

PROSPECTUS

LOCKED GATES

Sale Date: March 27, 2012

(1) Roseburg Sale No.: 11-08

Sale Name: Mud Slinger Commercial Thinning
and Density Management Reoffer

Douglas County, Oregon: O&C, Public Domain: Oral Auction

Bid Deposit Required: \$28,200.00

All timber designated for cutting on:

E½ SE¼	Sec. 31,	T. 26 S.,	R. 7 W.,	Willamette Meridian
SE¼ SE¼	Sec. 32,	T. 26 S.,	R. 7 W.,	Willamette Meridian
NW ¼, N ½ SW ¼, SW ¼ SW ¼	Sec. 33,	T. 26 S.,	R. 7 W.,	Willamette Meridian

Approx. Number	Est. Vol. MBF	Est. Vol. C Cu.		Est. Vol. MBF	Appraised Price	Est. Volume Times
Merch. Trees	32' Log	Ft.	Species	16' Log	Per MBF	Appraised Price
16,771	1,842	4,204	Douglas-fir	2,268	\$121.40	\$275,335.20
783	74	164	Grand Fir	90	\$62.60	\$5,634.00
156	7	15	Western Hemlock	8	\$68.10	\$544.80
17,710	1,923	4,383		2,366		\$281,514.00

LOG EXPORT AND SUBSTITUTION RESTRICTIONS:

All timber sales, including timber from Federal rights-of-ways, shall be subject to the restrictions relating to the export and substitution of unprocessed timber from the United States in accordance with P.L. 94-165 and 43 CFR 5400 and 5424 as amended.

Excepting Port-Orford-cedar, all timber offered for sale hereunder is restricted from export from the United States in the form of unprocessed timber and is prohibited from being used as a substitute for exported private timber.

CRUISE INFORMATION:

The Douglas-fir has been cruised using the 3P system to select sample trees. The sample trees have been cruised and their volume computed on form class tables for estimating volume in 16-foot lengths. This volume is then expanded to a total sale volume. A map showing the location of these sample trees is available at the Roseburg District Office.

The volume of all other species and R/W trees has been determined by individual tree measurements using a 100% cruise.

With respect to merchantable trees of all species: the average tree is 12.1 in. D.B.H.O.B., the average log contains 41 bd. ft., the total gross volume is approximately 2480 M bd. ft., and 95 % recovery is expected.

CUTTING AREA: An area of approximately 127 acres in 4 units are to be partially cut and a right-of-way of approximately 2 acres must be clearcut.

<u>TIMBER ACREAGE:</u>	Area 1: 82 acres	Area 4: 18 acres
	Area 2: 15 acres	R/W: 2 acres
	Area 3: 12 acres	

ACCESS: Access to the sale area is provided by Government, County, and Privately controlled roads.

LOCKED GATES: Locked gates are located on Road No 27-7-4.0. See BLM receptionist for key.

DIRECTIONS TO SALE AREA: To reach the sale area in Sections 31, 32 and 33 of T. 26 S., R. 7 W., W.M., go west from Roseburg on County Road 6 (Garden Valley Road) to County Road 167 (Melrose Road). Turn left and proceed west on County Road 167 approximately 2.5 miles to the junction with County Road 90 (Doerner Road). Proceed west approximately 2.5 miles on County Road 90 to the junction of County Road 174 (Callahan Rd.) and turn right. Proceed northwest on County Road 174, through Harvest Area 3, to the junction with BLM Road 26-7-33.0 and follow the Exhibit D map to the sale area.

ROAD MAINTENANCE: A maintenance fee of \$48.98 will be required to be paid to the BLM. Maintenance and rockwear fees of \$1,943.67 and a road use fee of \$1,051.52 will be required to be paid to Lone Rock Timber Co. A road use fee of \$2,483.71 will be required to be paid to Seneca Jones Timber Co. Maintenance and rockwear fees of \$1,172.19 and a road use fee of \$2,024.70 will be required to be paid to Weyerhaeuser Timber Co.

ROAD CONSTRUCTION: Estimates include approximately 33+60 stations of road construction, and 33+60 stations of road decommissioning as shown on Exhibit C.

DURATION OF CONTRACT will be 36 months for cutting and removal of timber. The contract will contain SPECIAL PROVISIONS regarding: logging; environmental protection; road construction; maintenance and use; fire prevention and control; slash disposal and site preparation; and log exports. Log scaling may be required under the terms of this contract.

ADDITIONAL INFORMATION: This prospectus includes maps and tables that cannot be made Section 508 compliant. For help with its data or information, please contact the Roseburg District Office at 541-440-4930.

NOTES:

1. A revised Special Provision has been added to the contract which enables the Contracting Officer to suspend the contract to facilitate protection of certain plant or animal species, and /or to modify or terminate the contract when necessary to: (1) Comply with the Endangered Species Act, or; (2) Comply with a court order, or; (3) Protect species which were identified for protection through survey and manage and/or protection buffer standards and guidelines established in the ROD and RMP.

This contract provision limits the liability of the Government to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area.

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

3. Seasonal restrictions and daily operating restrictions (DOR) on operations apply (see attached Seasonal Restriction Matrix and Exhibit E).

Marbled Murrelet seasonal restrictions and daily operating restrictions will be applied in Harvest Area 1. Marbled Murrelet daily operating restrictions (DOR) will be applied in Harvest Area 4.

Protection of Marbled Murrelet habitat located within the timber sale contract area is required.

Protection measures include no cutting or removal of timber within the designated Marbled Murrelet habitat area, unless approved by the Authorized Officer. A pre-work conference will be scheduled to discuss protection measures and the seasonal and daily operating restrictions.

4. Cable yarding in Harvest Areas 1 and 2 may require the use of lift trees and/or intermediate support trees.
5. To prevent the introduction of noxious weeds to the Contract Area, all logging, road building and subsoiling equipment, except log trucks, must be steam cleaned or pressure washed prior to initial move-in or upon return to the sale area if used elsewhere.
6. License Agreements with Lone Rock Timber Co., Seneca Jones Timber Co. and Weyerhaeuser Co. are required.
7. Yarding of log lengths greater than forty-two (42) feet will not be permitted.
8. Directional falling away from or parallel to property lines, unit boundaries, roads, retention trees and snags will be required. Directional falling away from or parallel to reserve areas and riparian buffers will be required for all trees cut within 100 feet of these areas.
9. A harvester/forwarder system, tractor, rubber-tired skidder, or track-mounted log loader may be used in the areas designated for ground-based yarding. Ground-based yarding is generally permitted between July 15 and October 15. Minor and incidental ground-based yarding may be permitted in limited portions of the cable yarding areas; ground-based yarding seasonal restrictions apply, and the locations involved and equipment used must be approved by the Authorized Officer.
10. Unsurfaced roads used for more than a single season or which must over-winter prior to decommissioning will be winterized in accordance with Exhibit C.
11. This contract contains provisions for the sale and removal of additional timber necessary to facilitate safe and efficient Purchaser operations. It is estimated that approximately 118 MBF of such additional timber would be removed under the contract, but is not included in the advertised sale volume.
12. This contract contains provisions for subsoiling approximately 0.5 miles spur roads and 1.0 miles of compacted skid trails and landings (see attached Exhibit F).
13. In the cable yarding areas, a skyline logging system with lateral yarding and multi-span capability will be required. One-end suspension of logs will be required. Cable yarding will not be permitted in or through reserve areas or riparian buffers, except in Harvest Area 2, where full suspension will be required.

14. Slash disposal requirements consist of the following: Hand piling and covering of approximately 12 acres of slash within fifty (50) feet of each side of the roads in the Harvest Areas, as designated on Exhibit G, and machine piling and covering slash and debris within fifty (50) feet of landings and other locations designated by the Authorized Officer.
15. Upon completion of logging operations Road 26-7-31.1 Segment D, 27-7-5.1 Segment B(Por), and 26-7-32.2 Segment B shall be water-barred, blocked, and straw mulched and Road 26-7-31.1 Segment E shall be water-barred, blocked, and mulched with logging slash. Spurs 1, 2, 3, 4, 5, 6 and 7 and Road 26-7-32.2 Segment C and 27-7-5.1 Segment B(Por) shall be subsoiled, water-barred, blocked, and mulched with logging slash.
16. Portions of Harvest Area 1 are available for winter logging (see attached Exhibit E winter haul approved roads).

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

Section 40. TIMBER RESERVED FROM CUTTING -The following timber in the contract area is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of the Government.

- (a) All timber on the Reserve Areas as shown on Exhibit A, all retention trees marked with orange paint above and below stump height within the cutting areas and all orange painted and posted trees which are on or mark the boundaries of the Reserve Areas.
- (b) All snags in the Harvest Areas as shown on Exhibit A. Snags which pose a hazard to operations may be felled with the approval of the Authorized Officer.
- (c) All existing downed trees at the time of the timber cruise in the Harvest Areas shown on Exhibit A, except Eleven (11) downed trees marked for cutting heretofore by the Government with blue paint. Reserved existing downed trees may be bucked to facilitate yarding.
- (d) Approximately eight (8) trees painted orange and posted with orange signs that read "WILDLIFE TREE----DO NOT DISTURB" in the Harvest Areas shown on Exhibit A

Section 41. The Purchaser shall comply with the special provisions which are attached hereto and made a part hereof, unless otherwise authorized in writing by the Authorized Officer.

Section 41(A) Periodic Payment and First Installment Adjustment:

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

Section 41(B) Logging:

- (1) Before beginning operations on the contract area for the first time or after a shutdown of ten (10) or more days, the Purchaser shall notify the Authorized Officer in writing of the day 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 ten (10) or more days.
- (2) Prior to the commencement of operations, the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract which shall include measures needed to assure protection of the environment and watershed. A pre-work conference between the Purchaser's authorized representative and the Authorized Officer must be held at a location designated by the Authorized Officer before the logging plan will be approved. All logging shall be done in accordance with the plan developed by this provision.
- (3) In the Harvest Areas shown on Exhibit A, all trees designated for cutting which are within (100) feet of the property lines, unit boundaries, reserve areas and riparian buffers shall be felled and yarded away from these areas.

- (4) No cable yarding, ground-based yarding or log loading shall be conducted in or through the reserve areas as shown on Exhibit A, except in Harvest Area 2, where full suspension is required.
- (5) In the Harvest Areas shown on Exhibit A, all trees designated for cutting shall be felled, limbed and cut into log lengths not to exceed forty-two (42) feet before being yarded, unless otherwise approved by the Authorized Officer.
- (6) In the portions of Harvest Areas 1 and 2 designated for cable yarding as shown on Exhibit A:
 - (a) Yarding shall be done with a cable skyline system utilizing a mechanical slack-pulling carriage capable of maintaining a fixed position on the skyline while lateral yarding and having a lateral capability of seventy-five (75) feet. The carriage must not move during in-haul. The cable yarder shall have a maximum tower height of fifty (50) feet and a maximum of two hundred fifty (250) horsepower. The system shall have the capability to yard in multi-span configuration.
 - (b) Wherever possible, skyline roads shall be perpendicular to hill-slope contour lines, parallel to each other and spaced at least one hundred fifty (150) feet apart to minimize damage to reserve trees.
 - (c) Cable yarding of logs shall be done under the canopy and with one end suspended. Lift trees and/or intermediate support trees shall be employed where necessary to meet this requirement. All logs shall be yarded away from or parallel to riparian buffers except in Harvest Area 2, where full suspension is required.
 - (d) Prior to attaching any logging equipment to a reserve tree, the Purchaser shall obtain written approval from the Authorized Officer and shall take precautions to protect the tree from damage as directed in writing by the Authorized Officer.
- (7) In Harvest Areas 3 and 4 and portions of Harvest Areas 1 and 2 designated for ground-based yarding as shown on Exhibit A:
 - (a) Ground-based yarding operations shall be limited to slopes of thirty-five (35) percent or less, and existing skid trails shall be utilized to the greatest extent possible.
 - (b) No ground-based yarding shall be permitted between October 15 of one calendar year and July 15 of the following calendar year, both days inclusive, or other periods of unseasonably wet weather and soil moisture conditions, unless approved by the Authorized Officer.
 - (c) A rubber-tired or track-mounted skidder may be used in accordance with the following specifications:
 - (1) The skidder shall be approved by the Authorized Officer prior to ground-based yarding operations.

- (2) Yarding shall be done with one end of the log suspended.
 - (3) The skidder shall be restricted to designated skid trails. Skid trails shall be clearly identified on the ground, twelve (12) feet or less in width and spaced at least one hundred fifty (150) feet apart. Designated skid trails, whether existing or newly proposed, shall be approved by the Authorized Officer prior to the felling of timber.
- (d) A track-mounted log loader, or shovel yarding system, may be used in accordance with the following specifications:
- (1) The track-mounted log loader shall be approved by the Authorized Officer prior to ground-based yarding operations.
 - (2) The track-mounted log loader shall be restricted to designated skid trails and shall utilize the swing yarding method to the greatest extent practicable. The designated skid trail network shall minimize both the amount of ground covered by the tractor treads and the number of passes over any single spot on the ground. Designated skid trails, whether existing or newly proposed, shall be approved by the Authorized Officer prior to the felling of timber.
 - (3) The track-mounted log loader shall be required to place logging slash in front of the machine's tracks prior to traveling designated skid trails in order to reduce soil compaction.
- (e) A harvester/forwarder system may be used in accordance with the following specifications:
- (1) The harvester shall be required to cut off limbs and tops in front of the machine's tracks in order to reduce soil compaction. The harvester must have a lateral reach of twenty (20) feet or more, and the machine's lateral reach must be utilized as much as possible.
 - (2) The forwarder shall operate only on designated skid trails approved by the Authorized Officer. Forwarder trails shall be located on existing skid trails and/or the slash-covered areas traversed by the harvester. Forwarder trails shall be perpendicular to hill-slope contour lines as much as possible.
 - (3) Logs that are too large for the harvester/forwarder operation may be yarded with a rubber-tired or track-mounted skidder, or a track-mounted log loader approved by the Authorized Officer, and as directed by the Authorized Officer. The skidder shall operate on designated skid trails approved by the Authorized Officer.
- (8) To prevent potential disturbance to nesting marbled murrelets the following restrictions apply:

For the portion of Harvest Area 1 that is within 100 yards of the marbled murrelet occupied site as designated on Exhibit E no operations except hauling shall be conducted between April 1 and August 5, both days inclusive, after which daily operating restrictions shall be in effect from August 6 to September 15 both days inclusive. During the daily operating restriction period, all operations, except hauling, shall be scheduled from two (2) hours after sunrise to two (2) hours before sunset.

For the portion of Harvest Area 4 that is within 100 yards of marbled murrelet suitable habitat as designated on Exhibit E, daily operating restrictions shall be in effect from April 1 to August 5, both days inclusive. During the daily operating restriction period all operations shall be scheduled from two (2) hours after sunrise to two (2) hours before sunset.

