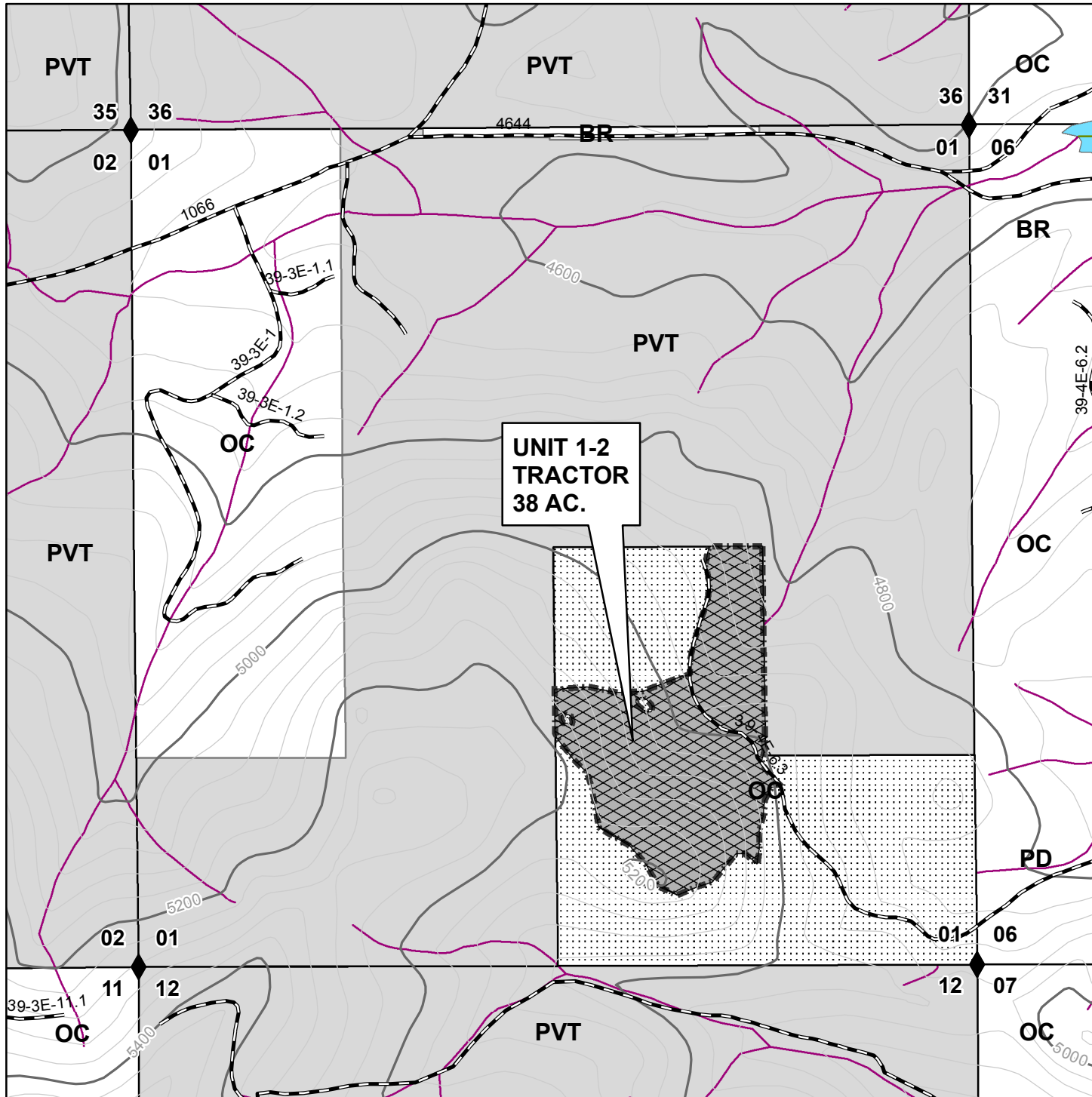
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Miles

1 inch = 1,000 feet



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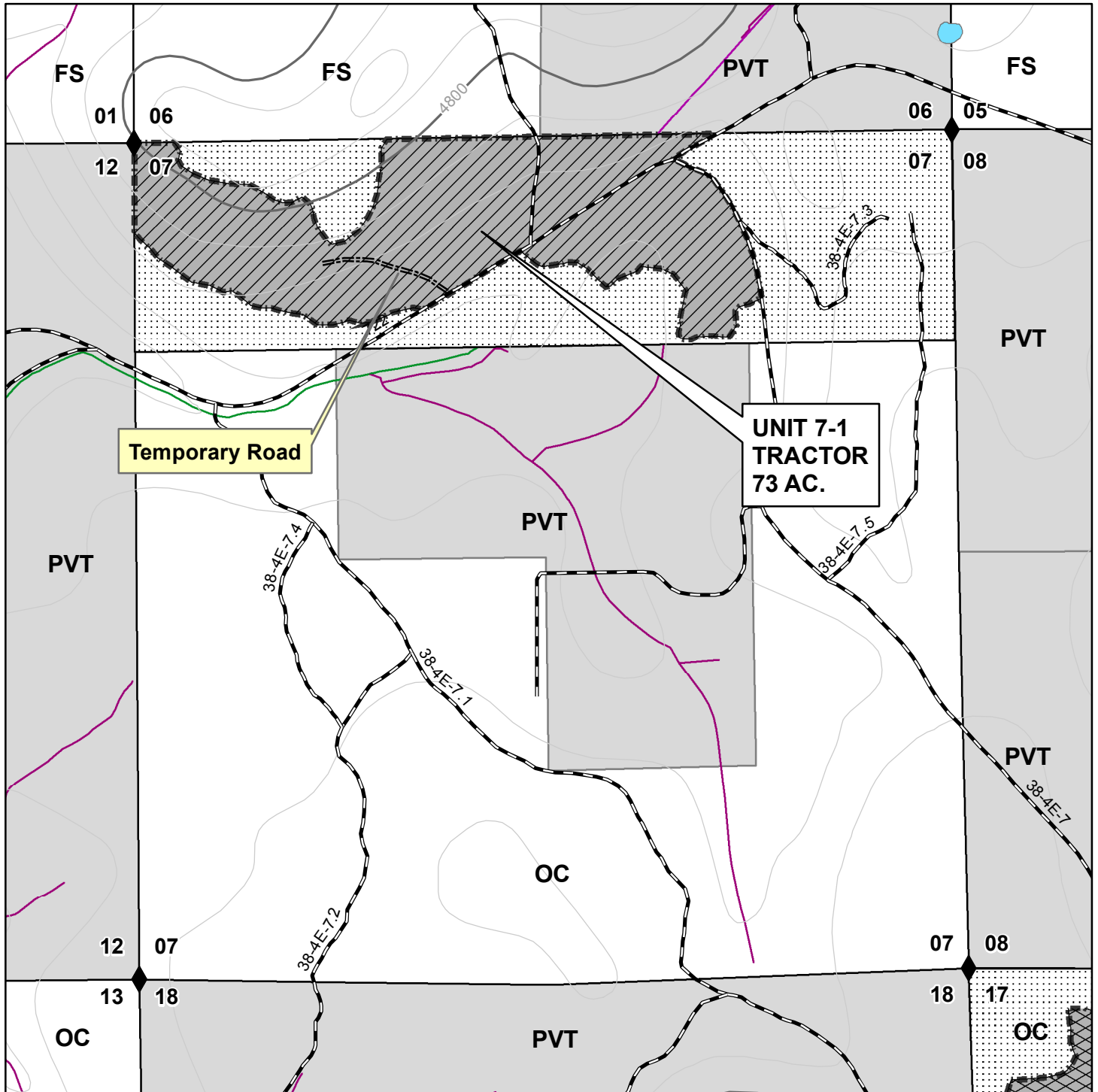
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Miles

1 inch = 916.666667 feet



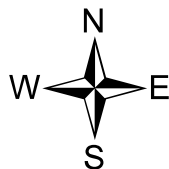
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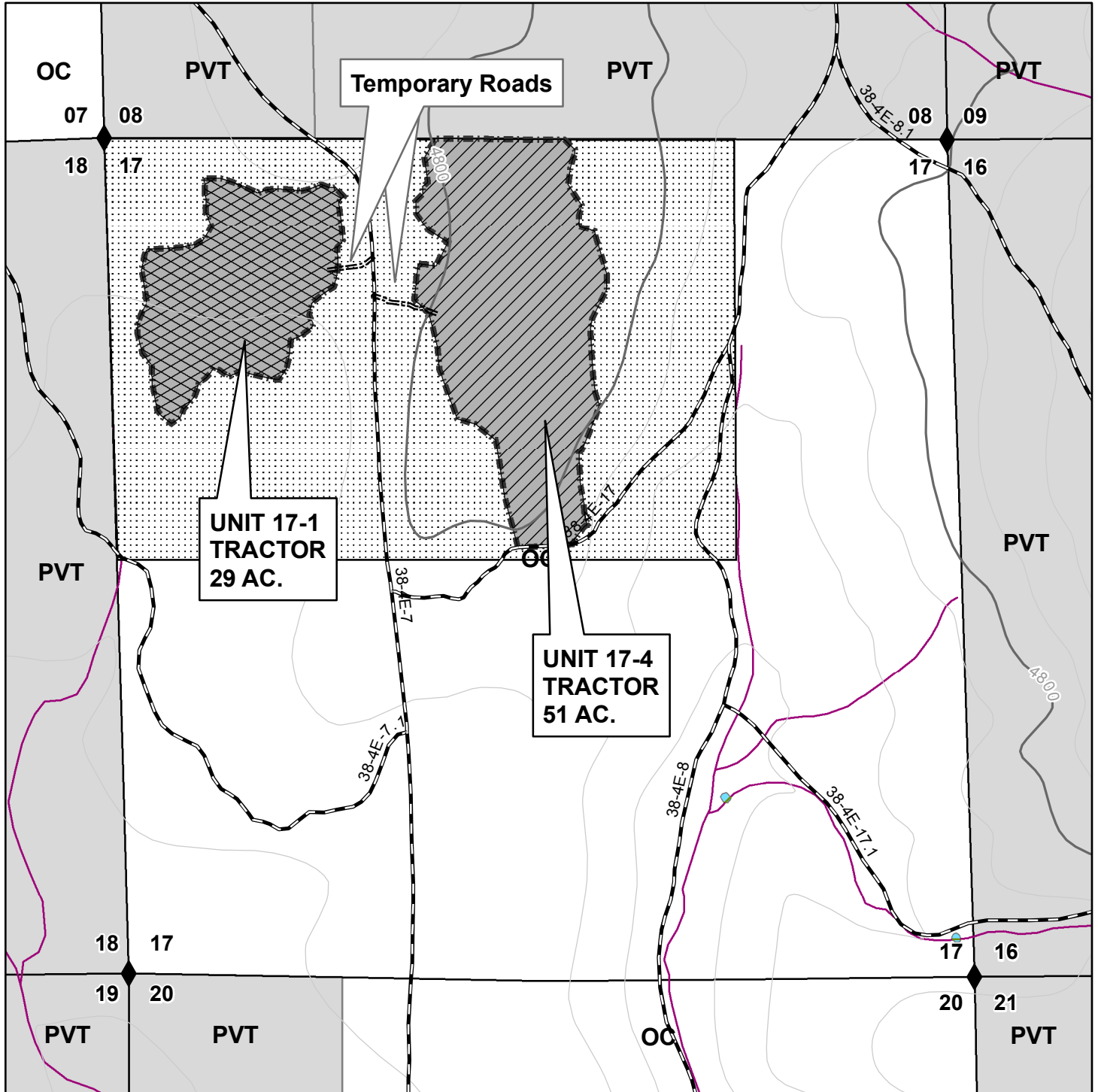
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0 0.1 0.2 0.4 Miles

1 inch = 916.666667 feet



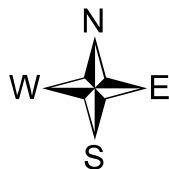
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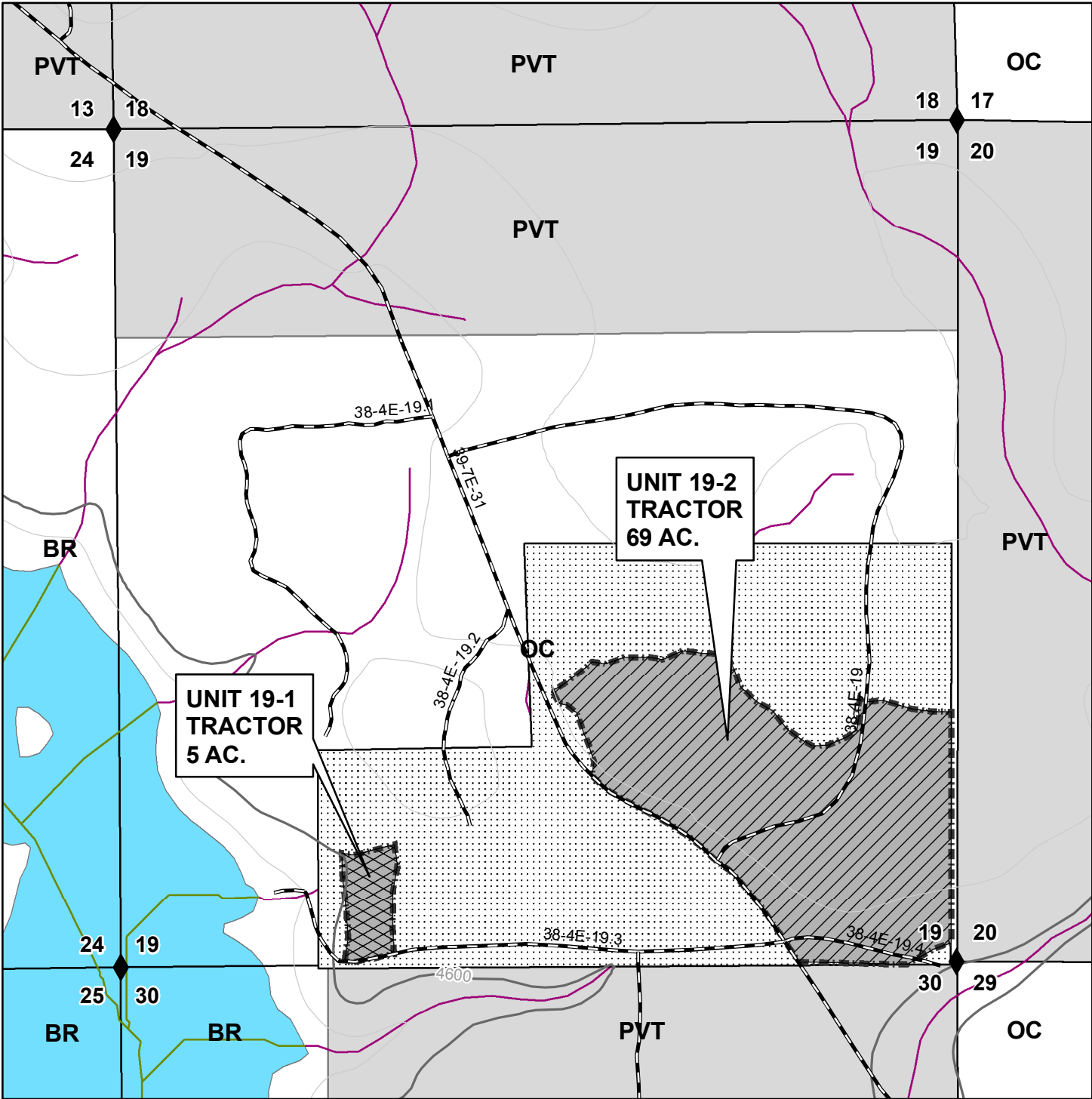
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0 0.1 0.2 0.4
Miles

1 inch = 916.666667 feet



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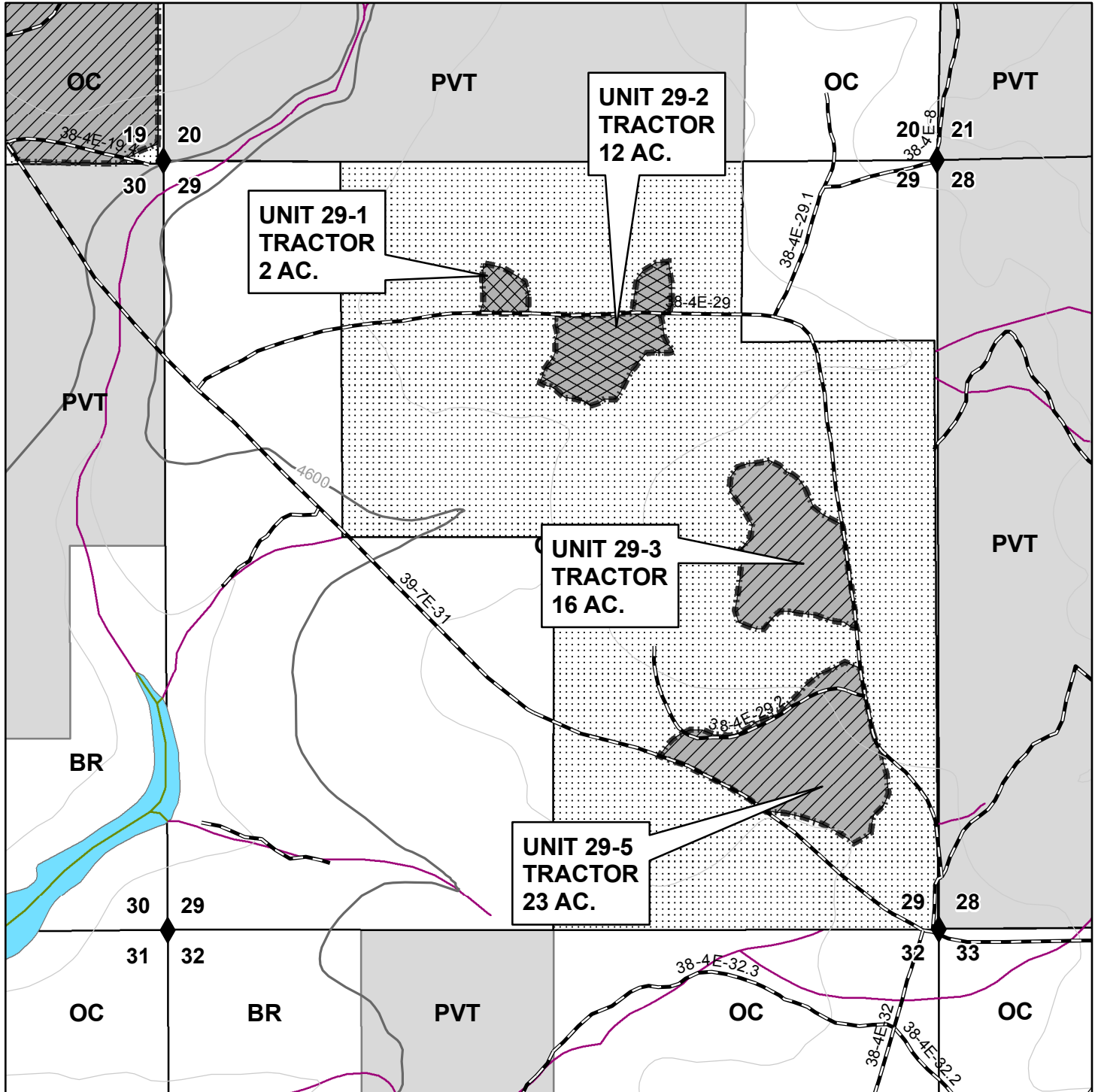
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Miles