- (9) No logging equipment shall be attached to reserve trees located within the marbled murrelet occupied site as shown on Exhibit E between April 1 and September 15, both days inclusive, of each calendar year, unless approved by the Authorized Officer. Logging equipment may be attached to reserve trees within the marbled murrelet occupied site outside of the aforementioned dates in accordance with Section 41(B)(6)(d) of this contract. No cutting or removal of timber shall be permitted within marbled murrelet suitable habitat as shown on Exhibit E unless approved by the Authorized Officer.
- (10) Before cutting and removing any trees necessary to facilitate logging in the Harvest Areas shown on Exhibit A, the Purchaser shall identify the location of the skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees on the ground in a manner approved by the Authorized Officer at the pre-work conference and documented in the logging plan. Said Purchaser identification of trees to be cut and removed does not constitute authority to proceed with cutting and removal. In addition, before proceeding with cutting the following conditions must be met:
 - (a) All skid roads and/or cable yarding roads upon which timber is identified by the Purchaser to be cut and removed in accordance with this special provision must be necessary for the safe and expeditious removal of timber sold under this contract and shall be limited to the minimum width necessary for yarding of logs with a minimum of damage to reserve trees, however, unless otherwise approved in writing by the Authorized Officer, the width of skid roads shall be limited to (12) feet and cable yarding roads shall be limited to (15) feet.
 - (b) The Purchaser may immediately cut and remove additional timber to clear skid roads and cable yarding roads; and provide tailhold, tieback, and guyline, lift and intermediate support trees; and to clear danger trees when the trees have been marked with high visibility blue paint above and below stump height by the Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. The volume of the timber to be sold will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures. No timber may be cut or removed under terms of this provision unless sufficient installment payments have been made in accordance with Section 3(b) of the contract or sufficient bonding has been provided in accordance with Section 3(d) of the contract.

- (c) The Purchaser agrees that sale of this additional timber shall be accomplished by a unilateral modification of the contract executed by the Contracting Officer and that such timber shall be sold at the unit prices shown in Exhibit B of this contract unless: the value of the timber must be reappraised subject to the terms for contract extension set forth in Section 9 of the contract; or the Authorized Officer determines that trees otherwise reserved in Section 40 of the contract or any tree that exceeds thirty-six (36) inches diameter at breast height shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Section 8 of the contract.
 - (d) This authorization for the Purchaser to cut and remove additional timber prior to the execution of a modification may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser has cut and removed any tree not previously marked and approved for cutting by the Authorized Officer, which under Section 10 of the contract constitutes a violation of the contract and under Section 13 of the contract may constitute a trespass rendering the Purchaser liable for damages under applicable law.
 - (e) If authorization is withdrawn, the Contracting Officer shall issue a written notice to the Purchaser that the sale of additional timber under this special provision is no longer approved. In this case, the Purchaser shall inform the Authorized Officer at least one (1) working day prior to the need for cutting and removing any additional timber, and execute a bilateral modification prior to cutting for such additional approved timber at the unit prices shown in Exhibit B of the contract or in accordance with Section 8 or Section 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all contract work for the period of time deemed necessary and appropriate for the Government to safely measure and mark additional timber.
 - (f) The Government may reserve trees previously designated for cutting and removal by applying orange paint as replacements for additional trees cut and removed for skid roads and/or cable yarding roads when the Authorized Officer determines such reservation is necessary to maintain stand densities consistent with objectives set forth in the management prescription(s). This may include the replacement of trees damaged by storm events, or insects or disease. The volume of this timber to be reserved will be determined by the Authorized Officer in accordance with Bureau of Land Management prescribed procedures and the value shall be based on the unit prices shown in Exhibit B of the contract. The Purchaser agrees that the Total Purchase Price shall be reduced accordingly through a unilateral modification to the contract executed by the Contracting Officer.
- (11) In accordance with the requirements of Section 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 obstructing needed cable-yarding roads, hazardous to workers, needed for guyline, tail hold or tieback trees, severely damaged from the normal conduct of felling or yarding operations 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 Section 40 of the contract are not included in the authorization.
- (b) The Purchaser shall identify each tree sold and cut in accordance with the provision by marking the cut surface of the stump and the bottom log immediately after falling with high visibility paint. The stump shall be marked by flagging the location of the stump with plastic fluorescent pink ribbon hung within five (5) feet of the stump at eye level so that the stump can be visually located from a distance of not less than one-hundred (100) feet.
- (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 Section 3(b) or 3(d) of the contract as required by Section 8 of the contract.
- (d) No timber may be cut or removed under the terms of this provision until all contract payments required by Section 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 high visibility paint.
 - (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 damaged (as defined during the pre-work conference) 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 tail hold trees.
 - (10) Cut more than the minimum number of trees necessary to properly serve as tie-backs for topped tailhold trees.
 - (11) Failed to maintain accurate and current (no more than twenty-four [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 (2) working days prior to the need for cutting and yarding any guyline tree, tailhold tree, tie-back tree, danger tree, corridor tree, pulled over tree, and severely damaged tree. All sales 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 cable-yarding corridors and/or 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 Section 13 of the contract for any reserved timber cut or removed in violation of the terms of this special provision.

- (12) For a distance of fifty (50) feet from the perimeter of each landing, all logs more than eight (8) inches in diameter at the large end and longer than eight (8) feet in length shall be decked or windrowed at the location designated by the Authorized Officer except logs sold and removed from the contract area. If a log or piece of log meeting or exceeding the above specifications is bucked and left in place, all portions of that log shall be yarded and decked at the above described location.
- (13) No falling or yarding shall be conducted between April 15 and July 15, both days inclusive in order to prevent damage to residual trees due to bark slippage, unless approved by the Authorized Officer.
- (14) No road construction or renovation shall be conducted on the contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive, unless approved by the Authorized Officer.
- (15) No timber yarding shall be conducted on those Harvest Areas accessed by unsurfaced roads between October 15 of one calendar year and July 15 of the following calendar year, both days inclusive, unless approved by the Authorized Officer.
- (16) No timber loading or hauling shall be conducted on unsurfaced roads between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive, unless approved by the Authorized Officer.

Section 41(C) Miscellaneous:

- (1) The Government, at its option, may administratively check scale any portion of the timber removed from the contract area, and if necessary, conduct check scaling of independent scalers contracted to BLM for administrative check scaling purposes. The Purchaser hereby agrees to make such contract timber available for such scaling at a location or locations to be approved in writing by the Authorized Officer. At the approved location or locations, the Purchaser shall provide an area for logs to be safely rolled out for scaling, to unload logs from trucks, place logs in a manner so that both ends and three faces of each log are visible for scaling, and to reload or remove logs after scaling has been completed. In the event that BLM elects to administratively check scale, and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows. If the entire sale is check scaled, the purchase price of this contract shall be reduced by One Thousand Seven Hundred Seventy-four and 50/100 dollars (\$1,774.50). In the event only a portion of the contract timber is scaled the purchase price shall be reduced by that portion of One Thousand Seven Hundred Seventy-four and 50/100 dollars (\$1,774.50) 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 Eastside (Scribner Decimal C) Rules by BLM scalers, and/or independent scalers contracted to BLM. A copy of the scale report will be made available to Purchaser upon request.

Section 41(D) Environmental Protection:

- (1) In addition to the requirements set forth in Section 25 of this contract, the Purchaser shall clean road surfaces, cut banks, landings, ditch lines and culverts of all debris created by logging operations.
- (2) In addition to the requirements set forth in Section 25 of this contract, the Purchaser shall steam clean or pressure wash all logging, subsoiling, and road building equipment, except logging trucks, prior to initial move-in, to minimize the likelihood of introducing noxious weeds to the Contract Area. Equipment washing shall occur at a location approved by the Authorized Officer. Equipment will be visually inspected by the Authorized Officer prior to use. Any logging or road building equipment removed from the Contract Area during the duration of the contract must be steam cleaned or pressure washed before it is returned to the Contract Area. Cleaning shall be defined as removal of all dirt, grease, plant parts and material that may carry noxious weed seeds.
- (3) In addition to the requirement set forth in Section 25 of this contract, the Purchaser shall winterize all natural surfaced roads used under Section 41(F)(1) or any portion thereof, in accordance with the plans and specifications shown on Exhibit C, and in accordance with the following stipulations:

- (a) The purchaser intends to use the natural surfaced roads or portions thereof for more than a single operating season; or, circumstances require that the roads or portions thereof overwinter before decommissioning.
 - (b) Winterizing shall consist of water-barring, blocking and mulching to the satisfaction of the Authorized Officer.
 - (c) Winterizing shall take place at the end of the operating season as described in Section 41(B)(16) and Section 41(F)(2) of this contract, or as directed by the Authorized Officer.
- (4) In addition to the requirements set forth in Section 25 of this contract, the Purchaser shall, upon completion of logging operations, perform the following operations on approximately one half (0.5) mile of spur roads and one (1.0) mile of compacted skid trails and landings, as shown on Exhibit F and in accordance with the following stipulations:
- (a) Till with a subsoiler bucket attached to an excavator as directed by the Authorized Officer. Specifications for the subsoiler bucket are contained in Exhibit F which is attached hereto and made a part thereof.
 - (b) Slash and other organic debris and some topsoil as inoculant will be spread over the subsoiled surface. Coverage with slash and other organic debris will be at least 50 percent of the area where levels of this material are in enough abundance. At each position the excavator locates to perform subsoiling, one bucketful of topsoil will be collected from the adjacent undisturbed area and will be scattered over the subsoiled surface. The excavator shall construct waterbars on grades steeper than 10 percent and immediately above and below the subsoiled areas on roads, or as directed by the Authorized Officer. The track width of the excavator shall not exceed 116 inches on trails.
 - (c) Subsoiling shall be done during the same dry season as ground-based harvesting or completion of spur/road use or as directed by the Authorized Officer.
- (5) 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 to protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Roseburg District Record of Decision (ROD) and Resource Management Plan (RMP) 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;
- (g) species have been discovered which were identified for protection through Survey and Manage and/or protection buffer standards and guidelines established in the ROD and RMP, and the Contracting Officer determines that continued operations would affect the species or its habitat, or;
- (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 thirty (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 thirty (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 fifteen (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 thirty (30) days, the unamortized Out-of-Pocket Expenses for road or other construction required pursuant to Exhibit C of the contract shall be refunded or transferred to another BLM contract at the request of the Purchaser. Upon written notice from the Contracting Officer lifting the suspension, the Purchaser shall reimburse the Government the amounts refunded or transferred. The Purchaser may choose to pay this reimbursement at once or in installments payable at the same time as payments are due for the timber under the contract and in amounts approximately equal to the expenses associated with the timber for which payment is due.

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

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

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

The Purchaser specifically and expressly waives any right to claim damages, other than those described in the preceding paragraph, based on an alleged breach of any duty to the Purchaser, whether express or implied, in regard to the manner in which the Government defended the litigation which resulted in the court order affecting the operation of the contract. This waiver also extends to any claims based on effects on the operation of the contract that

arise from litigation against another agency. Furthermore, the Purchaser specifically acknowledges and agrees that a court ruling that the Government violated the Administrative Procedures Act cannot be interpreted, in itself, to mean that the Government had not acted reasonably in regard to its duties to the Purchaser under this contract.

Section 41 (E) Cultural Resources Protection:

- (1) If in connection with operations under this contract the Purchaser, their contractors, subcontractors, or the employees of any of them, discovers, encounters, or becomes aware of any objects or sites of cultural value on the contract area such as historical or prehistorical ruins, graves or grave markers, fossils, or artifacts, the Purchaser shall immediately suspend all operations in the vicinity of the cultural value and shall notify the Authorized Officer of the findings. Operations may resume at the discovery site upon receipt of written instructions and authorization by the Authorized Officer.

Section 41(F) Road Construction, Maintenance & Use:

- (1) The Purchaser shall construct Spurs 1, 2, 3, 4, 5, 6 and 7 and Road Nos. 26-7-31.1 Segments D and E, 26-7-32.2 Segments B and C, 27-7-5.1 Segment B. Any required construction of structures and roads shall be completed prior to the removal of any timber, except right-of-way timber, over that road.

Upon completion of logging operations Road Nos. 26-7-31.1 Segment D, 27-7-5.1 Segment B(Por), and 26-7-32.2 Segment B shall be water-barred, blocked, and straw mulched and Road Nos. 26-7-31.1 Segment E shall be water-barred, blocked, and mulched with logging slash in strict accordance with the plans and specifications shown on Exhibit C, which is attached hereto and made a part hereof. In accordance with Special Provision 41 (D)(4) Spurs 1, 2, 3, 4, 5, 6 and 7 and Road Nos. 26-7-32.2 Segments C, and 27-7-5.1 Segment B(Por) shall be subsoiled, water-barred, blocked, and mulched with logging slash in accordance with the plans and specifications shown on Exhibit C and Exhibit F, which is attached hereto and made a part hereof.

- (2) Unsurfaced roads constructed in the contract area shall be water-barred, mulched, and blocked in accordance with Exhibit C of this contract; the aforementioned work shall be completed after hauling and before October 15 of the same operating season, or as directed by the Authorized Officer, when over-wintering of roads is necessary.
- (3) The Purchaser is authorized to use the roads listed and shown on Exhibit D which are under the jurisdiction of the Bureau of Land Management for the removal of Government timber sold under the terms of this contract provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 41(F)(4). Any road listed on Exhibit D and requiring improvement or renovation in Exhibit C of this contract shall be maintained by the Purchaser until receiving written acceptance of the construction, improvement, or renovation from the Authorized Officer. The Purchaser shall pay current Bureau of Land Management maintenance and rockwear fees for the sale of additional timber under modification to the contract.

- (4) The Purchaser shall pay the Government a road maintenance obligation in the amount of Forty-eight and 98/100 dollars (\$48.98) for the transportation of timber included in the contract price over roads listed on the Exhibit D.

The above road maintenance and rockwear amount is for use of 0.2 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 and No/100 dollars (\$500.00) payable in the same manner as and together with payments required in Sec. 3 of this contract.

- (5) 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.
- (6) The Purchaser also agrees that if they elect to use any other private road which is the subject of a right-of-way agreement with the Government for the removal of Government timber sold under the terms of this contract, 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.

IF OTHER THAN LONE ROCK TIMBER COMPANY PURCHASES:

- (7) In the use of Road No. 26-7-33.0 Segment A(Imp), the purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. R-768, dated September 17, 1964, between the United States of America and Lone Rock Timber Company. This Document is available for inspection at the Bureau of Land Management, Roseburg District Office, 777 N.W. Garden Valley Blvd., Roseburg Oregon 97471. These conditions include:
- (a) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a copy of the executed license agreement.
 - (b) Payment of a maintenance and rockwear fee of One Thousand Nine Hundred Forty-three and 67/100 dollars (\$1,943.67) payable at the time indicated in the license agreement.
 - (c) Payment of a road use obligation of One Thousand Fifty-one and 52/100 dollars (\$1,051.52) payable at the time indicated in the license agreement.
 - (d) 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.

IF LONE ROCK TIMBER COMPANY PURCHASES:

In accordance with 43CFR2812.6-2(a)(5), the following allowances have been made for amortization on capital investment of the roads covered by Right-of-Way and Road Use Agreement No. R-768, dated September 17, 1964 between the United States of America and Lone Rock Timber Company: One Thousand Fifty-one and 52/100 dollars (\$1,051.52) for the use of Road No. 26-7-33.0 Segment A(Imp). It is understood that the purchase price stated in Sec. 2 of this contract is the net price and no deductions will be made from the purchase price because of such allowances.