1 inch = 916.666667 feet



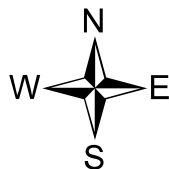
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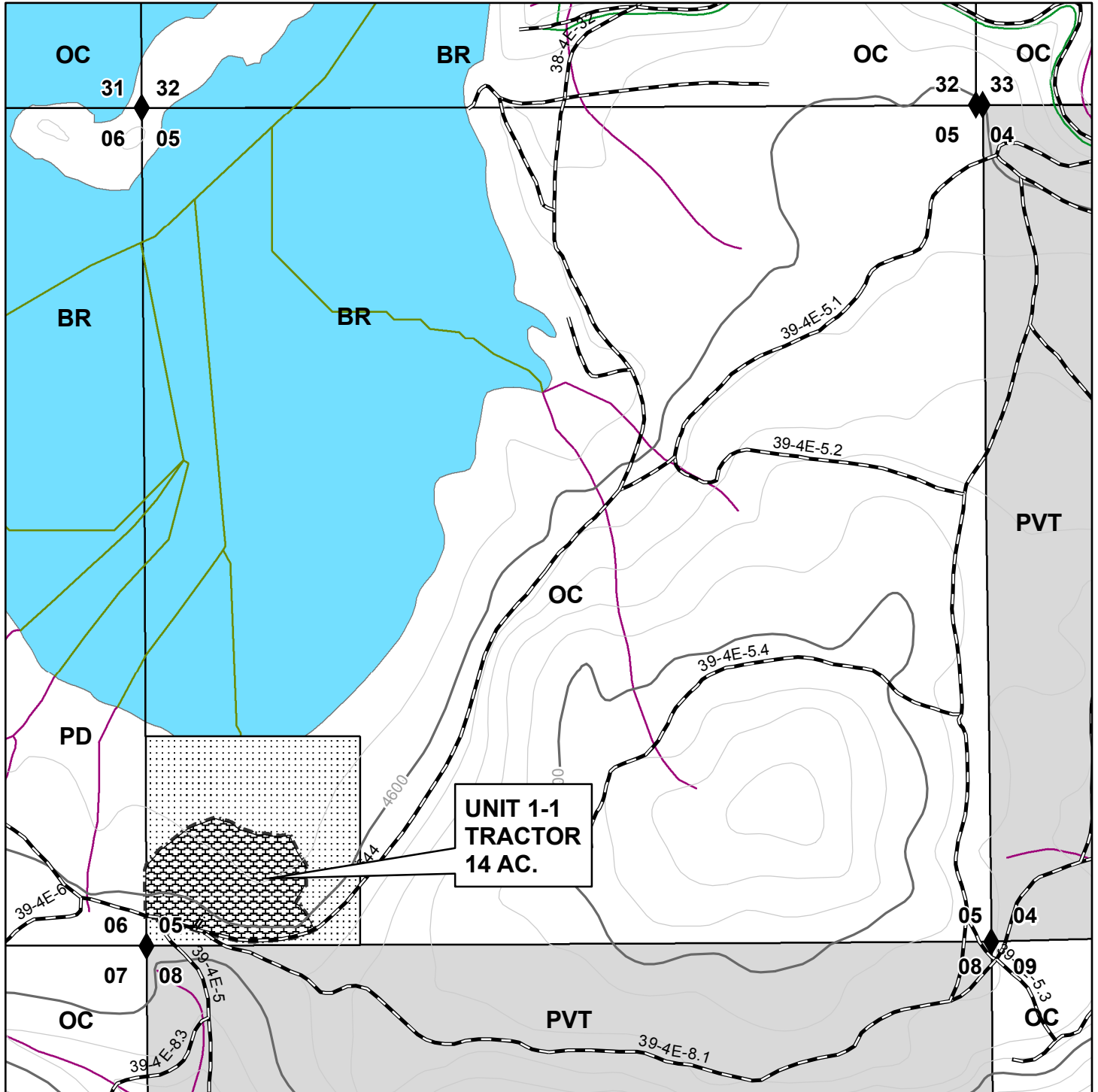
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Miles

1 inch = 1,000 feet



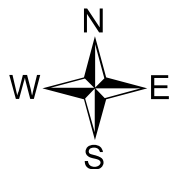
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40 FOOT CONTOURS

0 0.1 0.2 0.4 Miles

1 inch = 916.666667 feet



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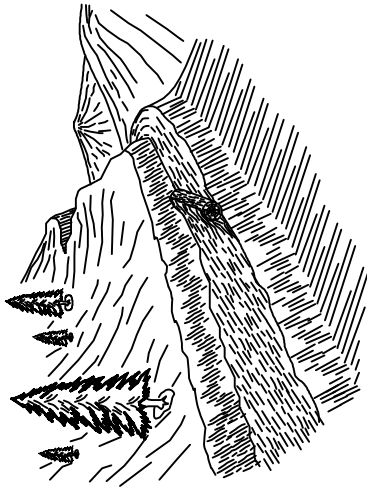
HOWARD TS

Fuels Handpiling Costs

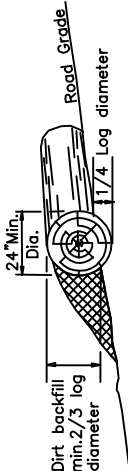
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1-2	38	None	0	0
13-4	90	L3	\$376.00	\$33,840.00
13-4	10	L&S	\$41.00	\$410.00
13-5	41	L2	\$507.00	\$20,787.00
17-4	51	L2	\$376.00	\$19,176.00
19-2	69	L2	\$376.00	\$25,944.00
29-5	23	L2	\$376.00	\$8,648.00
7-1	73	L2	\$376.00	\$27,448.00
17-1	29	None	0	0
19-1	5	None	0	0
23-1	82	L2	\$376.00	\$30,832.00
26-1	27	L2	\$376.00	\$10,152.00
26-2	31	L2	\$376.00	\$11,656.00
29-1	2	L3	\$507.00	\$1,014.00
29-2	12	None	0	0
29-3	16	L2	\$376.00	\$6,016.00
TOTAL	613			\$199,941.00

Piling Level	Acres by level	Avg Piles/Ac.
Level 1	14	0-20
Level 2	462	21-40
Level 3	43	41-60
Lop & Scatter	10	0
	529	

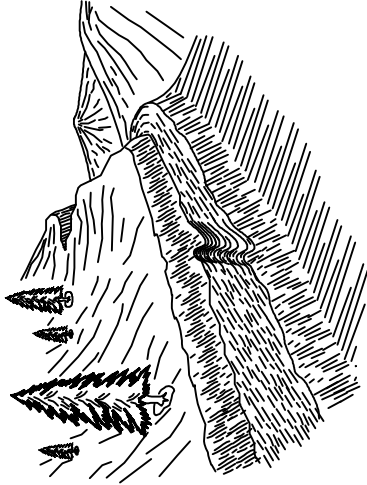
Lop and Scatter	Acres	\$/Acre	Total \$
Lop and scatter 12 " hig	10	\$41.00	\$410.00



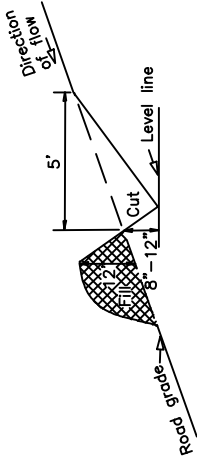
LOG BARRICADE



1. LOG BARRICADE SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL BARRICADES SHALL BE SKEWED 30 DEGREES
4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE.
5. THE MINIMUM SMALL END DIAMETER OF THE LOG BARRICADE SHALL BE 24".

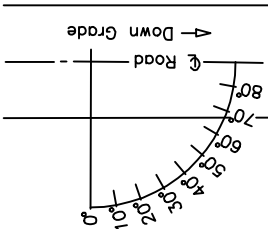


WATER BAR



1. WATER BARS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
3. ALL WATER BARS SHALL BE SKEWED 30 DEGREES
4. UPON COMPLETION OF SKIDDING LOGS, FOR THE LOGGING SEASON, EACH SKID ROAD WILL HAVE CROSS DRAINAGE CONSTRUCTED AS SHOWN ABOVE.
5. PRIOR TO BLOCKING, EACH ROAD WILL HAVE CROSS DRAINAGE CONSTRUCTED AS SHOWN ABOVE.

SKEW DIAGRAM



WATER BAR SPACING *

ROAD GRADE	LOAM OR CLAY	DECOMPOSED LOAM GRANITE
%	FEET	FEET
4-6	400	300
7-9	300**	200**
10-14	200	150
15-20	150	90
21-40	90	50
41-60	50	25

* DISTANCES ARE MAXIMUM.

** ON GRADES IN EXCESS OF 10% CONSTRUCT WATER BARS.



United States of America
Department of the Interior
Bureau Of Land Management
Timber Sale Appraisal

District : Medford
Sale Name : Howard
Sale Date : 08/28/2014
Appraisal Method : 16' MBF

Contract # : ORM06-TS-14-14
Job File # : 14
Master Unit : Jackson
Planning Unit : Ashland

Contents

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Consolidated Comments	17

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

Medford
Howard
ORM06-TS-14-14

Legal Description

Forest Type	Township	Range	Section	Subdivision
O&C	38S	3E	13	W 1/2 NW 1/4, SE 1/4 NW 1/4, SW 1/4, W 1/2 SE 1/4
O&C	38S	3E	23	SE 1/4 NW 1/4, NE 1/4 NE 1/4, S 1/2 NE 1/4, NW 1/4 SE 1/4, NE 1/4 SE 1/4
O&C	38S	3E	26	NE 1/4 SW 1/4, N 1/2 SE 1/4, SE 1/4 SE 1/4
O&C	38S	4E	7	N 1/2 NW 1/4, N 1/2 NE 1/4
O&C	38S	4E	17	NW 1/4, W 1/2 NE 1/4
O&C	38S	4E	19	SE 1/4 SW 1/4, SE 1/4
O&C	38S	4E	29	E 1/2 NW 1/4, W 1/2 NE 1/4, SE 1/4 NW 1/4, SE 1/4
O&C	39S	3E	1	W 1/2 SE 1/4
O&C	39S	4E	5	LOT 7

Cutting Volume (16' MBF)

Unit	WF	DF	PP	IC					Total	Regen	Partial	ROW
1-1	33	14	2						49	0	14	0
1-2	108	8		6					122	0	38	0
13-4	592	50	25	0					667	0	100	0
13-5	294	49	11	0					354	0	41	0
17-1	105	8							113	0	29	0
17-4	212	21	0	1					234	0	51	0
7-1	312	68	5						385	0	73	0
19-1	13	14	1						28	0	5	0
19-2	348	25	0						373	0	69	0
23-1	298	45		0					343	0	82	0
26-1	107	59	0	1					167	0	27	0
26-2	90	69	1	6					166	0	31	0
29-1	5	21	0						26	0	2	0
29-2	68	5							73	0	12	0
29-3	92	5							97	0	16	0
29-5	146	7	5						158	0	23	0

Totals	2,823	468	50	14					3,355	0	613	0
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**UNITED STATES
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ORM06-TS-14-14

Logging Costs per 16' MBF

Stump to Truck	\$	135.56
Transportation	\$	59.00
Road Construction	\$	9.83
Road Amortization	\$	0.00
Road Maintenance	\$	4.66

Other Allowances :

Fuels Treatment	\$ 59.59
Misc	\$ 0.36
Other Costs	\$ 4.75
Total Other Allowances :	\$ 64.70

Total Logging Costs per 16' MBF

\$ 273.74

Utilization Centers

Center #1 : White City, OR 46 Miles
Center #2 0 Miles
Weighted distance to Utilization Centers 46

Length of Contract

Cutting and Removal Time 36 Months
Personal Property Removal Time 6 Months

Profit & Risk

Total Profit & Risk 11 %
Basic Profit & Risk 11 % + Additional Risk 0 %
Back Off 0 %

Tract Features

Avg Log White Fir : 81 bf All : 79 bf
Recovery White Fir : 84 % All : 85 %
Salvage White Fir : 0 % All : 0 %
Avg Volume (16' MBF per Acre) 5
Avg Yarding Slope 10 %
Avg Yarding Distance (feet) 400
Avg Age 100
Volume Cable 0 %
Volume Ground 100 %
Volume Aerial 0 %
Road Construction Stations 0.00
Road Improvement Stations 0.00
Road Renovation Stations 0.00
Road Decommission Stations 0.00

Cruise

Cruised By Worman, Siemer
Date 05/01/2014
Type of Cruise 3P
County, State Jackson, OR

Net Volume

Green (16' MBF) 3,355
Salvage (16' MBF) 0
White Fir Peeler 7
Export Volume 0
Scaling Allowance (\$0.50 per 16' MBF) \$1,677.50

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DEPARTMENT OF THE INTERIOR
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Medford
Howard
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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
WF	12,581	2,823	\$ 421.45	\$ 46.36	\$ 273.74			\$ 101.40	\$ 286,252.20
DF	2,253	468	\$ 495.76	\$ 54.53	\$ 273.74			\$ 167.50	\$ 78,390.00
PP	148	50	\$ 368.47	\$ 40.53	\$ 273.74			\$ 54.20	\$ 2,710.00
IC	153	14	\$ 449.12	\$ 49.40	\$ 273.74			\$ 126.00	\$ 1,764.00
Totals	15,135	3,355							\$ 369,116.20

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
White Fir			3.0	62.0	29.0	6.0
Ponderosa Pine				75.0	24.0	1.0
Douglas-fir			4.0	67.0	23.0	6.0
Incense-cedar				62.0	22.0	16.0

Marginal Log Volume

Species	Grade #7	Grade #8
White Fir		
Ponderosa Pine		
Douglas-fir		
Incense-cedar		

Appraised By :	Date :
Area Approval By :	Date :
District Approval By :	Date :

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

Medford
Howard
ORM06-TS-14-14

Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
White Fir	12,581	2,823	2,226	4,780
Douglas-fir	2,253	468	374	827
Ponderosa Pine	148	50	42	84
Incense-cedar	153	14	12	32
Total	15,135	3,355	2,654	5,723

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
3,956	15,135	261	16.0	3,662	46,415	79

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
46,415	2,743	49,158	3.2	3,355	3,956	85 %

White Fir

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
3,379	12,581	268	16.0	3,093	38,333	81

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
38,333	2,573	40,906	3.3	2,823	3,379	84 %

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Medford
Howard
ORM06-TS-14-14

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
1-1		14		14
1-2		38		38
13-4		100		100
13-5		41		41
17-1		29		29
17-4		51		51
7-1		73		73
19-1		5		5
19-2		69		69
23-1		82		82
26-1		27		27
26-2		31		31
29-1		2		2
29-2		12		12
29-3		16		16
29-5		23		23
Totals :		613		613

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Exhibit B

The following estimates and calculations of timber sold are made solely as an administrative aid for determining: (1) Adjustments made or credits given in accordance with Sections 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 provided in Section 2, Purchaser shall be liable for the total purchase price even though the 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 the Exhibit A.

Sale Totals (16' MBF)

Species	Net Volume	Bid Price	Sale SubTotal
White Fir	2,823		
Douglas-fir	468		
Ponderosa Pine	50		
Incense-cedar	14		
Sale Totals	3,355		

Unit Details (16' MB)

Unit 1-1 14 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	14		
Ponderosa Pine	2		
White Fir	33		
Unit Totals	49		

Unit 1-2 38 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	8		
Incense-cedar	6		
White Fir	108		
Unit Totals	122		

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Unit 13-4 100 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	50		
Incense-cedar			
Ponderosa Pine	25		
White Fir	592		
Unit Totals	667		

Unit 13-5 41 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	49		
Incense-cedar			
Ponderosa Pine	11		
White Fir	294		
Unit Totals	354		

Unit 17-1 29 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	8		
White Fir	105		
Unit Totals	113		

Unit 17-4 51 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	21		
Incense-cedar	1		
Ponderosa Pine			
White Fir	212		
Unit Totals	234		

Unit 19-1 5 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	14		
Ponderosa Pine	1		
White Fir	13		
Unit Totals	28		

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Unit 19-2 69 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	25		
Ponderosa Pine			
White Fir	348		
Unit Totals	373		

Unit 23-1 82 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	45		
Incense-cedar			
White Fir	298		
Unit Totals	343		

Unit 26-1 27 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	59		
Incense-cedar	1		
Ponderosa Pine			
White Fir	107		
Unit Totals	167		

Unit 26-2 31 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	69		
Incense-cedar	6		
Ponderosa Pine	1		
White Fir	90		
Unit Totals	166		

Unit 29-1 2 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	21		
Ponderosa Pine			
White Fir	5		
Unit Totals	26		

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Unit 29-2 12 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	5		
White Fir	68		
Unit Totals	73		

Unit 29-3 16 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	5		
White Fir	92		
Unit Totals	97		

Unit 29-5 23 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	7		
Ponderosa Pine	5		
White Fir	146		
Unit Totals	158		

Unit 7-1 73 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	68		
Ponderosa Pine	5		
White Fir	312		
Unit Totals	385		

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

Medford
Howard
ORM06-TS-14-14

Sale Volume Totals

613 Acres 0 Regen 613 Partial 0 R/W 16 Units

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Net	16' MBF GM	16' MBF Gross	32' MBF Net	32' MBF GM	32' MBF Gross	CCF Net	CCF GM	CCF Gross
White Fir	12,581	38,333	2,573	2,823	3,093	3,379	2,226	2,438	2,672	4,780	5,247	5,735
Douglas-fir	2,253	7,231	123	468	499	503	374	398	402	827	885	895
Ponderosa Pine	148	541	47	50	54	58	42	46	48	84	94	97
Incense-cedar	153	310	0	14	16	16	12	13	13	32	35	35
Totals	15,135	46,415	2,743	3,355	3,662	3,956	2,654	2,895	3,135	5,723	6,261	6,762

Unit Totals

Unit : 1-1 14 Acres 0 Regen 14 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	205	447	30	40	36	33
Douglas-fir	98	219	4	15	15	14
Ponderosa Pine	6	21	2	2	2	2
Unit Totals	309	687	36	57	53	49

Unit : 1-2 38 Acres 0 Regen 38 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	646	1,472	99	130	119	108
Douglas-fir	40	118	2	8	8	8
Incense-cedar	62	127		7	7	6
Unit Totals	748	1,717	101	145	134	122

Unit : 13-4 100 Acres 0 Regen 100 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	2,332	7,993	536	705	648	592
Douglas-fir	215	772	13	54	53	50
Ponderosa Pine	71	256	23	28	27	25
Incense-cedar	3	9				
Unit Totals	2,621	9,030	572	787	728	667

Unit : 13-5 41 Acres 0 Regen 41 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net

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White Fir	1,167	3,992	268	352	322	294
Douglas-fir	250	749	13	52	52	49
Ponderosa Pine	27	118	11	13	12	11
Incense-cedar	1	2				
Unit Totals	1,445	4,861	292	417	386	354

Unit : 17-1 29 Acres 0 Regen 29 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	381	1,429	96	126	115	105
Douglas-fir	14	124	2	9	9	8
Unit Totals	395	1,553	98	135	124	113

Unit : 17-4 51 Acres 0 Regen 51 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	1,179	2,900	195	255	234	212
Douglas-fir	103	328	6	23	23	21
Incense-cedar	18	27		1	1	1
Ponderosa Pine	2	5		1		
Unit Totals	1,302	3,260	201	280	258	234