IF OTHER THAN SENECA JONES TIMBER COMPANY PURCHASES:

- (8) In the use of 26-7-33.0 Segment A(Imp), 26-7-32.1 Segment A and 26-7-32.2 Segment A, the purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. R-788, dated February 1, 1965, between the United States of America and Seneca Jones Timber Company. This Document is available for inspection at the Bureau of Land Management, Roseburg District Office, 777 N.W. Garden Valley Blvd., Roseburg, Oregon 97471. These conditions include:
- (a) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a copy of the executed license agreement.
 - (b) Payment of a road use obligation of Two Thousand Four Hundred Eighty-three and 71/100 dollars (\$2,483.71) payable at the time indicated in the license agreement
 - (c) Prior to cutting or removing any timber from the road right of way between Stations 0+00 and 0+82.3 on Road No. 26-7-32.2 Segment B the Purchaser shall pay to Seneca Jones Timber Company, the owner of the right-of-way timber, the total value of that timber based on a fair market value appraisal. The timber has been cruised and appraised as follows:

Number of Trees	Species	Estimated Volume (MBF)	Price per MBF*	Value
5	Douglas-fir	2.0	\$251.10	\$502.20
5	TOTALS	2.0		\$502.20

* Appraised price shall be valid from 5/15/2011 – 9/30/2012

- (d) 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.

IF SENECA JONES TIMBER COMPANY PURCHASES:

In accordance with 43CFR2812.6-2(a)(5), the following allowances have been made for amortization on capital investment of the roads covered by Right-of-Way and Road Use Agreement No. R-788, dated February 1, 1965 between the United States of America and Seneca Jones Timber Company:

Two Thousand Four Hundred Eighty-three and 71/100 dollars (\$2,483.71) for the use of Road Nos. 26-7-33.0 Segment A(Imp) and 26-7-32.1 Segment A. It is understood that the purchase price stated in Sec. 2 of this contract is the net price and no deductions will be made from the purchase price because of such allowances.

IF OTHER THAN WEYERHAEUSER COMPANY PURCHASES:

- (9) In the use of Road Nos. 26-7-31.1 Segments A, B and C, 27-7-4.0 Segments F and G and 27-7-5.1 Segment A the purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. R-863, dated August 15, 1969, between the United States of America and Weyerhaeuser Timber Company. This Document is available for inspection at the Bureau of Land Management, Roseburg District Office, 777 N.W. Garden Valley Blvd., Roseburg Oregon 97471. These conditions include:
- (a) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a copy of the executed license agreement.
 - (b) Payment of a maintenance and rockwear fee of One Thousand One Hundred Seventy-two and 19/100 dollars (\$1,172.19) payable at the time indicated in the license agreement.
 - (c) Payment of a road use obligation of Two Thousand Twenty-four and 70/100 dollars (\$2,024.70) payable at the time indicated in the license agreement.
 - (d) 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.

Section 41(G) Fire Prevention and Control:

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

Section 41(H) Slash Disposal and Site Preparation:

- (1) Fire Hazard Reduction. In addition to the requirements of Section 15 of this contract, and notwithstanding the Purchaser's satisfactory compliance with state laws and regulations regarding offsetting or abating the additional fire hazard created by this operation and the State's willingness to release the Purchaser from liability for such hazard, the Purchaser shall remain responsible to the Government for performance of the following hazard reduction measures required by this contract:

- (a) Machine Pile and Cover all slash situated within fifty (50) feet of all landings or other locations designated by the Authorized Officer in accordance with the following specifications:
- (1) Landing slash piles shall be capped with a ten (10) foot by ten (10) foot cover of four (4) mil black plastic or equivalent material to maintain a dry ignition point. The covers shall be firmly fixed to each pile.
 - (2) Slash piles shall be located away from unit boundaries, wildlife trees, seed trees, retention trees, snags, downed logs and/or stumps.
 - (3) Finished piles shall be tight and free of earth
- (b) 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 the Purchaser's operations under the terms of this contract.
- (c) Landings shall be piled and covered within thirty (30) days of the completion of yarding from each landing.
- (d) Covering of slash piles shall be done concurrently with piling operations.
- (e) Hand pile all slash within fifty (50) feet each side along designated roads, as shown on Exhibit G, in or adjacent to Harvest Areas 1, 2 and 3 (approximately 1.2 miles of roads or 12 acres of piling) as directed by the Authorized Officer and in accordance with the following specifications:
- (1) Piling shall be accomplished by hand.
 - (2) Pile all slash between three (3) and six (6) inches in diameter on the large end and greater than four (4) feet in length.
 - (3) Slash piles shall be capped with a five (5) foot by five (5) foot cover of four (4) mil black plastic or equivalent material to maintain a dry ignition point. The covers shall be firmly fixed to each pile. Maximum pile size shall be eight (8) feet in diameter and four (4) feet in height.
- (2) Notwithstanding the provisions of Section 15 of this contract, the Government shall assume all obligations for disposal or reduction of fire hazards created by the Purchaser's operations on Government lands.

Section 41(l) Log Exports:

- (1) All timber sold to the Purchaser under the terms of this contract, except exempted species, is restricted from export from the United States in the form of unprocessed timber, and is prohibited from being used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below,

such as sawlogs, peeler logs and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three-quarters (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 the last export sale.
- (c) Volume of timber exported in the past twelve (12) months from the date of last export sale.
- (d) Volume of Federal timber purchased in the past twelve (12) months from the date of last export sale.
- (e) Volume of timber exported in succeeding twelve (12) months from date of last export sale.
- (f) Volume of Federal timber purchased in succeeding twelve (12) months from date of last export sale.

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

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

Prior to the termination of this contract, the Purchaser shall submit to the Authorized Officer Form 5460-15 (Log Scale and Disposition of Timber Removed Report) which shall be

executed by the Purchaser. In addition, the Purchaser is required under the terms of this contract to retain for a three-year period from the date of termination of the contract the records of all sales or transfer of logs involving timber from the sale for inspection and use of the Bureau of Land Management.

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

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

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

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

Seasonal Restriction Matrix

Sheet 1 of 2

Mud Slinger Commercial Thinning and Density Management Reoffer
OR10-TS11-08

Seasonal Restrictions are Black-Stippled.



Daily Operating Restrictions are Shaded.



Sale Area	Activity	Jan		Feb		Mar		Apr		May		June		July		Aug			Sept		Oct		Nov		Dec	
		1	15	1	15	1	15	1	15	1	15	1	15	1	16	1	6	15	1	16	1	15	1	15	1	15
Unit 1	Falling, bucking and yarding ¹																									
	Ground-based yarding ^{1,2}																									
	Cable yarding on unsurfaced roads ^{1,2}																									
	Road construction, right-of-way logging and clearing ²																									
	Loading or hauling on unsurfaced roads ²																									
	Cable yarding from rocky roads ¹																									
	All operations except hauling within 100 yards of Marbled Murrelet occupied site as shown on Exhibit E ^{3,4}																									
	Attaching logging equipment to reserve trees within Marbled Murrelet occupied site as shown on Exhibit E ^{3,4}																									
Unit 2	Falling, bucking and yarding ¹																									
	Ground-based yarding ^{1,2}																									
	Cable yarding on unsurfaced roads ^{1,2}																									
	Road construction, right-of-way logging and clearing ²																									
	Loading or hauling on unsurfaced roads ²																									
Unit 3	Falling, bucking and yarding ¹																									
	Ground-based yarding ^{1,2}																									
	Road construction, right-of-way logging and clearing ²																									
	Loading or hauling on unsurfaced roads ²																									

¹Bark slip seasonal restriction from April 15th to July 15th may be conditionally waived.

²Wet season restrictions may be shortened or extended depending on soil moisture and weather conditions.

³Daily operating restrictions will be in effect from August 6th thru September 15th. Operations shall be scheduled to begin two hours after sunrise and must conclude two hours before sunset.

⁴Seasonal restrictions will be in effect from April 1st thru August 5th.

⁵Daily operating restrictions will be in effect from April 1st thru August 5th. Operations shall be scheduled to begin two hours after sunrise and must conclude two hours before sunset.

Seasonal Restriction Matrix

Sheet 2 of 2

Mud Slinger Commercial Thinning and Density Management Reoffer
OR10-TS11-08

Seasonal Restrictions are Black-Stippled. 

Daily Operating Restrictions are Shaded. 

Sale Area	Activity	Jan		Feb		Mar		Apr		May		June		July		Aug			Sept		Oct		Nov		Dec	
		1	15	1	15	1	15	1	15	1	15	1	15	1	16	1	6	15	1	16	1	15	1	15	1	15
Unit 4	Falling, bucking and yarding ¹																									
	Ground-based yarding ^{1,2}																									
	Road construction, right-of-way logging and clearing ²																									
	Loading or hauling on unsurfaced roads ²																									
	All operations within 100 yards of Marbled Murrelet suitable habitat as shown on Exhibit E ⁵																									

¹Bark slip seasonal restriction from April 15th to July 15th may be conditionally waived.

²Wet season restrictions may be shortened or extended depending on soil moisture and weather conditions.

³Daily operating restrictions will be in effect from August 6th thru September 15th. Operations shall be scheduled to begin two hours after sunrise and must conclude two hours before sunset.

⁴Seasonal restrictions will be in effect from April 1st thru August 5th.

⁵Daily operating restrictions will be in effect from April 1st thru August 5th. Operations shall be scheduled to begin two hours after sunrise and must conclude two hours before sunset.

X **TIMBER***

DEPOSIT AND BID FOR ☐ **VEGETATIVE RESOURCE**
(Other Than Timber)

LUMP SUM SALE

Tract Number

(1) 11-08

Sale Name

Mud Slinger Commercial Thinning and Density Management Reoffer

Sale Notice (<i>dated</i>)

February 28, 2012 (sale date 03/27/12)

BLM District

Roseburg

☐ Sealed Bid for Sealed Bid Sale

☒ Written Bid for Oral Auction Sale

In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated timber/vegetative resource on the tract specified above.

Required bid deposited is **\$ 28,200.00** and is enclosed in for form of ☐ cash ☐ money order ☐ bank draft

☐ cashier's check ☐ certified check ☐ bid bond of corporate surety on approved list of the United States Treasury☐ guaranteed remittance approved by the authorized officer.

IT IS AGREED That the bid deposit shall be retained by the United States as liquidated damages if the bid is accepted and the undersigned fails to execute and return the contract, together with any required performance bond and any required payment within 30 days after the contract is received by the successful bidder. It is understood that no bid for less than the appraised price on a unit basis per species will be considered. If the bid is rejected the deposit will be returned.

BID SCHEDULE - LUMP SUM SALE

NOTE: Bidders should carefully check computations in completing the Bid Schedule

BID SUBMITTED		(Est. Volume MBF 16' Log)				ORAL BID MADE				
PRODUCT SPECIES	UNIT	ESTIMATED VOLUME OR QUANTITY	UNIT PRICE		TOTAL VALUE		UNIT PRICE		TOTAL VALUE	
Douglas-fir	MBF	2,268	x		=		x		=	
Grand Fir	MBF	90	x		=		x		=	
Western Hemlock	MBF	8	x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
	MBF		x		=		x		=	
TOTAL PURCHASE PRICE					=				=	

(Continued on reverse)

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

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et. seq.) requires us to inform you that:

This information is being collected to obtain data relevant to the operation of this timber sale contract.

This information will be used to administer our timber sale program.

Response to this request is required to obtain a benefit.

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 timer or vegetative resources.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 1 hr. 15 min. per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 18 and C Streets, N.W. Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0113), Washington, D.C. 20503.

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.*

*Applies to Timber Only

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.

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 Num-

ber 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.

**U.S. Department of Interior
Bureau of Land Management**

EXHIBIT "A"
Sheet 1 of 3

**Mud Slinger CT & DM Reoffer
Sale No. 11-08**

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	31, 32 & 33	WILLAMETTE	OR10-TS11-08

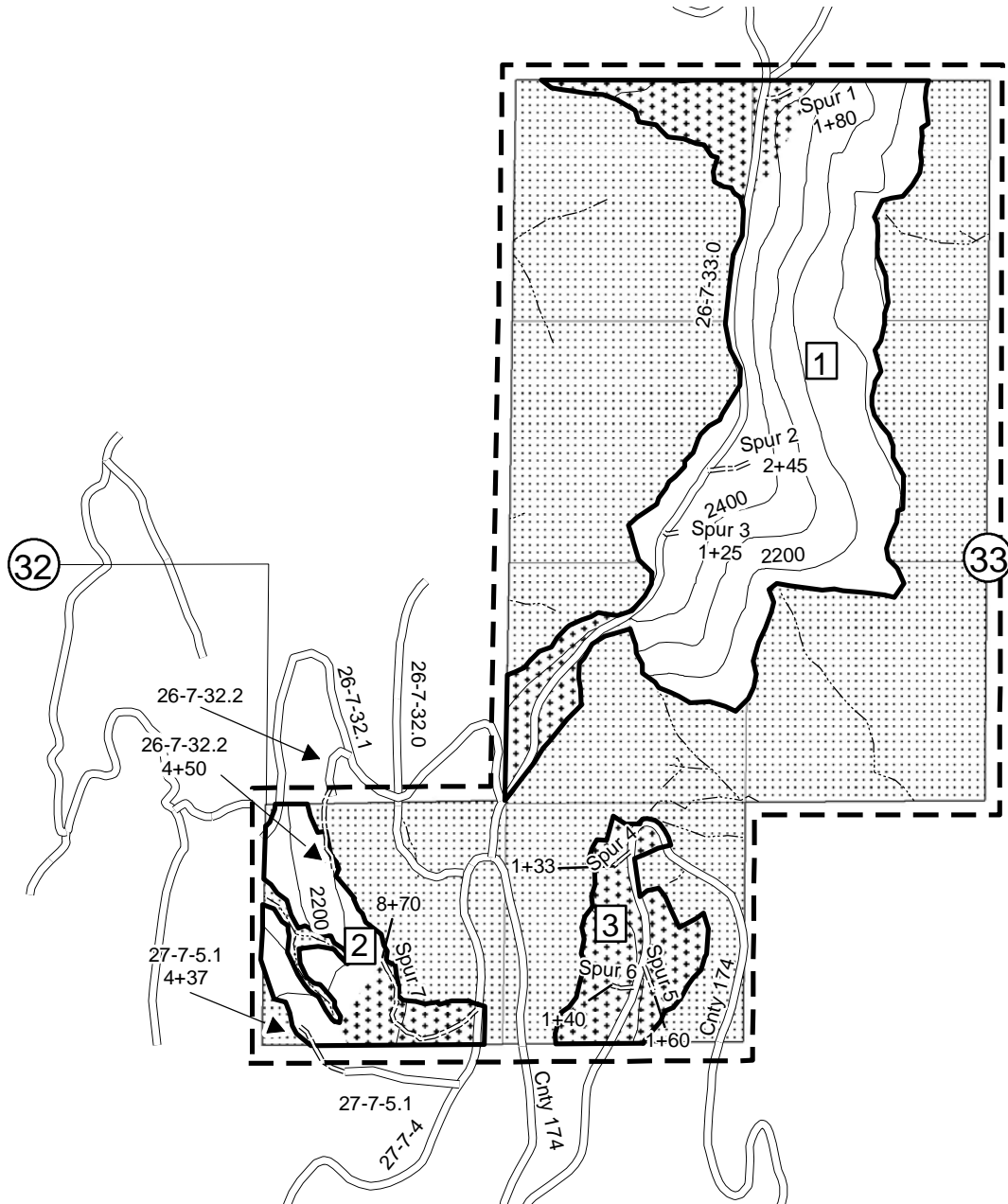
HARVEST AREA	HARVEST TYPE	HARVEST ACRES	HARVEST METHOD
1	COMMERCIAL THINNING	82	CABLE/GROUND
2	COMMERCIAL THINNING	15	CABLE/GROUND
3	COMMERCIAL THINNING	12	GROUND
4	COMMERCIAL THINNING	18	GROUND
Totals		<u>127</u>	

THINNING AREA ----- 127 Acres
 RIGHT-OF-WAY - (Clearing) ----- 2 Acres
 RESERVE AREA ----- 271 Acres
 TOTAL CONTRACT AREA ----- 400 Acres

1. Boundaries are posted with tags that read "Boundary of Timber Reserve," and boundary trees are painted orange.
2. Property lines are posted with orange and white tags that read "Timber Cutting Boundary."
3. Clearing limits on road rights-of-way are marked with colored paper flashers.
4. Trees marked with orange paint in all Harvest Areas and on all Harvest Area boundaries are reserved by the government.
5. Ground-based yarding is limited to dry season operations and slopes 35% or less within the approximate ground-based area shown on Exhibit A.