Unit : 7-1 73 Acres 0 Regen 73 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	1,277	4,244	285	374	342	312
Douglas-fir	322	1,043	18	73	72	68
Ponderosa Pine	12	50	4	5	5	5
Unit Totals	1,611	5,337	307	452	419	385

Unit : 19-1 5 Acres 0 Regen 5 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	54	223	4	16	15	14
White Fir	56	182	12	16	15	13
Ponderosa Pine	1	12	1	1	1	1
Unit Totals	111	417	17	33	31	28

Unit : 19-2 69 Acres 0 Regen 69 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	1,382	4,735	318	417	381	348
Douglas-fir	110	391	7	27	27	25

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Ponderosa Pine	1	3				
Unit Totals	1,493	5,129	325	444	408	373

Unit : 23-1 82 Acres 0 Regen 82 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	1,101	4,049	272	357	326	298
Douglas-fir	182	695	12	48	48	45
Incense-cedar	2	4				
Unit Totals	1,285	4,748	284	405	374	343

Unit : 26-1 27 Acres 0 Regen 27 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	566	1,450	97	128	117	107
Douglas-fir	268	917	15	64	63	59
Incense-cedar	8	19		1	1	1
Ponderosa Pine	1	3				
Unit Totals	843	2,389	112	193	181	167

Unit : 26-2 31 Acres 0 Regen 31 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	468	1,217	82	107	98	90
Douglas-fir	302	1,068	18	74	74	69
Incense-cedar	59	122		7	7	6
Ponderosa Pine	3	13	1	1	1	1
Unit Totals	832	2,420	101	189	180	166

Unit : 29-1 2 Acres 0 Regen 2 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	171	321	5	22	22	21
White Fir	27	65	4	6	5	5
Ponderosa Pine	2	5		1		
Unit Totals	200	391	9	29	27	26

Unit : 29-2 12 Acres 0 Regen 12 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	386	925	62	81	75	68
Douglas-fir	36	83	1	6	6	5

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Unit Totals	422	1,008	63	87	81	73
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Unit : 29-3 16 Acres 0 Regen 16 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	564	1,245	84	110	100	92
Douglas-fir	36	74	1	5	5	5
Unit Totals	600	1,319	85	115	105	97

Unit : 29-5 23 Acres 0 Regen 23 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
White Fir	844	1,988	133	175	160	146
Douglas-fir	52	106	2	7	7	7
Ponderosa Pine	22	55	5	6	6	5
Unit Totals	918	2,149	140	188	173	158

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Stump to Truck Costs

Total (16' MBF)

Total Stump to Truck Costs	Net Volume	Cost / Net Volume
\$ 454,791.24	3,355	\$ 135.56

Detail

Yarding & Loading

Yarding System	Unit Of Measure	Units	Cost / Unit	Total Cost
Cut To Length	GMBF	2,562	\$ 125.67	\$ 321,966.54
Track Skidder	GMBF	1,100	\$ 111.22	\$ 122,342.00
Subtotal				\$ 444,308.54

Other Costs

Explanation	Unit Of Measure	Units	Cost / Unit	Total Cost
Directional Falling	MBF	1,110	\$ 0.57	\$ 632.70
Subtotal				\$ 632.70

Additional Move-Ins

Equipment	# Move-In	Cost / Move In	Total Cost
Yarder / Loader	5	\$ 480.00	\$ 2,400.00
Delimber	5	\$ 480.00	\$ 2,400.00
Skidder	5	\$ 505.00	\$ 2,525.00
Feller Buncher	5	\$ 505.00	\$ 2,525.00
Subtotal			\$ 9,850.00

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Medford
Howard
ORM06-TS-14-14

Other Allowances Costs

Total (16' MBF)

Total Other Allowances Costs	Net Volume	Cost / Net Volume *	Total Buy Out Cost
\$217,069.00	3,355	\$64.70	\$0.00

Fuels Treatment

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Hand Pile, Cvr - Level 1	\$ 4,018.00	\$ 1.20	N	\$ 0.00
Hand Pile, Cvr - Level 2	\$ 173,712.00	\$ 51.78	N	\$ 0.00
Hand Pile, Cvr - Level 3	\$ 21,801.00	\$ 6.50	N	\$ 0.00
Lop and Scatter-Lvl 2	\$ 410.00	\$ 0.12	N	\$ 0.00
Subtotal	\$ 199,941.00	\$ 59.59		\$ 0.00

Misc

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Rock Approaches (2)	\$ 1,200.00	\$ 0.36		\$ 0.00
Subtotal	\$ 1,200.00	\$ 0.36		\$ 0.00

Other Costs

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Barricades	\$ 600.00	\$ 0.18	N	\$ 0.00
Flaggers (2)	\$ 1,024.00	\$ 0.31	N	\$ 0.00
Landing Construction	\$ 1,200.00	\$ 0.36	N	\$ 0.00
Equipment Washing	\$ 800.00	\$ 0.24	N	\$ 0.00
Watering, Cleaning and Dust abatement	\$ 1,504.00	\$ 0.45	N	\$ 0.00
Landing Clean up	\$ 4,000.00	\$ 1.19	N	\$ 0.00
Hand Seeding @ 17 lb seed per hour	\$ 4,400.00	\$ 1.31	N	\$ 0.00
Mulching (2 hours/5 bales)	\$ 2,400.00	\$ 0.72	N	\$ 0.00
Subtotal	\$ 15,928.00	\$ 4.75		\$ 0.00

* Cost / Net Volume has been rounded to the nearest \$0.01 Subtotals may not tie to Sale Total Cost / Net Volume.

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

Medford
Howard
ORM06-TS-14-14

General

Yarding & Loading

Used BLM WOF logging Costs worksheet. Appraised with FS Log Cost as well. Both were very similar and were within 1% of the same answer. Stump to Truck Costs split to account for Directional Falling on trees greater than 26" DBH.

Road Costs

(see Engineering Appraisal for details).

Transportation

Costs for hauling were based on a 2.5 hour round trip with loading and unloading time included.

(see Transportation appendix for details).

Other Allowances

Fuels treatments involve level 2 piling on 462 acres due to the volume of slash generated from the wide canopy on the white fir. Level 3 on units with higher volume being removed and 14 acres of level 1. 10 acres of Lop and Scatter within unit 13-4 for OHV barricading.

Flaggers were figured for 32 hours of flagging needed along Dead Indian Memorial Highway while cutting in Unit 7-1.

Two Rock approaches of 150 feet each were included to limit mud and debris on paved roads for unit 7-1 and unit 1-1. 10 loads of rock were figured with 1 hour turnaround on each load of 8 yards, plus time to spread and pack material.

Equipment washing was figured at \$40/hour and four pieces of equipment at 5 hours each.

Prospectus

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Summary of All Roads and Projects

Updated: 5/1/2013

T.S. Contract Name: Howard Tract No: 14-14 Sale Date: 2014

Prepared by: jmcneel Ph: 2370 Print Date: 7/17/2014 11:52:32 AM

Construction: 0.00 sta

Improve: 0.00 sta Renov: 815.76 sta Decom: 33.79 sta Temp: 0.00 sta

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing: 0.0 sta Grubbing: 0.0 acres	
Slash Treatment: 0.0 acres	
300 Excavation:	\$0.00
Haul: 0 sta-yds	
400 Drainage:	\$1,460.34
Culvert: 34 lf wt = 510 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 40 lf	
500 Renovation:	\$5,912.58
Blading 9.35 mi	
Surfacing:	\$17,254.72
1200 Quarry Name: Table Mt Stockpile 330 cy	
1200 Quarry Name: Nameless Springs 500 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 15.3 acres	\$4,667.76
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$1,876.08
Mobilization: Const. \$863.63 Surf. \$938.00.....	\$1,801.63
Quarry Development:	\$0.00

Total: 3,354 mbf @ \$9.831/mbf = \$32,973.11

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities are COMPACTED in place cubic yards.

File S:\Ashland\Engineering Projects\2014\Timber Sales\Howard\RdCost and Mtnc\Howard TS.mdb

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-13 Spur A Road Name: Spur A

Road Decommission: 0.12 mi 12 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$62.37
Blading 0.12 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.1 acres	\$33.40
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$120.00
Mobilization: Const. \$5.98 Surf. \$0.00.....	\$5.98
Quarry Development:	\$0.00

Total: \$221.75

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-13 Spur A Road Name: Spur A

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: $\$519.72/\text{mi} \times 0.12 \text{ mi} = \62.37

Subtotal: \$62.37

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: $\$278.34/\text{acre} \times 0.12 \text{ acres} = \33.40

Subtotal: \$33.40

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Howard

Fully Decommission Backhoe or similar equipment

$0.12 \text{ Mi} \times \$1,000.00/\text{Mi} = \120.00

Subtotal: \$120.00

Mobilization:

Construction - 0.69% of total Costs = \$5.98

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$5.98

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 38-3E-13 Spur A Spur A Continued

Total: \$221.75

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-13 Spur B Road Name:

Road Renovation: 0.15 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$272.60
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 20 lf	
500 Renovation:	\$77.96
Blading 0.15 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.2 acres	\$41.75
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$500.00
Mobilization: Const. \$24.72 Surf. \$0.00.....	\$24.72
Quarry Development:	\$0.00
Total:	\$917.03

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-13 Spur B Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Poly Pipe Temp Culvert 12 inch 20 ea x \$13.63/ea = \$272.60

Subtotal: \$272.60

Section 500 Renovation:

Blading: \$519.72/mi x 0.15 mi = \$77.96

Subtotal: \$77.96

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.15 acres = \$41.75

Subtotal: \$41.75

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Howard

Trench and Earth Barricade 1 EA x \$350.00/EA = \$350.00

Fully Decommission Backhoe or similar equipment

0.15 Mi x \$1,000.00/Mi = \$150.00

Subtotal: \$500.00

Mobilization:

Construction - 2.86% of total Costs = \$24.72

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$24.72

Quarry Development:

Based on 0.00% of total rock volume

Road Number: 38-3E-13 Spur B Continued

Subtotal: \$0.00

Total: \$917.03

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-13.05 Road Name: Keno Spur

Road Renovation: 0.22 mi 12 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$272.60
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 20 lf	
500 Renovation:	\$114.34
Blading 0.22 mi	
Surfacing:	\$481.19
Quarry Name: Nameless Springs 10 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.2 acres	\$61.23
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$350.00
Mobilization: Const. \$35.45 Surf. \$11.30.....	\$46.75
Quarry Development:	\$0.00

Total: \$1,326.11

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-13.05 Road Name: Keno Spur

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Poly Pipe Temp Culvert 12 inch 20 ea x \$13.63/ea = \$272.60

Subtotal: \$272.60

Section 500 Renovation:

Blading: \$519.72/mi x 0.22 mi = \$114.34

Subtotal: \$114.34

Section 1200 Crushed under 1 1/2 Quarry Name: Nameless Springs

Comment: Rock Approach

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									10cy

Rock Volume = 10cy

Production: \$9.09/cy x 10cy = \$90.90

Processing: \$1.40/cy x 10cy = \$14.00

Compaction: \$0.79/cy x 10cy = \$7.90

T11 Testing: \$0.06/cy x 10cy = \$0.60

T27 Testing: \$0.06/cy x 10cy = \$0.60

Basic Rock Haul cost: \$0.93/cy x 10cy = \$9.30

Rock Haul -15% grades: \$1.39/cy-mi x 10cy x 2.71 mi= \$37.67

Rock Haul St& Co Roads: \$0.62/cy-mi x 10cy x 7.72 mi= \$47.86

Basic Water Haul cost: \$0.61/cy x 10cy = \$6.10

Water Haul -15% grades: \$0.13/cy-mi x 10cy x 0.25 mi= \$0.33

Howard

Dump truck 10 cy 2 hr x \$74.28/hr = \$148.56

Motor Grader 12G 1 hr x \$117.37/hr = \$117.37

Subtotal: \$481.19

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.22 acres = \$61.23

Subtotal: \$61.23

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Road Number: 38-3E-13.05 Keno Spur Continued

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Trench Barricade

Construct Trench Barricade 1 EA x \$350.00/EA = \$350.00

Subtotal: \$350.00

Mobilization:

Construction - 4.10% of total Costs = \$35.45

Surfacing - 1.20% by rock volume = \$11.30

Subtotal: \$46.75

Quarry Development:

Based on 1.20% of total rock volume

Subtotal: \$0.00

Total: \$1,326.11

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-13.06 Road Name: Keno Spur

Road Decommission: 0.49 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$386.99
Blading 0.49 mi	
Surfacing:	\$213.04
Quarry Name: Nameless Springs 10 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.5 acres	\$545.55
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$482.10
Mobilization: Const. \$45.10 Surf. \$11.30.....	\$56.40
Quarry Development:	\$0.00

Total: \$1,684.07

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-13.06 Road Name: Keno Spur

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.49 mi = \$254.66

Clean Culverts: \$270.05/mi x 0.49 mi = \$132.32

Subtotal: \$386.99

Section 1200 Crushed under 1 1/2 Quarry Name: Nameless Springs

Comment: Rock Approach

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									10cy

Rock Volume = 10cy

Production: \$9.09/cy x 10cy = \$90.90

Processing: \$1.40/cy x 10cy = \$14.00

Compaction: \$0.79/cy x 10cy = \$7.90

T11 Testing: \$0.06/cy x 10cy = \$0.60

T27 Testing: \$0.06/cy x 10cy = \$0.60

Basic Rock Haul cost: \$0.93/cy x 10cy = \$9.30

Rock Haul -15% grades: \$1.39/cy-mi x 10cy x 2.71 mi= \$37.67

Rock Haul St& Co Roads: \$0.62/cy-mi x 10cy x 7.31 mi= \$45.32

Basic Water Haul cost: \$0.61/cy x 10cy = \$6.10

Water Haul -15% grades: \$0.13/cy-mi x 10cy x 0.50 mi= \$0.65

Howard

Motor Grader 12G 0 hr x \$117.37/hr = \$0.00

Subtotal: \$213.04

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

RoadSide Brushing Heavy: \$1113.36/acre x 0.49 acres = \$545.55

Subtotal: \$545.55

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Road Number: 38-3E-13.06 Keno Spur Continued

Section 8000 Miscellaneous:

Long Term Closure

Construct Trench Barricade 1 ea x \$350.00/ea = \$350.00

Road Camouflage 0.5 Mi x \$264.20/Mi = \$132.10

Subtotal: \$482.10

Mobilization:

Construction - 5.22% of total Costs = \$45.10

Surfacing - 1.20% by rock volume = \$11.30

Subtotal: \$56.40

Quarry Development:

Based on 1.20% of total rock volume

Subtotal: \$0.00

Total: \$1,684.07

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-19.00 D Road Name: Buck Pr

Road Renovation: 1.52 mi 16 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$1,200.45
Blading 1.52 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.5 acres	\$423.08
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$44.98 Surf. \$0.00.....	\$44.98
Quarry Development:	\$0.00

Total: \$1,668.51

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-19.00 D Road Name: Buck Pr

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 1.52 mi = \$789.97

Clean Culverts: \$270.05/mi x 1.52 mi = \$410.48

Subtotal: \$1,200.45

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 1.52 acres = \$423.08

Subtotal: \$423.08

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 5.21% of total Costs = \$44.98

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$44.98

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$1,668.51

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-23.01 Road Name: None

Road Renovation: 1.04 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$821.36
Blading 1.04 mi	
Surfacing:	\$1,819.11
Quarry Name: Table Mt Stockpile 100 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.0 acres	\$289.47
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$81.18 Surf. \$113.01.....	\$194.19
Quarry Development:	\$0.00

Total: \$3,124.13

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-23.01 Road Name: None

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Comment: Clean culverts as needed

Blading: \$519.72/mi x 1.04 mi = \$540.51

Clean Culverts: \$270.05/mi x 1.04 mi = \$280.85

Subtotal: \$821.36

Section 1200 Crushed under 1 1/2 Quarry Name: Table Mt Stockpile

Comment: Spot Rocking

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									100cy

Rock Volume = 100cy

Production: \$9.09/cy x 100cy = \$909.00

Basic Rock Haul cost: \$0.93/cy x 100cy = \$93.00

Rock Haul -15% grades: \$1.39/cy-mi x 100cy x 2.33 mi= \$323.87

Rock Haul St& Co Roads: \$0.62/cy-mi x 100cy x 6.44 mi= \$399.28

Basic Water Haul cost: \$0.61/cy x 100cy = \$61.00

Water Haul -15% grades: \$0.13/cy-mi x 100cy x 0.80 mi= \$10.40

Water Haul St&Co Roads: \$0.08/cy-mi x 100cy x 2.82 mi= \$22.56

Subtotal: \$1,819.11

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 1.04 acres = \$289.47

Subtotal: \$289.47

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Road Number: 38-3E-23.01 None Continued

Mobilization:

Construction - 9.40% of total Costs = \$81.18

Surfacing - 12.05% by rock volume = \$113.01

Subtotal: \$194.19

Quarry Development:

Based on 12.05% of total rock volume

Subtotal: \$0.00

Total: \$3,124.13

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-23.02 Road Name:

Road Decommission: 0.03 mi 12 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$7.93
Mobilization: Const. \$0.22 Surf. \$0.00.....	\$0.22
Quarry Development:	\$0.00
Total:	\$8.15

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-23.02 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Long Term Closure

Road Camouflage 0.03 MI x \$264.20/MI = \$7.93

Subtotal: \$7.93

Mobilization:

Construction - 0.03% of total Costs = \$0.22

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$0.22

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$8.15

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-23.03 Road Name: None

Road Renovation: 0.33 mi 12 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$171.51
Blading 0.33 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.3 acres	\$91.85
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$7.30 Surf. \$0.00.....	\$7.30
Quarry Development:	\$0.00
Total:	\$270.66

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-23.03 Road Name: None

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Comment: Spot blade

Blading: \$519.72/mi x 0.33 mi = \$171.51

Subtotal: \$171.51

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.33 acres = \$91.85

Subtotal: \$91.85

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.84% of total Costs = \$7.30

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$7.30

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$270.66

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-25.00 A Road Name: Willow Creek Rd

Road Renovation: 0.18 mi 17 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$142.16
Blading 0.18 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.2 acres	\$50.10
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$5.33 Surf. \$0.00.....	\$5.33
Quarry Development:	\$0.00
Total:	\$197.59

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-25.00 A Road Name: Willow Creek Rd

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.18 mi = \$93.55

Clean Culverts: \$270.05/mi x 0.18 mi = \$48.61

Subtotal: \$142.16

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.18 acres = \$50.10

Subtotal: \$50.10

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.62% of total Costs = \$5.33

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$5.33

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$197.59

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-25.02 Road Name: Willow Creek Spur

Road Renovation: 0.75 mi 12 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$389.79
Blading 0.75 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.8 acres	\$208.76
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$16.58 Surf. \$0.00.....	\$16.58
Quarry Development:	\$0.00
Total:	\$615.13

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-25.02 Road Name: Willow Creek Spur

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Comment: Spot blade

Blading: \$519.72/mi x 0.75 mi = \$389.79

Subtotal: \$389.79

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.75 acres = \$208.76

Subtotal: \$208.76

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 1.92% of total Costs = \$16.58

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$16.58

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$615.13

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-27.01 A Road Name: Wilson Trespass

Road Renovation: 0.07 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.1 acres	\$19.48
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$0.54 Surf. \$0.00.....	\$0.54
Quarry Development:	\$0.00