Note: Acres shown on Exhibit A have been computed using a Trimble Geo XT Global Positioning System receiver and ESRI ArcMap 9.3 GIS software. Acreage was calculated based on Global Positioning System traverse procedures including differential correction.

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	32 & 33	WILLAMETTE	OR10-TS11-08



1 inch = 1,000 feet

500 250 0 500 1,000 Feet

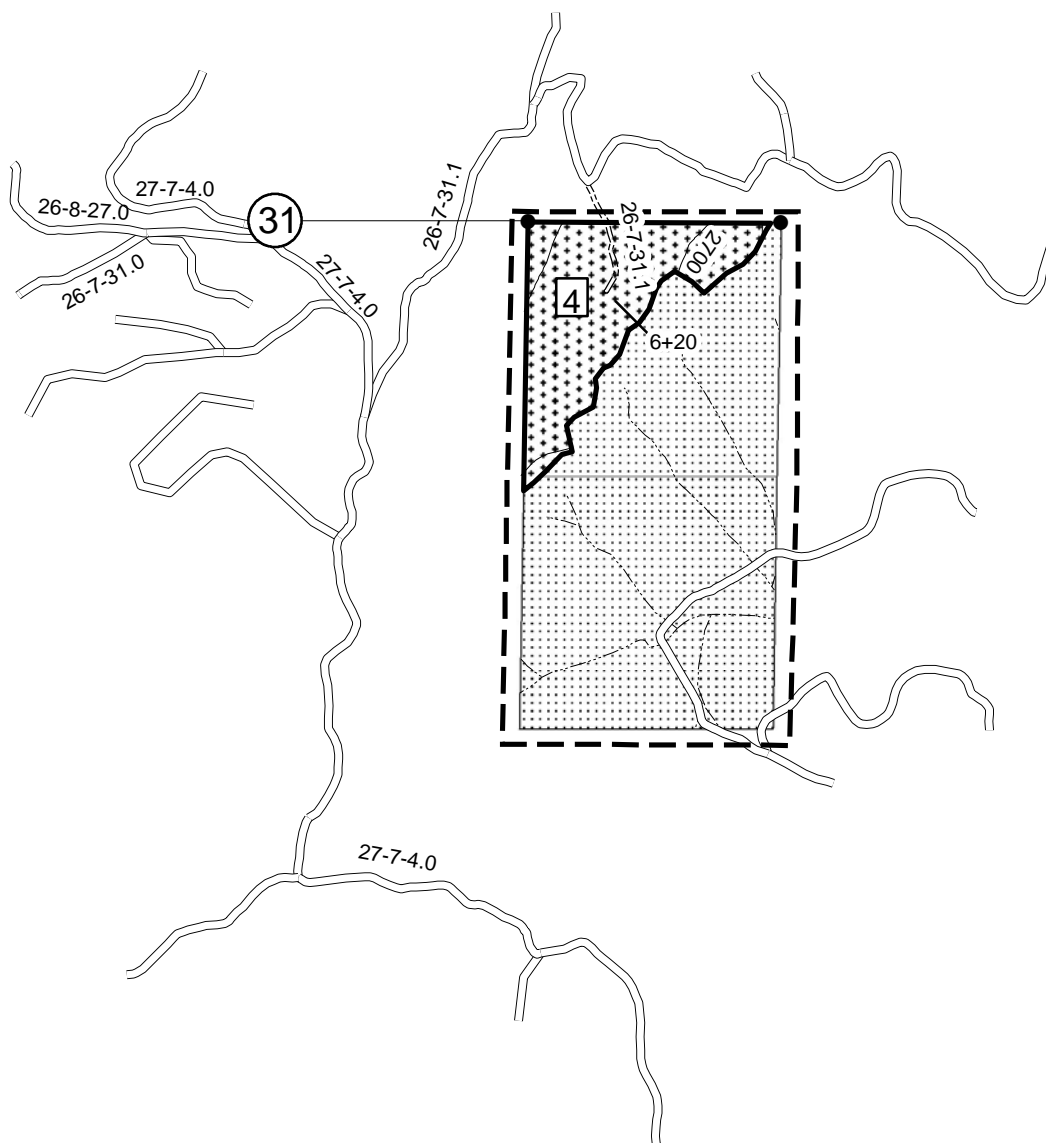


LEGEND

- Harvest Area - Ground Based Yarding
- Harvest Area - Cable Yarding
- Reserve Area
- Boundary of Cutting Area
- Boundary of Contract Area

- Existing Road
- Spur To Be Constructed
- Stream

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	31	WILLAMETTE	OR10-TS11-08











500 250 0 500 1,000 Feet

1 inch = 1,000 feet



LEGEND

-  Harvest Area - Ground Based Yarding
-  Reserve Area
-  Boundary of Cutting Area
-  Boundary of Contract Area

-  Existing Road
-  Spur To Be Constructed
-  Stream
-  Found Corner

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

Roseburg
Mud Slinger CT & DM Reoffer
TS 11-08

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
Douglas-fir	2,268		
Grand Fir	90		
Western Hemlock	8		
Sale Totals	2,366		

Unit Details (16' MB)

Unit 1 82 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	1,480		
Grand Fir	75		
Western Hemlock	2		
Unit Totals	1,557		

Unit 2 15 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	256		
Grand Fir	5		
Western Hemlock	5		
Unit Totals	266		

Unit 3 12 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	235		
Grand Fir	7		
Western Hemlock	1		
Unit Totals	243		

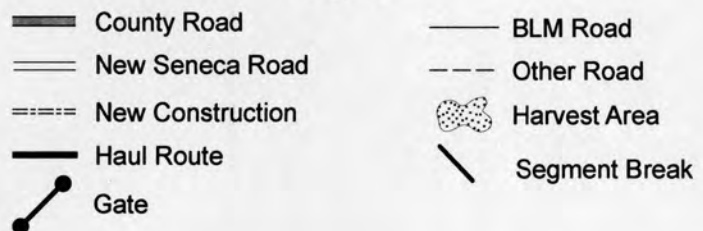
Roseburg
Mud Slinger CT & DM Reoffer
TS 11-08

Species	Net Volume	Bid Price	Species Value
Douglas-fir	244		
Unit Totals	244		

Species	Net Volume	Bid Price	Species Value
Douglas-fir	53		
Grand Fir	3		
Unit Totals	56		

Commercial Thinning and Density Management Reoffer

R7W



**United States Department of the Interior
Bureau of Land Management Roseburg District
EXHIBIT "D"**

Sale Name: Mud Slinger CT & DM Reoffer							
Contract No. OR10-TS11-08							
Road Number	Road Seg.	Segment Length	Segment Owner	Road Use Fees	Surface Type	Timber Haul Fees	Maintained By
26-7-31.1	A	0.21	WeyCo	\$0.81	Native	\$0.79	Weyco
26-7-31.1	B	0.15	WeyCo	Free Use	Native	\$0.79	Weyco
26-7-31.1	C	0.16	WeyCo	\$1.51	Native	\$0.79	Weyco
26-7-31.1	D	0.04	BLM		Native		PURCHASER
26-7-31.1	E	0.07	BLM		Native		PURCHASER
26-7-32.1	A	0.29	Seneca	\$6.39	Rock		PURCHASER
26-7-32.2	A	0.06	Seneca	Free Use	Rock		PURCHASER
26-7-32.2	B	0.02	BLM		Native		PURCHASER
26-7-32.2	C	0.07	BLM		Native		PURCHASER
26-7-33.0	A(Base)	0.91	BLM		Rock		LRT
26-7-33.0	A(Imp)	0.91	LRT	\$0.64	Rock	\$1.30	LRT
26-7-33.0	A(Imp)	0.91	Seneca	\$1.22	Rock		LRT
27-7-4.0	E	0.16	BLM		BST	\$0.65	BLM
27-7-4.0	F	1.30	WeyCo	\$2.13	Rock	\$1.30	Weyco
27-7-4.0	G	1.92	WeyCo	\$3.49	Rock	\$1.30	Weyco
27-7-5.1	A	0.11	WeyCo	Free Use	Rock		PURCHASER
27-7-5.1	B	0.08	BLM		Native		PURCHASER
Spur 1	A	0.03	BLM		Native		PURCHASER
Spur 2	A	0.05	BLM		Native		PURCHASER
Spur 3	A	0.02	BLM		Native		PURCHASER
Spur 4	A	0.02	BLM		Native		PURCHASER
Spur 5	A	0.03	BLM		Native		PURCHASER
Spur 6	A	0.03	BLM		Native		PURCHASER
Spur 7	A	0.16	BLM		Native		PURCHASER

ROAD MAINTENANCE SPECIFICATIONS

3000 - General

- 3001- The Purchaser shall be required to maintain all roads listed and/or referenced in Section 41 Special Provisions and as shown in the Exhibit "D" of this contract in accordance with Sections 3000, 3100, 3200, 3300 and 3400 of this exhibit.
- 3002- The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards. Any roads required to be constructed, improved, or renovated under terms of this contract shall be maintained to the standards as required in Exhibit C of this contract.
- 3003- The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3100, and 3105.
- 3004- The purchaser shall be responsible for providing timely maintenance and cleanup on any road 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.

3100 - Operational Maintenance

- 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.
- 3104- The Purchaser shall perform other road cleanup including removal of debris, fallen timber, bank slough, and slides which can practicably be accomplished by a motor 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 slope 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 the 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 water bars using equipment specified in Subsection 3104 and other culvert cleaning and flushing equipment.
- 3106- The Purchaser shall be responsible for repair and replacement of all materials eroded from road shoulders and fill slopes, up to fifteen (15) station yards in quantity, at any one slide. 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 Representative shall agree in writing, in the field, to the quantity of material, borrow source and method of repair. Work may commence immediately after agreement.

Upon completion of agreed upon work, a reduction in timber sale purchase price will be made to offset the cost of the work, based upon current BLM Timber Appraisal Production Cost Schedules for rental rates and labor costs. 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 as directed by the Authorized Officer.
- 3108- The Purchaser shall avoid fouling gravel or bituminous surface through covering with earth and debris from side ditches, slides, or other sources. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway. Skidding of logs on the roadway in or outside designated logging unit is not authorized without prior written approval by the Authorized Officer. Repair required by such skidding activity is not considered maintenance and shall be performed at the Purchaser's expense.

- 3109- The maximum allowable rut depth on aggregate surfaced roads is 2". Roads with ruts exceeding this requirement shall be bladed and brought back into conformance with the typical sections shown in the drawings. Rut depth shall be measured by centering a minimum 3 foot long strait edge across the wheel rut maintaining contact with the aggregate at both ends of the strait edge. The rut depth shall be the distance measured between the bottom of the strait edge and the lowest point of the wheel rut.

3200 - Seasonal Maintenance

- 3201- The Purchaser shall perform preventive maintenance at the end of Purchaser's hauling each season and during non-hauling periods which occur between other operations on the contract area. This includes cross ditching, water barring, constructing vehicle barriers, removing ruts or other surface irregularities, and all other requirements specified in Section 3100 and Exhibit "C" Erosion Control 1700 Specifications.
- 3203- The Purchaser shall complete road cleanup and maintenance, as specified in Section 3100, at the completion of logging operations on any road 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.

3300 - Final Maintenance

- 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 expiration of Purchaser's right to cut and remove timber (Sec. 4) 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.

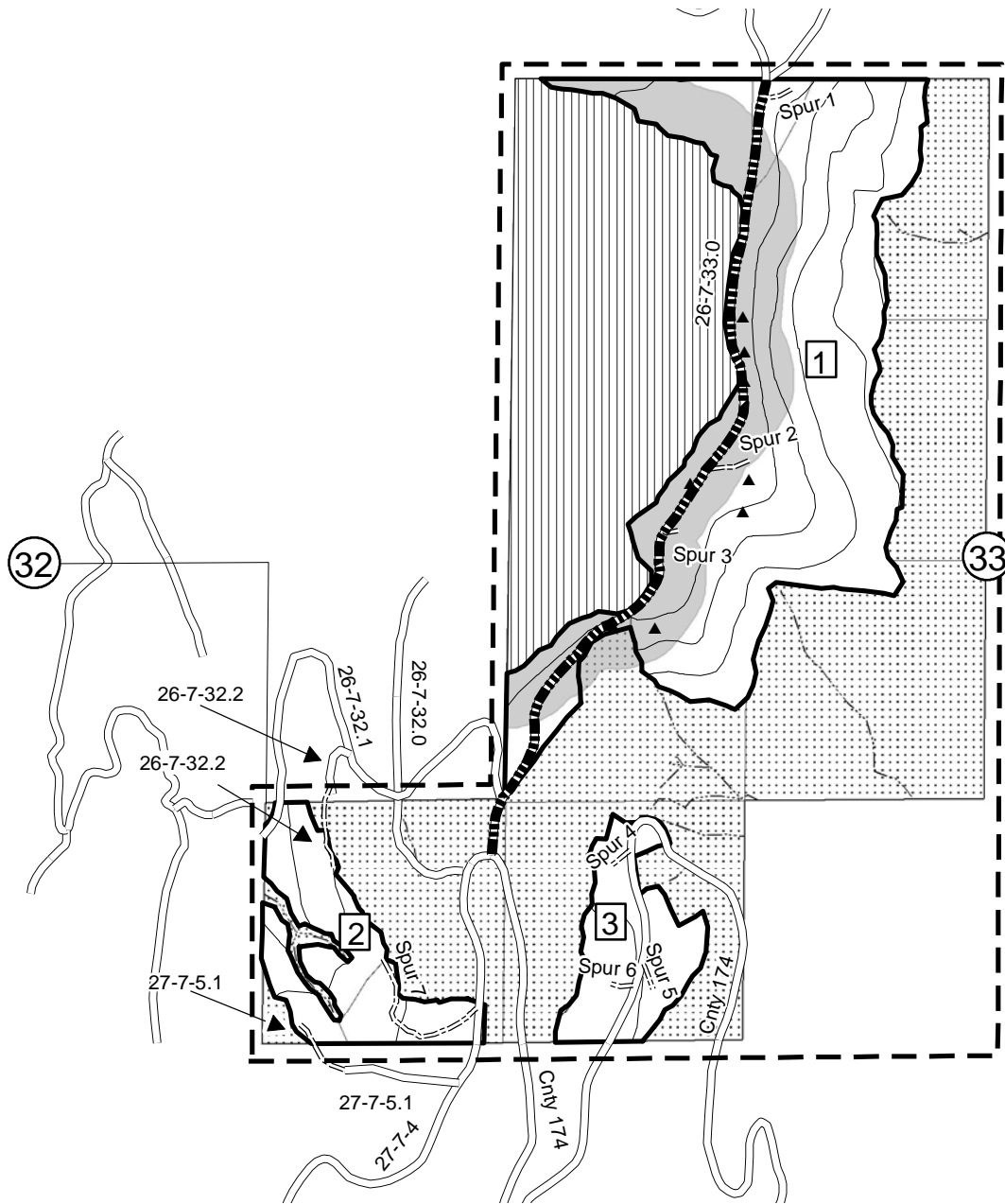
- 3303- The Purchaser shall complete Decommissioning according to Exhibit "C" Decommissioning 2600 Specifications on all native surfaced roads used under terms of their contract within 30 calendar days following the expiration of Purchaser's right to cut and remove timber (Sec. 4) and in accordance with Sec. 16(b) of this contract.