Total: \$20.02

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-27.01 A Road Name: Wilson Trespass

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.07 acres = \$19.48

Subtotal: \$19.48

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.06% of total Costs = \$0.54

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$0.54

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$20.02

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-27.01 B Road Name: Wilson Trespass

Road Renovation: 1.15 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$597.68
Blading 1.15 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.2 acres	\$320.09
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$25.43 Surf. \$0.00.....	\$25.43
Quarry Development:	\$0.00
Total:	\$943.20

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-27.01 B Road Name: Wilson Trespass

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Comment: Spot blade

Blading: \$519.72/mi x 1.15 mi = \$597.68

Subtotal: \$597.68

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 1.15 acres = \$320.09

Subtotal: \$320.09

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 2.94% of total Costs = \$25.43

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$25.43

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$943.20

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-3E-27.01 C Road Name: Wilson Trespass

Road Renovation: 0.53 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$275.45
Blading 0.53 mi	
Surfacing:	\$2,417.67
Quarry Name: Table Mt Stockpile 100 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.5 acres	\$147.52
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$78.70 Surf. \$113.01.....	\$191.71
Quarry Development:	\$0.00

Total: \$3,032.36

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-3E-27.01 C Road Name: Wilson Trespass

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.53 mi = \$275.45

Subtotal: \$275.45

Section 1200 Crushed under 1 1/2 Quarry Name: Table Mt Stockpile

Comment: Spot Rock large holes

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									100cy

Rock Volume = 100cy

Production: \$9.09/cy x 100cy = \$909.00

Basic Rock Haul cost: \$0.93/cy x 100cy = \$93.00

Rock Haul -15% grades: \$1.39/cy-mi x 100cy x 5.70 mi= \$792.30

Rock Haul St& Co Roads: \$0.62/cy-mi x 100cy x 8.00 mi= \$496.00

Basic Water Haul cost: \$0.61/cy x 100cy = \$61.00

Water Haul -15% grades: \$0.13/cy-mi x 100cy x 3.37 mi= \$43.81

Water Haul St&Co Roads: \$0.08/cy-mi x 100cy x 2.82 mi= \$22.56

Subtotal: \$2,417.67

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Comment: Prune tree branches

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.53 acres = \$147.52

Subtotal: \$147.52

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Road Number: 38-3E-27.01 C Wilson Trespass Continued

Mobilization:

Construction - 9.11% of total Costs = \$78.70

Surfacing - 12.05% by rock volume = \$113.01

Subtotal: \$191.71

Quarry Development:

Based on 12.05% of total rock volume

Subtotal: \$0.00

Total: \$3,032.36

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-4E-07.00 C Road Name: Guard Station Rd

Road Renovation: 0.59 mi 12 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$306.63
Blading 0.59 mi	
Surfacing:	\$4,632.44
Quarry Name: Nameless Springs 200 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$136.84 Surf. \$226.02.....	\$362.86
Quarry Development:	\$0.00

Total: \$5,301.94

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-4E-07.00 C Road Name: Guard Station Rd

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Comment: Spot blade

Blading: \$519.72/mi x 0.59 mi = \$306.63

Subtotal: \$306.63

Section 1200 Crushed under 1 1/2 Quarry Name: Nameless Springs

Comment: Spot Rocking over bones

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									200cy

Rock Volume = 200cy

Production: \$9.09/cy x 200cy = \$1,818.00

Processing: \$1.40/cy x 200cy = \$280.00

Compaction: \$0.79/cy x 200cy = \$158.00

T11 Testing: \$0.06/cy x 200cy = \$12.00

T27 Testing: \$0.06/cy x 200cy = \$12.00

Basic Rock Haul cost: \$0.93/cy x 200cy = \$186.00

Rock Haul -15% grades: \$1.39/cy-mi x 200cy x 3.20 mi= \$889.60

Rock Haul St& Co Roads: \$0.62/cy-mi x 200cy x 8.70 mi= \$1,078.80

Basic Water Haul cost: \$0.61/cy x 200cy = \$122.00

Water Haul -15% grades: \$0.13/cy-mi x 200cy x 1.22 mi= \$31.72

Water Haul St&Co Roads: \$0.08/cy-mi x 200cy x 2.77 mi= \$44.32

Subtotal: \$4,632.44

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Road Number: 38-4E-07.00 C Guard Station Rd Continued

Subtotal: \$0.00

Mobilization:

Construction - 15.84% of total Costs = \$136.84

Surfacing - 24.10% by rock volume = \$226.02

Subtotal: \$362.86

Quarry Development:

Based on 24.10% of total rock volume

Subtotal: \$0.00

Total: \$5,301.94

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-4E-07.07 Road Name: FS Access Spur

Road Renovation: 0.13 mi 14 ft Subgrade 0 ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$67.56
Blading 0.13 mi	
Surfacing:	\$1,025.03
Quarry Name: Nameless Springs 50 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.1 acres	\$36.18
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$350.00
Mobilization: Const. \$40.97 Surf. \$56.51.....	\$97.48
Quarry Development:	\$0.00

Total: \$1,576.25

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-4E-07.07 Road Name: FS Access Spur

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.13 mi = \$67.56

Subtotal: \$67.56

Section 1200 Crushed under 1 1/2 Quarry Name: Nameless Springs

Comment: Rock Approach to County Road

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									50cy

Rock Volume = 50cy

Production: \$9.09/cy x 50cy = \$454.50

Processing: \$1.40/cy x 50cy = \$70.00

Compaction: \$0.79/cy x 50cy = \$39.50

T11 Testing: \$0.06/cy x 50cy = \$3.00

T27 Testing: \$0.06/cy x 50cy = \$3.00

Basic Rock Haul cost: \$0.93/cy x 50cy = \$46.50

Rock Haul -15% grades: \$1.39/cy-mi x 50cy x 1.50 mi= \$104.25

Rock Haul St& Co Roads: \$0.62/cy-mi x 50cy x 8.50 mi= \$263.50

Basic Water Haul cost: \$0.61/cy x 50cy = \$30.50

Water Haul St&Co Roads: \$0.08/cy-mi x 50cy x 2.57 mi= \$10.28

Subtotal: \$1,025.03

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.13 acres = \$36.18

Subtotal: \$36.18

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Road Number: 38-4E-07.07 FS Access Spur Continued

Trench Barricade

Construct Earth Berm Barricade 1 EA x \$350.00/EA = \$350.00

Subtotal: \$350.00

Mobilization:

Construction - 4.74% of total Costs = \$40.97

Surfacing - 6.02% by rock volume = \$56.51

Subtotal: \$97.48

Quarry Development:

Based on 6.02% of total rock volume

Subtotal: \$0.00

Total: \$1,576.25

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-4E-17.00 Road Name: None

Road Renovation: 0.27 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$140.32
Blading 0.27 mi	
Surfacing:	\$473.07
Quarry Name: Nameless Springs 20 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.3 acres	\$83.50
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$19.31 Surf. \$22.60.....	\$41.91
Quarry Development:	\$0.00

Total: \$738.80

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-4E-17.00 Road Name: None

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.27 mi = \$140.32

Subtotal: \$140.32

Section 1200 Crushed under 1 1/2 Quarry Name: Nameless Springs

Comment: Spot Rocking over bones

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									20cy

Rock Volume = 20cy

Production: \$9.09/cy x 20cy = \$181.80

Processing: \$1.40/cy x 20cy = \$28.00

Compaction: \$0.79/cy x 20cy = \$15.80

T11 Testing: \$0.06/cy x 20cy = \$1.20

T27 Testing: \$0.06/cy x 20cy = \$1.20

Basic Rock Haul cost: \$0.93/cy x 20cy = \$18.60

Rock Haul -15% grades: \$1.39/cy-mi x 20cy x 3.50 mi= \$97.30

Rock Haul St& Co Roads: \$0.62/cy-mi x 20cy x 8.70 mi= \$107.88

Basic Water Haul cost: \$0.61/cy x 20cy = \$12.20

Water Haul -15% grades: \$0.13/cy-mi x 20cy x 1.79 mi= \$4.65

Water Haul St&Co Roads: \$0.08/cy-mi x 20cy x 2.77 mi= \$4.43

Subtotal: \$473.07

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Comment: Prune tree branches

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.30 acres = \$83.50

Subtotal: \$83.50

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Road Number: 38-4E-17.00 None Continued

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 2.24% of total Costs = \$19.31

Surfacing - 2.41% by rock volume = \$22.60

Subtotal: \$41.91

Quarry Development:

Based on 2.41% of total rock volume

Subtotal: \$0.00

Total: \$738.80

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-4E-19.00 Road Name: Hoxie Crk

Road Renovation: 0.30 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.3 acres	\$83.50
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$2.31 Surf. \$0.00.....	\$2.31
Quarry Development:	\$0.00
Total:	\$85.82

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-4E-19.00 Road Name: Hoxie Crk

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.30 acres = \$83.50

Subtotal: \$83.50

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 0.27% of total Costs = \$2.31

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$2.31

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$85.82

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-4E-19.03 Road Name: None

Road Renovation: 0.50 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$51.97
Blading 0.10 mi	
Surfacing:	\$2,820.96
Quarry Name: Nameless Springs 160 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.5 acres	\$139.17
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$83.45 Surf. \$180.82.....	\$264.27
Quarry Development:	\$0.00