3400 - Other Maintenance

- 3401- The Purchaser shall be required to repair any damage to road surfaces that was specified under Subsection 3108. This repair includes restoring the roadway to the designed standard and replacement of surfacing with approved surface material. This repair is not limited to use of equipment specified in subsection 3104.
- 3402- The Purchaser shall be permitted to remove ice and snow from roads authorized for use under this contract only when prior written approval has been secured from the Authorized Officer. The Purchaser shall submit a written request for permission to remove ice and snow in advance of the date operations are to begin.

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

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	32 & 33	WILLAMETTE	OR10-TS11-08



500 250 0 500 1,000 Feet

1 inch = 1,000 feet

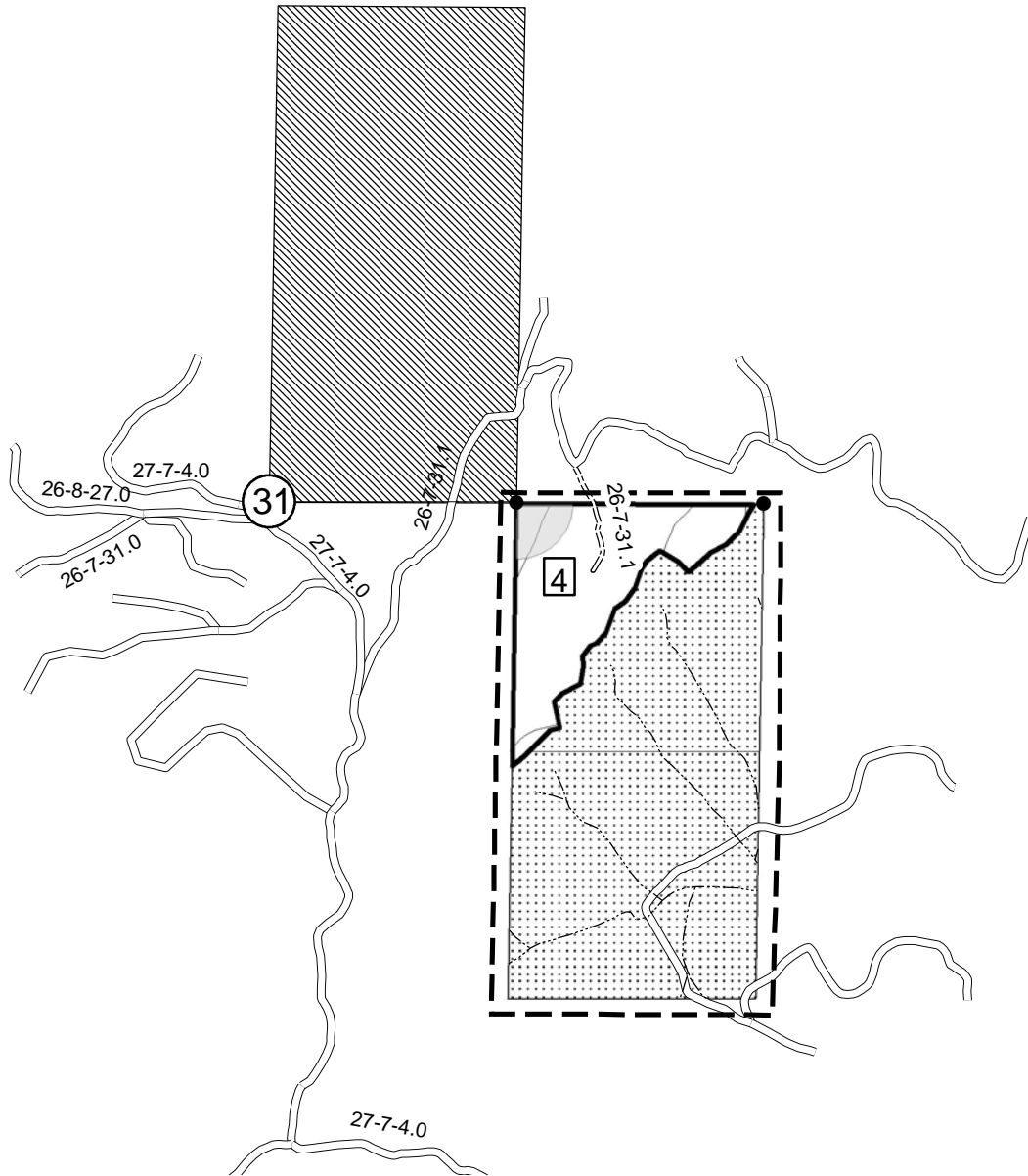


LEGEND

- Reserve Area
- Marbled Murrelet Occupied Site
- Marbled Murrelet
Seasonal Restrictions from April 1 - Aug 5
Daily Operating Restrictions Aug 6 - Sep 15
- Boundary of Cutting Area
- Boundary of Contract Area

- Winter Haul Approved
- Spur To Be Constructed
- Existing Road
- Stream
- Platform Trees

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	31	WILLAMETTE	OR10-TS11-08



500 250 0 500 1,000 Feet

1 inch = 1,000 feet



LEGEND



Reserve Area



Marbled Murrelet suitable habitat



Marbled Murrelet
Daily Operating Restrictions April 1 - Aug 5



Boundary of Cutting Area



Boundary of Contract Area



Spur To Be Constructed



Existing Road

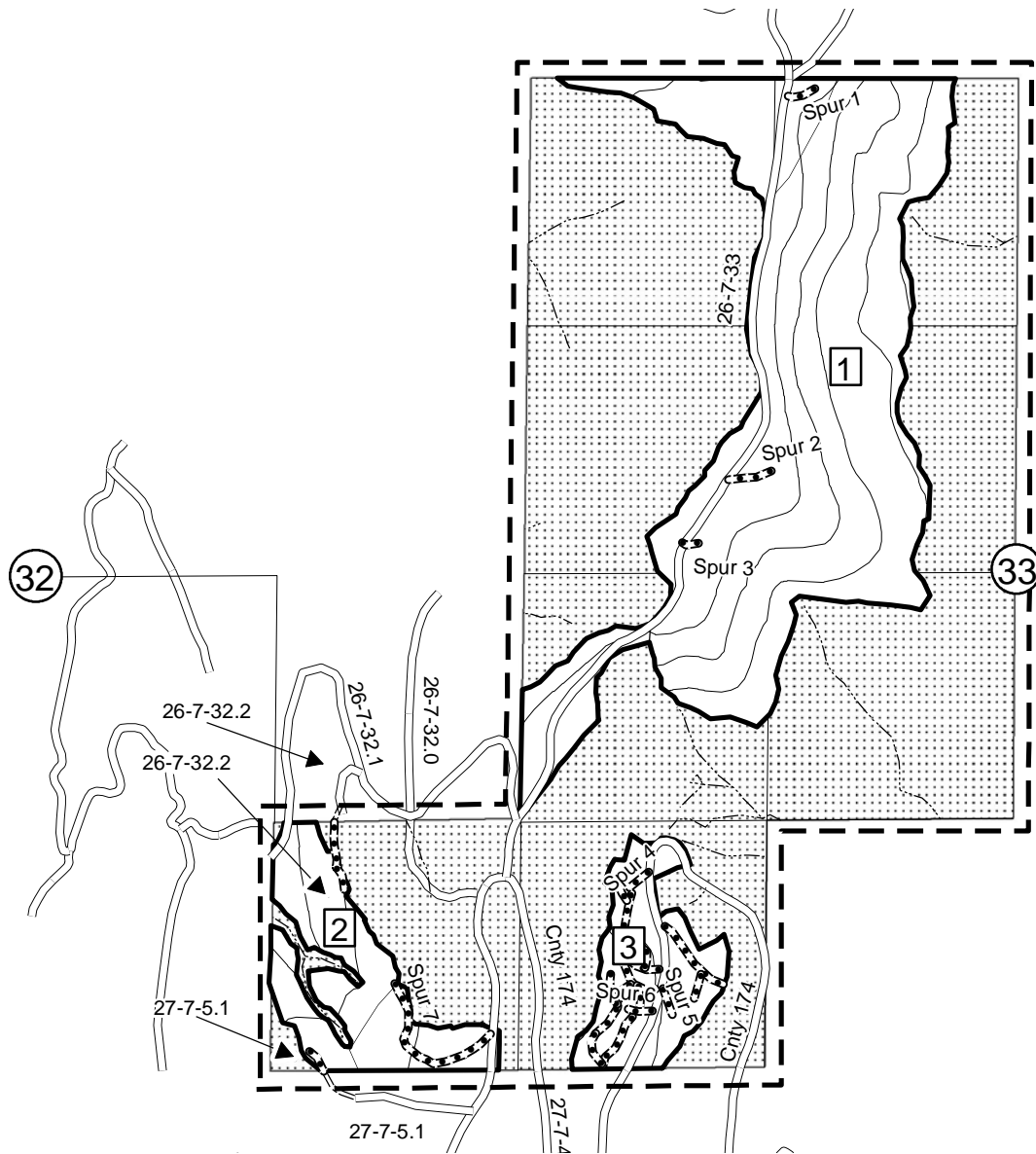


Stream



Found Corner

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	32 & 33	WILLAMETTE	OR10-TS11-08



500 250 0 500 1,000 Feet

1 inch = 1,000 feet



LEGEND



Reserve Area



Boundary of Cutting Area



Boundary of Contract Area



Spur To Be Constructed



Spurs and Trails to be Subsoiled

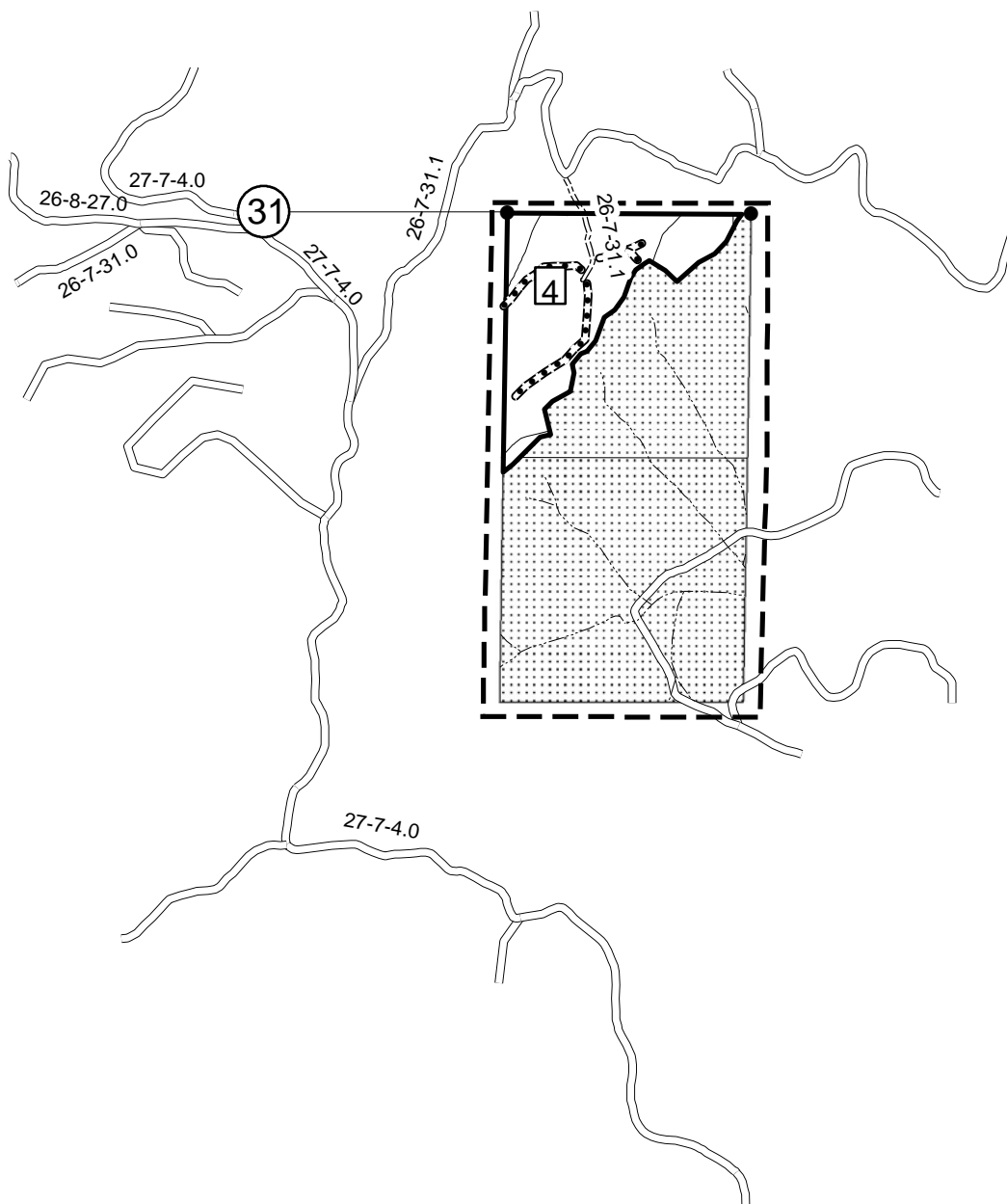


Existing Road



Stream

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	31	WILLAMETTE	OR10-TS11-08











500 250 0 500 1,000 Feet

1 inch = 1,000 feet



LEGEND

-  Reserve Area
-  Boundary of Cutting Area
-  Boundary of Contract Area

-  Spur To Be Constructed
-  Spurs and Trails to be Suboiled
-  Existing Road
-  Stream
-  Found Corner

SPECIAL PROVISIONS FOR EXCAVATOR ATTACHMENT

The Authorized Officer shall designate compacted areas within the contract area. The Purchaser shall till these areas in accordance with the specifications below.