Total: \$3,276.37

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-4E-19.03 Road Name: None

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Comment: Spot blade

Blading: \$519.72/mi x 0.10 mi = \$51.97

Subtotal: \$51.97

Section 1200 Crushed under 1 1/2 Quarry Name: Nameless Springs

Comment: Spot rock big holes in road

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									160cy

Rock Volume = 160cy

Production: \$9.09/cy x 160cy = \$1,454.40

Processing: \$1.40/cy x 160cy = \$224.00

Compaction: \$0.79/cy x 160cy = \$126.40

T11 Testing: \$0.06/cy x 160cy = \$9.60

T27 Testing: \$0.06/cy x 160cy = \$9.60

Basic Rock Haul cost: \$0.93/cy x 160cy = \$148.80

Rock Haul -15% grades: \$1.39/cy-mi x 160cy x 1.50 mi= \$333.60

Rock Haul St& Co Roads: \$0.62/cy-mi x 160cy x 3.86 mi= \$382.91

Basic Water Haul cost: \$0.61/cy x 160cy = \$97.60

Water Haul St&Co Roads: \$0.08/cy-mi x 160cy x 2.66 mi= \$34.05

Subtotal: \$2,820.96

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.50 acres = \$139.17

Subtotal: \$139.17

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Road Number: 38-4E-19.03 None Continued

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 9.66% of total Costs = \$83.45

Surfacing - 19.28% by rock volume = \$180.82

Subtotal: \$264.27

Quarry Development:

Based on 19.28% of total rock volume

Subtotal: \$0.00

Total: \$3,276.37

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-4E-19.04 Road Name:

Road Renovation: 0.20 mi 14 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$103.94
Blading 0.20 mi	
Surfacing:	\$879.01
Quarry Name: Nameless Springs 50 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$27.23 Surf. \$56.51.....	\$83.74
Quarry Development:	\$0.00

Total: \$1,066.69

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-4E-19.04 Road Name:

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Comment: Spot Blade

Blading: \$519.72/mi x 0.20 mi = \$103.94

Subtotal: \$103.94

Section 1200 Crushed under 1 1/2 Quarry Name: Nameless Springs

Comment: Spot Rock after harvest

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									50cy

Rock Volume = 50cy

Production: \$9.09/cy x 50cy = \$454.50

Processing: \$1.40/cy x 50cy = \$70.00

Compaction: \$0.79/cy x 50cy = \$39.50

T11 Testing: \$0.06/cy x 50cy = \$3.00

T27 Testing: \$0.06/cy x 50cy = \$3.00

Basic Rock Haul cost: \$0.93/cy x 50cy = \$46.50

Rock Haul -15% grades: \$1.39/cy-mi x 50cy x 1.50 mi= \$104.25

Rock Haul St& Co Roads: \$0.62/cy-mi x 50cy x 3.80 mi= \$117.80

Basic Water Haul cost: \$0.61/cy x 50cy = \$30.50

Water Haul St&Co Roads: \$0.08/cy-mi x 50cy x 2.49 mi= \$9.96

Subtotal: \$879.01

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Subtotal: \$0.00

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 3.15% of total Costs = \$27.23

Surfacing - 6.02% by rock volume = \$56.51

Subtotal: \$83.74

Quarry Development:

Based on 6.02% of total rock volume

Subtotal: \$0.00

Total: \$1,066.69

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 38-4E-29.00 Road Name: Hoxie Beaver

Road Renovation: 1.71 mi 16 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$129.93
Blading 0.25 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 1.7 acres	\$475.96
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$16.79 Surf. \$0.00.....	\$16.79
Quarry Development:	\$0.00
Total:	\$622.68

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 38-4E-29.00 Road Name: Hoxie Beaver

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.25 mi = \$129.93

Subtotal: \$129.93

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Comment: Prune tree branches, not with flailer

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 1.71 acres = \$475.96

Subtotal: \$475.96

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 1.94% of total Costs = \$16.79

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$16.79

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$622.68

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 39-4E-06.03 A Road Name: Howard Willow

Road Renovation: 0.66 mi 15 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$343.02
Blading 0.66 mi	
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.7 acres	\$183.70
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$66.05
Mobilization: Const. \$16.42 Surf. \$0.00.....	\$16.42
Quarry Development:	\$0.00
Total:	\$609.19

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 39-4E-06.03 A Road Name: Howard Willow

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Blading: \$519.72/mi x 0.66 mi = \$343.02

Subtotal: \$343.02

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.66 acres = \$183.70

Subtotal: \$183.70

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Howard

Backhoe 18 inch to remove guardrail barricade posts.

1 hr x \$66.05/hr = \$66.05

Subtotal: \$66.05

Mobilization:

Construction - 1.90% of total Costs = \$16.42

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$16.42

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Road Number: 39-4E-06.03 A Howard Willow Continued

Total: \$609.19

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 39-4E-06.03 B Road Name: Howard Willow

Road Renovation: 0.67 mi 15 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$915.14
Culvert: 34 lf wt = 510 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$529.15
Blading 0.67 mi	
Surfacing:	\$2,493.21
Quarry Name: Table Mt Stockpile 130 cy	
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.7 acres	\$186.49
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$114.26 Surf. \$146.92.....	\$261.17
Quarry Development:	\$0.00

Total: \$4,385.16

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 39-4E-06.03 B Road Name: Howard Willow

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Aluminized Replace rotted CD 18 inch 16 ga 34 lf x \$22.43/lf x 1.2 = \$915.14

Subtotal: \$915.14

Section 500 Renovation:

Comment: Clean culverts as needed

Blading: \$519.72/mi x 0.67 mi = \$348.21

Clean Culverts: \$270.05/mi x 0.67 mi = \$180.93

Subtotal: \$529.15

Section 1200 Crushed under 1 1/2 Quarry Name: Table Mt Stockpile

Comment: Rock over bones in road

<u>Length</u>	<u>TopW</u>	<u>BotW</u>	<u>Depth</u>	<u>CWid</u>	<u>#TOs</u>	<u>Width</u>	<u>F.W.L</u>	<u>Taper</u>	<u>Other</u>
									130cy

Rock Volume = 130cy

Production: \$9.09/cy x 130cy = \$1,181.70

Basic Rock Haul cost: \$0.93/cy x 130cy = \$120.90

Rock Haul -15% grades: \$1.39/cy-mi x 130cy x 3.81 mi= \$688.47

Rock Haul St& Co Roads: \$0.62/cy-mi x 130cy x 4.02 mi= \$324.01

Basic Water Haul cost: \$0.61/cy x 130cy = \$79.30

Water Haul -15% grades: \$0.13/cy-mi x 130cy x 0.66 mi= \$11.15

Water Haul St&Co Roads: \$0.08/cy-mi x 130cy x 8.43 mi= \$87.67

Subtotal: \$2,493.21

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 0.67 acres = \$186.49

Subtotal: \$186.49

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Road Number: 39-4E-06.03 B Howard Willow Continued

Subtotal: \$0.00

Mobilization:

Construction - 13.23% of total Costs = \$114.26

Surfacing - 15.66% by rock volume = \$146.92

Subtotal: \$261.17

Quarry Development:

Based on 15.66% of total rock volume

Subtotal: \$0.00

Total: \$4,385.16

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 39-7E-31.00 A1 Road Name: Keno Access Road

Road Renovation: 1.99 mi 20 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 2.0 acres	\$553.90
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$15.35 Surf. \$0.00.....	\$15.35
Quarry Development:	\$0.00

Total: \$569.24

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 39-7E-31.00 A1 Road Name: Keno Access Road

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 1.99 acres = \$553.90

Subtotal: \$553.90

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 1.78% of total Costs = \$15.35

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$15.35

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$569.24

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Howard Sale Date: 2014

Road Number: 39-7E-31.00 A2 Road Name: Keno Access

Road Renovation: 2.49 mi 20 ft Subgrade ft ditch 5/1/2013

200 Clearing and Grubbing: 0.0 acres	\$0.00
Clearing:0.0 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$0.00
400 Drainage:	\$0.00
Culvert: 0 lf wt = 0 lbs factor = 1.2	
DownSpout: 0 lf	
PolyPipe: 0 lf	
500 Renovation:	\$0.00
Surfacing:	\$0.00
1300 Geotextiles:	\$0.00
1400 Slope Protection:	\$0.00
1800 Soil Stabilization: 0.0 acres	\$0.00
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 2.5 acres	\$693.07
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$0.00
Mobilization: Const. \$19.20 Surf. \$0.00.....	\$19.20
Quarry Development:	\$0.00

Total: \$712.27

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

Road Construction Worksheet

Road Number: 39-7E-31.00 A2 Road Name: Keno Access

Section 200 Clearing and Grubbing:

Subtotal: \$0.00

Section 300 Excavation:

Subtotal: \$0.00

Section 400 Drainage:

Subtotal: \$0.00

Section 500 Renovation:

Subtotal: \$0.00

Surfacing:

Subtotal: \$0.00

Section 1300 Geotextiles:

Subtotal: \$0.00

Section 1400 Slope Protection:

Subtotal: \$0.00

Section 1800 Soil Stabilization:

Subtotal: \$0.00

Section 1900 Cattleguards:

Subtotal: \$0.00

Section 2100 Roadside Brushing:

Brushing width Left: 4ft. Right: 4ft.

RoadSide Brushing Light: \$278.34/acre x 2.49 acres = \$693.07

Subtotal: \$693.07

Section 2300 Engineering:

Subtotal: \$0.00

Section 2400 Minor Concrete:

Subtotal: \$0.00

Section 2500 Gabions:

Subtotal: \$0.00

Section 8000 Miscellaneous:

Subtotal: \$0.00

Mobilization:

Construction - 2.22% of total Costs = \$19.20

Surfacing - 0.00% by rock volume = \$0.00

Subtotal: \$19.20

Quarry Development:

Based on 0.00% of total rock volume

Subtotal: \$0.00

Total: \$712.27

TOTAL PURCHASE PRICE			
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(Continued on reverse)

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

Bid submitted on (date)

(Check appropriate box, sign in ink, and complete the following)

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

NOTICE

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

AUTHORITY: 38 FR 6280 and 43 CFR 5442.1

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

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

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

INSTRUCTIONS TO BIDDERS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

10. **PERFORMANCE BOND** –

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

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

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

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

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

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

*Applies to Timber Only

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

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

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

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

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