Winged subsoiler attachments to the bucket of an excavator

1. All subsoiling equipment shall be inspected and approved by the authorized officer before tilling operations begin.
2. The excavator shall be equipped with two subsoiling shanks spaced approximately 40 inches apart. The shanks shall be John Deere® part number A24206, or equivalent. These shanks have a forward sweeping curvilinear shape to promote the lift that a ripper shank can not achieve.
3. Each subsoiler shank shall be equipped with a John Deere® shoe and wing, part number N236012, or equivalent. The wings shall be a minimum of seven inches wide.

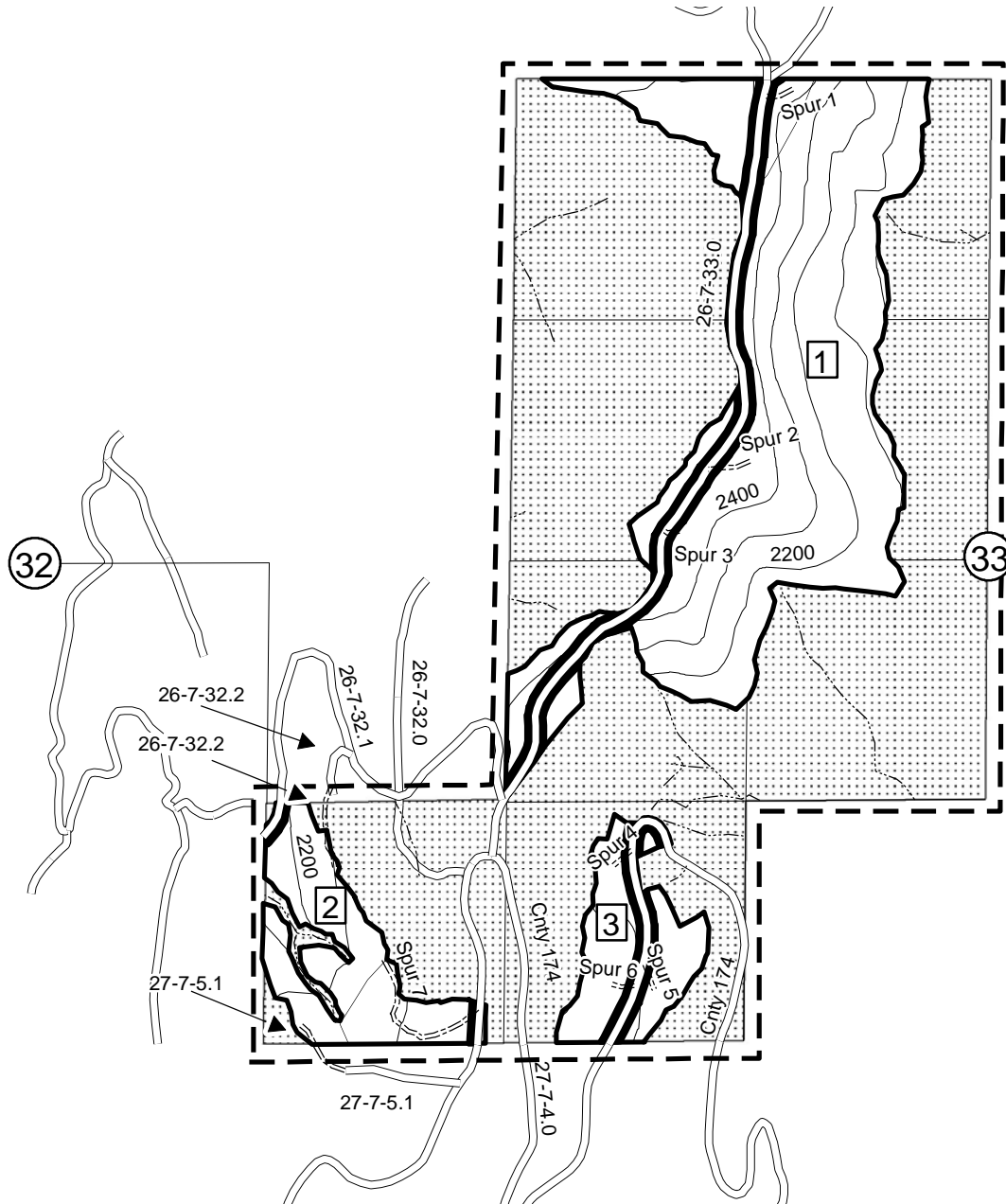


Example Excavator Bucket with Attachments

Tilling Operations:

1. Prior to commencement of work, the equipment must meet with the approval of the Authorized Officer.
2. Tilling shall occur when soil/site conditions are conducive to effective tillage, as determined by the Authorized Officer.
3. Subsoiling shall occur to a minimum depth of 18 inches, except where hard bedrock exists above that depth, or where otherwise specified by the authorized officer. Subsoiling passes shall overlap each other (One shank of the subsoiler shall straddle between the two shank paths of the previous subsoiling pass).
4. Treated areas shall span the total width of compaction, as identified by the Authorized Officer. At least 80 percent of the compacted soil profile shall be shattered. No more than 50 percent of the treated compacted soil shall have clods greater than two inches in diameter.
5. Subsoiling shall not occur within a five foot radius of the boles of the residual trees where major roots can be cut, mangled or pulled, unless otherwise directed by the authorized officer.
6. The excavator bucket shall be functional and used to distribute slash and topsoil over the tilled areas.
7. Equipment shall not be allowed to operate on slopes in excess of 35 percent or to cross streams or drainages unless approved by the Authorized Officer.
8. Tilling shall be done on the contour or cross slope whenever possible.
9. Areas traveled by equipment after tilling shall be re-tilled.
10. The Authorized Officer will issue written instructions at least 10 days in advance of the earliest required performance. The Purchaser may be required to commence tilling on a 24-hour notice, 10 days after the initial notice is received.

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	32 & 33	WILLAMETTE	OR10-TS11-08



500 250 0 500 1,000 Feet

1 inch = 1,000 feet



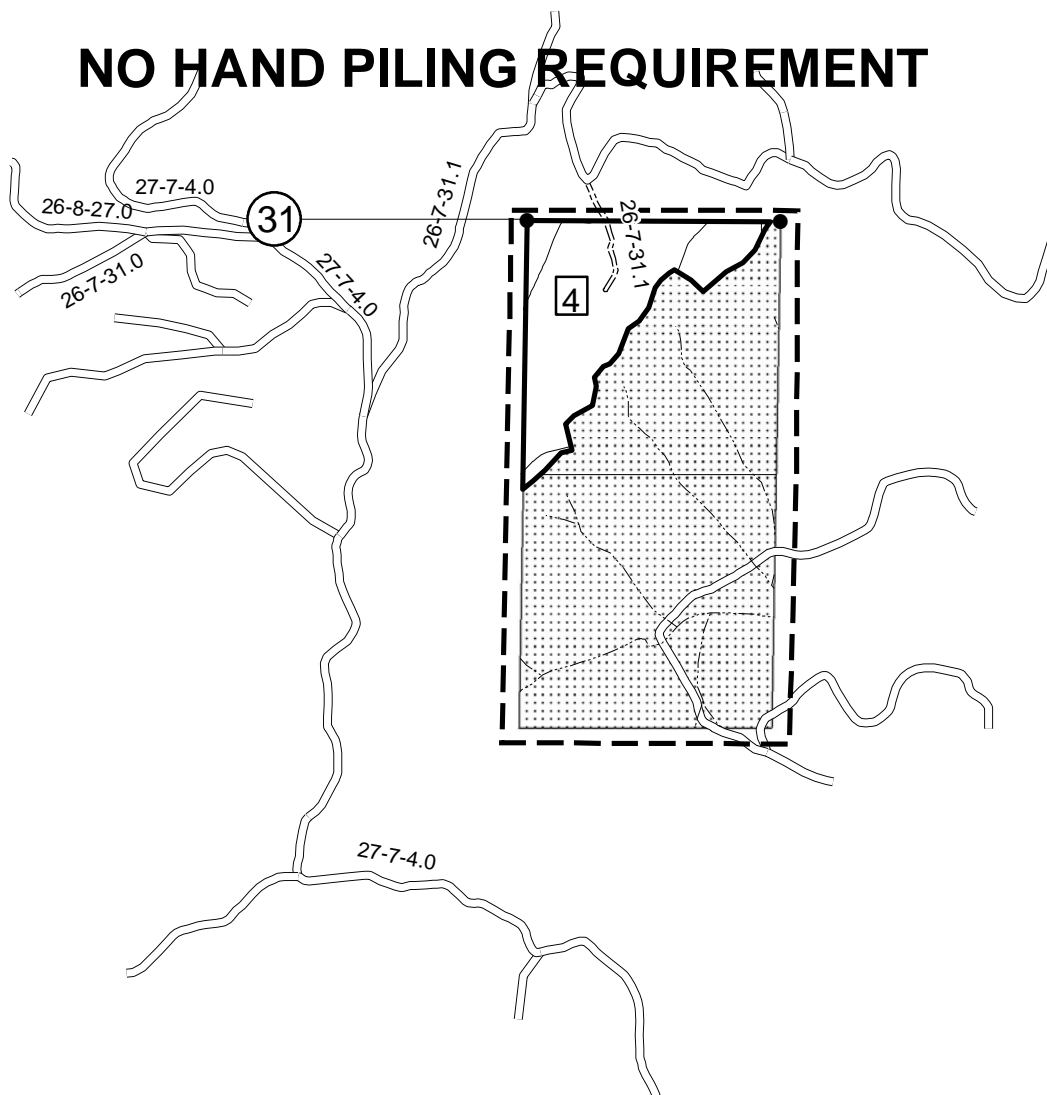
LEGEND

- Hand Piling Area
- Reserve Area
- Boundary of Cutting Area
- Boundary of Contract Area

- Spur To Be Constructed
- Existing Road
- Stream

District	Township	Range	Section	Meridian	Contract Number
ROSEBURG	26S	7W	31	WILLAMETTE	OR10-TS11-08

NO HAND PILING REQUIREMENT



500 250 0 500 1,000 Feet

1 inch = 1,000 feet



LEGEND



Reserve Area



Boundary of Cutting Area



Boundary of Contract Area



Spur To Be Constructed



Existing Road



Undrivable Road



Stream



Found Corner

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Summary of All Roads and Projects

T.S. Update 04/15/10

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012

Prepared by: T McNamara Ph: 3313 Print Date: 1/27/2012 9:33:57 AM

Construction: 33.60 sta (Surfaced 0.00 sta Natural 33.60 sta)

Improve: 0.00 sta Renov: 0.00 sta Decom: 0.00 sta Temp: 0.00 sta

200 Clearing and Grubbing: 0.0 acres	\$7,517.23
Clearing: 43.6 sta Grubbing: 0.6 acres	
Slash Treatment: 0.0 acres	
300 Excavation:	\$8,266.48
Haul: 0 sta-yds	
400 Drainage:	\$2,126.16
Culvert: 60 lf wt = 1,260 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	\$1,448.72
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$5,381.60
Mobilization: Const. \$3,800.00 Surf. \$0.00.....	\$3,800.00
Quarry Development:	\$0.00
Total: 2,366 mbf @ \$12.06/mbf =	\$28,540.19

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: 26-7-31.1 Road Name: 26-7-31.1
Road Construction: 0.12 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$556.70
Clearing:7.2 sta Grubbing:0.2 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,002.68
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	\$350.40
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$538.16
Mobilization: Const. \$375.99 Surf. \$0.00.....	\$375.99
Quarry Development:	\$0.00
	Total: \$2,823.93

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: 26-7-32.2 Road Name: 26-7-32.2
Road Construction: 0.09 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$839.63
Clearing:5.5 sta Grubbing:0.2 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$810.66
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	\$330.40
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$538.16
Mobilization: Const. \$386.89 Surf. \$0.00.....	\$386.89
Quarry Development:	\$0.00
	Total: \$2,905.74

Notes:

Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: 27-7-5.1 Road Name:
Road Construction: 0.08 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$413.79
Clearing:5.4 sta Grubbing:0.2 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$810.66
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	\$330.40
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$538.16
Mobilization: Const. \$321.48 Surf. \$0.00.....	\$321.48
Quarry Development:	\$0.00
	Total: \$2,414.49

Notes:

Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: Spur 1 Road Name:
Road Construction: 0.03 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$701.77
Clearing:2.8 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$618.64
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
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$403.62
Mobilization: Const. \$264.80 Surf. \$0.00.....	\$264.80
Quarry Development:	\$0.00
	Total: \$1,988.84

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: Spur 2 Road Name:
Road Construction: 0.05 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$721.07
Clearing:3.5 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$618.64
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
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$538.16
Mobilization: Const. \$288.43 Surf. \$0.00.....	\$288.43
Quarry Development:	\$0.00
	Total: \$2,166.30

Notes:

Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: Spur 3 Road Name:
Road Construction: 0.02 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$685.44
Clearing:2.3 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$618.64
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
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$403.62
Mobilization: Const. \$262.30 Surf. \$0.00.....	\$262.30
Quarry Development:	\$0.00
	Total: \$1,970.00

Notes:

Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: Spur 4 Road Name:
Road Construction: 0.03 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$687.82
Clearing:2.3 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$618.64
400 Drainage:	\$1,063.08
Culvert: 30 lf wt = 630 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
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$538.16
Mobilization: Const. \$446.61 Surf. \$0.00.....	\$446.61
Quarry Development:	\$0.00
	Total: \$3,354.31

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: Spur 5 Road Name:
Road Construction: 0.03 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$695.83
Clearing:2.6 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,312.00
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
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$672.70
Mobilization: Const. \$411.72 Surf. \$0.00.....	\$411.72
Quarry Development:	\$0.00
	Total: \$3,092.25

Notes:

Quantities shown are estimates only and not pay items.

Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: Spur 6 Road Name:
Road Construction: 0.03 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$689.90
Clearing:2.4 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$618.64
400 Drainage:	\$1,063.08
Culvert: 30 lf wt = 630 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
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$403.62
Mobilization: Const. \$426.27 Surf. \$0.00.....	\$426.27
Quarry Development:	\$0.00
	Total: \$3,201.50

Notes:

Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are COMPACTED in place cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: **Mud Slinger CT/DM Reoffer** Sale Date: March 27, 2012
Road Number: Spur 7 Road Name:
Road Construction: 0.16 mi 14 ft Subgrade ft ditch T.S. Update 04/15/10

200 Clearing and Grubbing: 0.0 acres	\$1,525.27
Clearing:9.7 sta Grubbing:0.0 acres	
Slash Treatment:0.0 acres	
300 Excavation:	\$1,237.28
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	\$437.52
1900 Cattleguards:	\$0.00
2100 RoadSide Brushing: 0.0 acres	\$0.00
2200 Surface Treatment: 0.0 tons	\$0.00
2300 Engineering: 0.00 sta.	\$0.00
2400 Minor Concrete:	\$0.00
2500 Gabions:	\$0.00
8000 Miscellaneous:	\$807.24
Mobilization: Const. \$615.51 Surf. \$0.00.....	\$615.51
Quarry Development:	\$0.00
	Total: \$4,622.82

Notes:

Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are COMPACTED in place cubic yards.



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

District : Roseburg	Contract # : TS 11-08
Sale Name : Mud Slinger CT & DM Reoffer	Job File # : R10455
Sale Date : 03/27/2012	Master Unit : Douglas
Appraisal Method : 16' MBF	Planning Unit : Swiftwater

Contents

Timber Sale Summary	2
Stumpage Summary	3
Prospectus	4
Exhibit B	5
Volume Summary	7
Stump to Truck Costs	9
Other Allowances Costs	10
Consolidated Comments	11

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

Roseburg
Mud Slinger CT & DM Reoffer
TS 11-08

Legal Description

Forest Type	Township	Range	Section	Subdivision
O&C	26S	7W	31	E1/2 SE1/4 Willamette Meridian
PD	26S	7W	32	SE1/4 SE1/4 Willamette Meridian
O&C	26S	7W	33	NW1/4, N1/2 SW1/4, SW1/4 SW1/4 Willamette Meridian

Cutting Volume (16' MBF)

Unit	DF	GF	WH						Total	Regen	Partial	ROW
1	1,480	75	2						1,557	0	82	0
2	256	5	5						266	0	15	0
3	235	7	1						243	0	12	0
4	244								244	0	18	0
RW	53	3							56	0	0	2
Totals	2,268	90	8						2,366	0	127	2

Logging Costs per 16' MBF

Stump to Truck	\$ 168.57
Transportation	\$ 36.61
Road Construction	\$ 12.06
Road Amortization	\$ 2.35
Road Maintenance	\$ 2.17
Other Allowances :	

Equipment Cleaning	\$ 0.56
Flag Person	\$ 0.30
Misc	\$ 1.75
Slash Disposal	\$ 4.79
Total Other Allowances :	\$ 7.40

Profit & Risk

Total Profit & Risk	10 %
Basic Profit & Risk	7 % + Additional Risk 3 %
Back Off	0 %

Tract Features

Avg Log	Douglas-fir : 41 bf	All : 41 bf
Recovery	Douglas-fir : 96 %	All : 95 %
Salvage	Douglas-fir : 0 %	All : 0 %
Avg Volume (16' MBF per Acre)		18
Avg Yarding Slope		48 %
Avg Yarding Distance (feet)		462
Avg Age		52
Volume Cable		61 %
Volume Ground		39 %
Volume Aerial		0 %
Road Construction Stations		33.60
Road Improvement Stations		0.00
Road Renovation Stations		0.00
Road Decommission Stations		33.60

Cruise

Cruised By	Wright, Payer, Keady
Date	02/22/2011
Type of Cruise	3-P & 100%
County, State	Douglas, OR

Net Volume

Green (16' MBF)	2,366
Salvage (16' MBF)	0
Douglas-fir Peeler	0
Export Volume	0
Scaling Allowance (\$0.75 per 16' MBF)	\$1,774.50

Total Logging Costs per 16' MBF

\$ 229.16

Utilization Centers

Center #1 : Winchester, Oregon	18 Miles
Center #2	0 Miles
Weighted distance to Utilization Centers	18

Length of Contract

Cutting and Removal Time	36 Months
Personal Property Removal Time	1 Months

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Roseburg
Mud Slinger CT & DM Reoffer
TS 11-08

Stumpage Summary

Stumpage Computation (16' MBF)

Species	Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Cost	(+) Marginal Log Value	(-) Back Off	Appraised Price	Appraised Value
DF	16,771	2,268	\$ 389.51	\$ 38.95	\$ 229.16			\$ 121.40	\$ 275,335.20
GF	783	90	\$ 324.18	\$ 32.42	\$ 229.16			\$ 62.60	\$ 5,634.00
WH	156	8	\$ 330.30	\$ 33.03	\$ 229.16			\$ 68.10	\$ 544.80
Totals	17,710	2,366							\$ 281,514.00

Log Code by Percent

Species	Code #1	Code #2	Code #3	Code #4	Code #5	Code #6
Douglas-fir				19.0	69.0	12.0
Grand Fir				26.0	60.0	14.0
Western Hemlock				4.0	64.0	32.0

Marginal Log Volume

Species	Grade #7	Grade #8
Douglas-fir		
Grand Fir		
Western Hemlock		

Appraised By : Wright, Darren	Date : 03/29/2011
Area Approval By : Keady, Joe	Date : 11/03/2011
District Approval By : Thompson, Kristen	Date : 02/21/2012

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

Roseburg
Mud Slinger CT & DM Reoffer
TS 11-08

Prospectus

Appraisal Method : (16' MBF)

Species	Trees	Net Volume 16' MBF	Net Volume 32' MBF	Net Volume CCF
Douglas-fir	16,771	2,268	1,842	4,204
Grand Fir	783	90	74	164
Western Hemlock	156	8	7	15
Total	17,710	2,366	1,923	4,383

All Species

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
2,480	17,710	140	12.1	2,472	59,893	41

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
59,893	379	60,272	3.4	2,366	2,480	95 %

Douglas-fir

Gross Volume	Number Trees	Avg bf Volume Per Tree	DBH	Gross Merch Volume	Merch Logs	Avg bf Gross Merch Log
2,374	16,771	141	12.2	2,369	57,259	41

Merch Logs	Cull Logs	Total Logs	Logs per Tree	Net Volume	Gross Volume	Recovery
57,259	279	57,538	3.4	2,268	2,374	96 %

Cutting Areas

Unit	Regen Acres	Partial Cut Acres	Right Of Way Acres	Total Acres
1		82		82
2		15		15
3		12		12
4		18		18
RW			2	2
Totals :		127	2	129

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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
Douglas-fir	2,268		
Grand Fir	90		
Western Hemlock	8		
Sale Totals	2,366		

Unit Details (16' MB)

Unit 1 82 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	1,480		
Grand Fir	75		
Western Hemlock	2		
Unit Totals	1,557		

Unit 2 15 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	256		
Grand Fir	5		
Western Hemlock	5		
Unit Totals	266		

Unit 3 12 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	235		
Grand Fir	7		
Western Hemlock	1		
Unit Totals	243		

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Unit 4 18 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	244		
Unit Totals	244		

Unit RW 2 Acres Value per Acre : \$0.00

Species	Net Volume	Bid Price	Species Value
Douglas-fir	53		
Grand Fir	3		
Unit Totals	56		

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

Roseburg
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Sale Volume Totals

129 Acres 0 Regen 127 Partial 2 R/W 5 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
Douglas-fir	16,771	57,259	279	2,268	2,369	2,374	1,842	1,913	1,918	4,204	4,389	4,400
Grand Fir	783	2,339	75	90	95	97	74	78	79	164	173	177
Western Hemlock	156	295	25	8	8	9	7	7	7	15	16	17
Totals	17,710	59,893	379	2,366	2,472	2,480	1,923	1,998	2,004	4,383	4,578	4,594

Unit Totals

Unit : 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
Douglas-fir	9,883	37,367	174	1,549	1,546	1,480
Grand Fir	639	1,916	64	81	79	75
Western Hemlock	43	68	6	2	2	2
Unit Totals	10,565	39,351	244	1,632	1,627	1,557

Unit : 2 15 Acres 0 Regen 15 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	2,581	6,456	30	267	267	256
Grand Fir	67	157	5	5	5	5
Western Hemlock	102	200	16	6	5	5
Unit Totals	2,750	6,813	51	278	277	266

Unit : 3 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
Douglas-fir	1,744	5,947	28	246	246	235
Grand Fir	46	174	6	7	7	7
Western Hemlock	11	27	3	1	1	1
Unit Totals	1,801	6,148	37	254	254	243

Unit : 4 18 Acres 0 Regen 18 Partial 0 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	2,098	6,170	29	256	255	244

**UNITED STATES
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Unit Totals	2,098	6,170	29	256	255	244
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Unit : RW 2 Acres 0 Regen 0 Partial 2 R/W

SpeciesName	# of Trees	Merch Logs	Cull Logs	16' MBF Gross	16' MBF GM	16' MBF Net
Douglas-fir	465	1,319	18	56	55	53
Grand Fir	31	92		4	4	3
Unit Totals	496	1,411	18	60	59	56

**UNITED STATES
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Stump to Truck Costs

Total (16' MBF)

Total Stump to Truck Costs	Net Volume	Cost / Net Volume
\$ 398,826.27	2,366	\$ 168.57

Detail

Yarding & Loading

Yarding System	Unit Of Measure	Units	Cost / Unit	Total Cost
Short Twr<40	MBF	1,508	\$ 201.58	\$ 303,982.64
Wheel Skidder	MBF	905	\$ 86.29	\$ 78,092.45
Track Skidder	MBF	59	\$ 90.02	\$ 5,311.18
Subtotal				\$ 387,386.27

Other Costs

Explanation	Unit Of Measure	Units	Cost / Unit	Total Cost
Lift Trees	Tree	37	\$ 150.00	\$ 5,550.00
Intermediate Supports	Tree	13	\$ 250.00	\$ 3,250.00
Subtotal				\$ 8,800.00

Additional Move-Ins

Equipment	# Move-In	Cost / Move In	Total Cost
Yarder / Loader	1	\$ 440.00	\$ 440.00
Yarder / Loader	1	\$ 440.00	\$ 440.00
Dozer	1	\$ 440.00	\$ 440.00
Yarder / Loader	3	\$ 440.00	\$ 1,320.00
Subtotal			\$ 2,640.00

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Other Allowances Costs

Total (16' MBF)

Total Other Allowances Costs	Net Volume	Cost / Net Volume *	Total Buy Out Cost
\$17,505.00	2,366	\$7.40	\$0.00

Equipment Cleaning

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Yarder	\$ 330.00	\$ 0.14	N	\$ 0.00
Shovel	\$ 330.00	\$ 0.14	N	\$ 0.00
Track Skidder	\$ 330.00	\$ 0.14	N	\$ 0.00
Wheel Skidder	\$ 165.00	\$ 0.07	N	\$ 0.00
Shovel	\$ 165.00	\$ 0.07	N	\$ 0.00
Subtotal	\$ 1,320.00	\$ 0.56		\$ 0.00

Flag Person

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Cost by Day	\$ 360.00	\$ 0.15	N	\$ 0.00
Cost by Day	\$ 360.00	\$ 0.15	N	\$ 0.00
Subtotal	\$ 720.00	\$ 0.30		\$ 0.00

Misc

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Subsoil Skid Trails	\$ 2,070.00	\$ 0.87		\$ 0.00
Move-in for Subsoiling	\$ 2,070.00	\$ 0.87		\$ 0.00
Subtotal	\$ 4,140.00	\$ 1.75		\$ 0.00

Slash Disposal

Detail (16' MBF)

Cost Item	Total Cost	Cost / Net Vol *	Buy Out	Buy Out Cost
Landings-All (clean-up, covering, piling, burning)	\$ 4,125.00	\$ 1.74	N	\$ 0.00
Hand Piling (covering, piling, burning)	\$ 7,200.00	\$ 3.04	N	\$ 0.00
Subtotal	\$ 11,325.00	\$ 4.79		\$ 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**

Roseburg
Mud Slinger CT & DM Reoffer
TS 11-08

General

Yarding & Loading

1. Tower use med. distance, \$4.00/gal, 3 cutters, 3 loads per day.
2. Ground base use short distance, \$4.00/gal, 2 cutters, 6 loads per day.
3. Additional Move-ins for moving equipment between units due to pavement and long distance from unit 3 to unit 4.

Road Costs

- 1) Road Fees: LRT \$1,051.52; Seneca \$2,483.71; Weyco \$2,024.70
 - 2) Maintenance: BLM \$48.98; Purchaser Credit \$1,961.37; LRT \$1,181.15;
Weyco \$753.42
 - 3) Rockwear: LRT \$762.52; Weyco \$418.77
- (see Engineering Appraisal for details).

Transportation

1. G.Merch.= 2472MBF/4.5MBF/Load= 550 Loads
 2. 2.1hrs/load X 550 Loads= 1155 Hours
 3. 1155 Hours X \$75/hour= \$86,625
- (see Transportation appendix for details).

Other Allowances

1. Yarder, shovel, track skidder for cable yarding side two cleanings at 3 hours each. 2. Loader and wheeled skidder for ground base side one cleaning at 3 hours each.
3. Landing piles to be burned by BLM
4. Hand piles to be burned by BLM (13ac. minus 1 ac. for landings)
5. Two flaggers for two days each for unit #3
6. Subsoiling for 1 mile skid trails for units 3 & 5 includes two separate move-ins with lowboy remaining on site for entire day.

Prospectus

1. 3-P Douglas fir only
2. BLM 100 all other species and RW

United States Department of the Interior

**BUREAU OF LAND MANAGEMENT
Roseburg District Office**

ROAD CONSTRUCTION SPECIFICATIONS

**MUD SLINGER COMMERCIAL THINNING
AND DENSITY MANAGEMENT
REOFFER**

EXHIBIT C

(Revised July 1996)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ROAD SPECIFICATIONS

T. 26 S., R. 7 W. Section 31, 32, 33

Willamette Meridian

Douglas County, Oregon

INDEX

100	GENERAL
200	CLEARING AND GRUBBING
300	EXCAVATION AND EMBANKMENT
400	PIPE CULVERTS
600	WATERING
1700	EROSION CONTROL
1800	SOIL STABILIZATION
2600	DECOMMISSIONING

GENERAL - 100

101 - Prewrite Conference:

A prework conference will be held prior to the start of new construction, and improvements, and reconstruction, and quarry development, and surfacing, and mulching operations. The Purchaser shall request the conference at least 48 hours prior to the time it is to be held. The conference will be attended by the Purchaser and/or his representative, subcontractor and/or his or their representative and the Authorized Officer and/or his representative.

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

102 - Definitions:

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

ACI - American Concrete Institute

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.

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

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.

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

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 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.

Geotextile Definitions:

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

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

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

Grab Tensile Strength - A modified tensile strength of a geotextile material. The strength of a specific width of geotextile material together with the additional strength contributed by adjacent areas. Typically, grab strength is determined on a 12-inch-wide strip of geotextile

material, with the tensile load applied at the midpoint of the geotextile material width through 1-inch-wide jaw faces.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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:
- 103a - Padded Drum (Tamping) Rollers. The unit shall consist of a drum with pads, be either self propelled or towed by a tractor, and capable of operating at a speed of 6 mph. The drum shall be not less than 48 inches in diameter over the pads, and not less than 60 inches in width. The pads shall have a minimum height of 3 inches, and a face area of not less than 14 square inches. The weight at drum shall be no less than 8,000 lb.
- 103b - (Sheepfoot)(Tamping) rollers. A tamping roller unit shall consist of two watertight metal drums mounted in frames in such manner as to be fully oscillating, together with a tractor having sufficient weight and power under actual working conditions to pull the roller drums at a maximum speed of 3 miles per hour. The drums shall be not less than 60 inches in diameter and not less than 54 inches in length, measured at the drum's surface, and shall be studded with tamping feet projecting not less than 7 inches from the face of the drums.

The distance between circumferential rows of tamper feet shall be such that the diagonal distance from any foot to the nearest foot in each adjacent row shall be not more than 12 inches. The cross sectional area of the face of each tamper foot, measured perpendicular to the axis of the stud, shall be not less than 5-1/2 square inches nor more than 8 square inches.

The weight of the tamping-roller unit shall be such as to exert a minimum pressure of 250 pounds per square inch on the ground area in contact with the tamping feet, and the roller shall be so designed that the weight may be increased to exert a pressure up to 500 pounds per square inch on the ground area in contact with the tamping feet. The ground pressure shall be determined by dividing the total weight of the roller unit, not including the weight of the tractor, by the total cross sectional area of the tamping feet in one row of tamping feet parallel to the axis of the roller.

- 103c - Smooth-wheel power rollers. Smooth-wheel power rollers shall either be of the 3-wheel type, weighing not less than 10 tons, or of the tandem type, 2-wheel or 3-wheel, weighing not less than 8 tons. Smooth-wheel roller shall provide compression of 325 pounds per linear inch of width of rear wheels or drum.
- 103d - Pneumatic-tired rollers. Pneumatic-tired rollers shall be of the double-axle type equipped with pneumatic tires each of equal size and type. The spacing between the sidewalls of adjacent tires shall not exceed 5 inches and the rear tires shall be staggered in relation to the front tires. The rolling width of the unit shall be not less than 60 inches, exclusive of the power unit. The roller shall be so constructed that the contact pressure is uniformly distributed on all of the tires, and the tires shall be inflated to maintain the air pressure in the several tires within a total tolerance of 5 pounds per square inch. The roller shall be so constructed that the total weight shall be between 1,000 and 2,000 pounds per tire. The actual operating weight of the rollers shall be as ordered by the Authorized Officer.
- Each pneumatic-tired roller shall be drawn by equipment having sufficient power and weight under normal working condition to pull the roller at a minimum speed of 5 miles per hour, or it may be self-propelled to obtain a minimum speed of 5 miles per hour.
- 103e - Grid roller. A grid roller shall consist of two or more cylindrical drums independently mounted on a common shaft in a rigid frame. Each drum shall have a minimum outside diameter of 5 feet and a minimum width of 2 feet 6 inches. The overall width of the roller exclusive of frame shall be not less than 5 feet 6 inches of which not more than 6 inches shall be used for center spacing between two roller drums. The face of the drums shall have the appearance of woven open-mesh made by interlacing bars of not less than 1-1/4 inches nor more than 1-3/4 inches diameter space spaced on 4-1/2 inches to 5-1/2 inches center. Net opening between the bars shall be not less than 3 inches nor more than 4 inches. The roller shall be so constructed that counterweights can be used to adjust the gross weight of the roller to not less than 30,000 pounds. The grid roller shall be drawn by a power unit capable of propelling the fully loaded roller through 6 inches of loose embankment material at a speed of at least 4 miles per hour.
- 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.

CLEARING AND GRUBBING - 200

- 201 - This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions within the clearing limits in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans
- 202 - Where clearing limits have not been staked, established by these specifications or shown on the plans, the limits shall extend 10 feet back of the top of the cut slope and 5 feet out from the toe of the fill slope.
- 202a - Where clearing limits for structures have not been staked or shown on the plans, the limits shall extend 10 feet out from the outside edge of the structure.
- 203 - Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsections 202, and 202a.
- 203a - Brush less than 2 feet in height need not be cut within the limits established for clearing.
- 203b - Standing trees and snags to be cleared shall be felled within the limits established for clearing, unless otherwise authorized.
- 204 - Grubbing shall consist of the removal and disposal of stumps, roots, and other wood material embedded in the ground, and protruding obstacles remaining as a result of the clearing operation in accordance with Subsections 204a, 204b, 204c, 204d and 204e, between the top of the cut slope and the toe of the fill slope. Undisturbed stumps, roots and other solid objects which will be a minimum of 3 feet below subgrades or slope surfaces of embankments are excepted.
- 204a - Stumps, including those overhanging cut banks, shall be removed within the required excavation limits.
- 204b - Stumps and other protruding objects shall be completely removed within the limits of required embankments having heights of less than 4 feet. When authorized, stumps and other nonperishable objects may be left provided they do not extend more than 6 inches above the existing ground line.
- 204c - On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.

- 204d - On areas to be occupied by embankments having heights greater than 4 feet, no stump or portion thereof shall remain within 3 feet of embankment subgrades or slope surfaces after grubbing is completed.
- 204e - Roots and embedded wood material shall be removed to a depth not less than 1 foot below embankment subgrades or slope surfaces.
- 205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections. Such debris will, however, be permitted to remain under waste material from full-bench construction on steep side slopes.
- 210 - Disposal of clearing and grubbing debris, stumps and cull logs shall be by scattering over government owned lands outside of established clearing limits in a manner acceptable to the Authorized Officer. The areas for such scattering shall have the prior approval of the Authorized Officer.
- 210a - Disposal of clearing and grubbing debris, stumps and cull logs on nongovernment property by scattering this material outside of clearing limits will be permitted provided the Purchaser obtains a written permit from the property owner on whose property the disposal is to be made. The Purchaser shall furnish the Authorized Officer a certified copy of the permit, and a written release from the property owner absolving the Government from responsibilities in connection with the disposal of debris on said property.
- 212 - No grading will be permitted prior to completion and approval by the Authorized Officer of the required clearing and grubbing work, except that stump grubbing may proceed with the excavation of the road prism.
- 213 - No clearing or grubbing debris shall be left lodged against standing trees.

EXCAVATION AND EMBANKMENT - 300

- 301 - This work shall consist of excavating, overhaul, placement of embankments, backfilling, borrowing, leveling, ditching, grading, insloping, outsloping, crowning and scarification of the subgrade, compaction, disposal of excess and unsuitable materials, and other earth-moving work in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 302 - Excavation shall also consist of the excavation of road and landing cut sections, borrow sites, backfilling, leveling, ditching, grading, compaction and other earth moving work necessary for the construction of the roadway in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 303 - Suitable material removed from the excavation shall be used in the formation of embankment subgrade, shoulders, slopes, bedding, backfill for structures, and for other purposes as shown on the plans.

- 304 - Borrow shall consist of suitable material required for the construction of embankments or for other portions of the work; such material shall be obtained from sources selected by the Purchaser at his option and approved by the Authorized Officer.
- 305 - Embankment construction shall consist of the placement of excavated and borrowed materials, backfilling, leveling, grading, compaction, and other earth-moving work necessary for the construction of the roadway and landings in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans, and as marked on the ground with stakes or metal tags.
- 305a - Material used in the construction of embankment sections shall be free of organic material, frozen material and other deleterious materials and shall be placed and compacted as specified.
- 305b - Embankment materials shall be placed in successive parallel layers on areas cleared of organic material and deleterious materials, except as provided under Subsection 204. Roadway embankments of earth material shall be placed in loose, horizontal layers not exceeding 12 inches in depth.
- 305c - Embankments formed of material containing less than 25 percent rock not larger than 8 inches in the greatest dimension shall be placed in 12-inch layers. Material containing more than 25 percent rock not larger than 12 inches in the greatest dimension shall be placed in successive layers not exceeding 2 feet in thickness. Individual rocks and boulders greater than 12 inches in diameter may be used to construct 2 foot embankment layers, provided they are carefully distributed, with interstices filled with fine material to form a dense and compact mass.
- 305d - Where embankments are constructed predominantly of blasted rock material, depth of layers shall not exceed 4 feet. Rock fragments having dimensions greater than 4 feet will be permitted provided that they have no dimensions greater than 6 feet and that clearance between adjacent fragments is adequate for the placing and compacting of material in horizontal layers as specified, and that no part of the larger fragments comes within 4 feet of subgrade.
- 306 - Layers of embankment, selected borrow, final subgrade and selected roadway excavation material as specified under Subsections 305a, and 305b shall be moistened or dried to a uniform optimum moisture content suitable for maximum density and compacted to full width with compacting equipment conforming to requirements of Subsections 103a, 103c, 103f, 103g, and 103h.
- 306a - Optimum moisture content shall be determined by hand clump test i.e., where soil sample forms a firm ball by hand that doesn't not crumble or free moisture is not visible on the surface and material does not squeeze between fingers.
- 306b - Minimum compaction for each layer of embankment, selected borrow, final subgrade and selected roadway excavation material placed shall be a minimum of 6 complete passes or until visual displacement ceases.

- 312 - When material, except solid rock, encountered in cuts at subgrade, is suitable for use in forming the finished roadbed, the top 6-inch layer of the subgrade shall be thoroughly scarified for the full width of the roadbed. Roots, sod, and other deleterious material or stones that will not pass a 6-inch square opening shall be removed. The scarified material shall be processed to the optimum moisture content suitable for maximum density and compacted in accordance with Subsection 306.
- 313 - In cut areas where solid rock is encountered at, or near subgrade, the rock shall be excavated to a minimum depth of 6 inches below subgrade elevation and the excavated area backfilled with suitable material. The backfill material shall be processed to the optimum moisture content suitable for maximum density and compacted to full width in accordance with the requirements of Subsection 306a and b.
- 314 - When heavy clays, muck, clay shale, or other deleterious material for forming the roadbed is encountered in cuts at subgrade, it shall be excavated to a minimum depth of 2 feet below the subgrade elevation and the excavated area backfilled with a selected borrow material approved by the Authorized Officer. The backfill material shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density in accordance with the requirements of Subsection 306a and b. Unsuitable material shall be disposed of as directed by the Authorized Officer.
- 321 - Excess excavated, unsuitable, or slide materials shall not be disposed of on areas where the material will encroach on a stream course or other body of water.
- 323 - In the construction of channel changes and stream crossing embankment sections, natural stream flow shall be maintained unless otherwise provided.
- 324 - Excavated material shall not be allowed to cover boles of standing trees to a depth in excess of 2 feet on the uphill side.
- 328 - The Purchaser shall adopt methods and procedures in using explosives, which will prevent damage to adjacent landscape features, and which will minimize scattering rocks and other debris outside the road prism.

PIPE CULVERTS - 400

- 401 - This work shall consist of furnishing and installing pipe culverts and other erosion control devices 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 installation of the appurtenance structures. 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 same gradient as the adjacent road grade, except grades shall not exceed 10% nor be less than 2%, and shall be skewed down grade 30

degrees, as measured from the perpendicular to the centerline, unless otherwise specified on the plans.

- 405b - Corrugated-aluminum-alloy pipe culverts and pipe-arch culverts shall conform to the requirements of AASHTO M 196.
- 405e - Corrugated Polyethylene Pipe for culverts 12-inch through 36-inch diameter shall meet the requirements of AASHTO M 294-03, Type S.
- 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 36 and AASHTO M 218 or AASHTO M 274.
- 408 - Pipe culverts and pipe-arch 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 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 compactable soil material.
- 416 - Side-fill material for pipe culverts shall be placed within 1 pipe diameter, or a minimum of 2 feet, of the sides of the pipe barrel, and to subgrade over the pipe with well graded crushed rock material free of excess moisture, muck, frozen material, roots, sod, or other deleterious or caustic material and devoid of rocks or stones of sizes which may impinge upon and damage the pipe or otherwise interfere with proper compaction.
- 417 - Side-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 12 inches loose in depth and 1 pipe diameter/span in width, on each side of and adjacent to, the full length of pipe barrel. Each layer shall be moistened or dried to a uniform optimum moisture content specified under Subsection 306a suitable for maximum compaction and immediately compacted by approved hand or pneumatic tampers as specified under Subsection 306b.
- 418 - Side fills beyond the compaction limits specified under Subsection 417 shall be compacted as specified under Section 300.

- 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.

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.
- 604 - Use of water sources are subject to applicable State water regulations.
- 605 - The Purchaser shall secure the necessary water permits and pay all required water fees for use of the water source specified under Subsection 604 for use of water source selected by the Purchaser and approved by the Authorized Officer.

EROSION CONTROL - 1700

- 1701 - This work shall consist of measures to control soil erosion or water pollution during the construction operation through the use of berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains and other control erosion devices or methods in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans.
- 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. This work is not required for road acceptance under Section 18 of this contract.

1802 - Soil stabilization work consisting of seeding and mulching shall be performed on existing roads in accordance with these specifications, and as shown on the plans.

1803 - Soil stabilization work as specified under Subsections 1801, and shall be performed during the following seasonal periods:

From: September 1 to: October 15

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

1803a- The Purchaser shall begin soil stabilization work within 10 days of the starting work date when notified by the Authorized Officer.

1804 - Seed mixture for this project will be provided by the Government.

1806a- Additional soil stabilization work consisting of seeding and mulching may be required at the option of the Authorized Officer. Providing the additional stabilization is not due to Purchaser negligence as specified in Sec. 12 of the contract, a reduction in the total purchased price shall be made to offset the cost of furnishing and applying such additional stabilization material. Cost shall be based upon the unit price set forth in the current BLM Timber Appraisal Production Cost Schedule.

1809 - Mulch materials conforming to the requirements of Subsection 1809a shall be furnished by the Purchaser in the amounts specified under Subsection 1812.

1809a- Straw mulch shall be from oats, wheat, rye or other approved grain crops which are free from noxious weeds, mold or other objectionable materials as attested to by written certification submitted to the authorized officer. Straw mulch shall be in an air-dry condition and suitable for placing with power spray equipment.

1812 - The Purchaser shall furnish and apply to acres designated for treatment as shown on the plans and as specified under Subsections 1802 and 1806a, a mixture of grass seed and mulch material at the following rate of application:

Grass seed	25 lbs./acre
Mulch	3000 lbs./acre

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

1815- The Purchaser may reduce the application rate on partially covered sloped and no application on areas already well stocked with grass or on rock surfaces.

1816b- Dry Method - Blowers, mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders or other approved mechanical seeding equipment may be used when seed and fertilizer are to be applied in dry form.

- 1819 - The maximum distance to be seeded, and fertilized and mulched from the road centerline shall be 100 feet for the cut slopes and 150 feet for the fill slopes.
- 1820 - The Purchaser shall notify the Authorized Officer at least 3 days in advance of date he intends to commence the specified soil stabilization work.
- 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.

DECOMMISSIONING - 2600

- 2601 - This work shall consist of installing water bars, scatter slash over road surface and blocking with trench barrier on roads designated to be decommissioned.
- 2602 - Decommissioning shall also include sub-soiling in accordance with these specifications and as shown on the plans.
- 2603 - Decommissioning work shall be completed at the end of timber hauling activities.
- 2604 - Water bars shall be constructed and installed at locations as shown on the drawings.
- 2605 - Slash shall be scattered over the decommissioned road surface and all areas disturbed by the decommissioning process. Where there is not slash available the disturbed area shall be seeded and mulched according to these specifications.
- 2606 - Trench barriers shall be constructed according to the drawings and specifications.
- 2607 - Sub-soiling shall be performed in accordance to Exhibit "F".

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ROSEBURG DISTRICT
TIMBER SALE EXHIBIT C

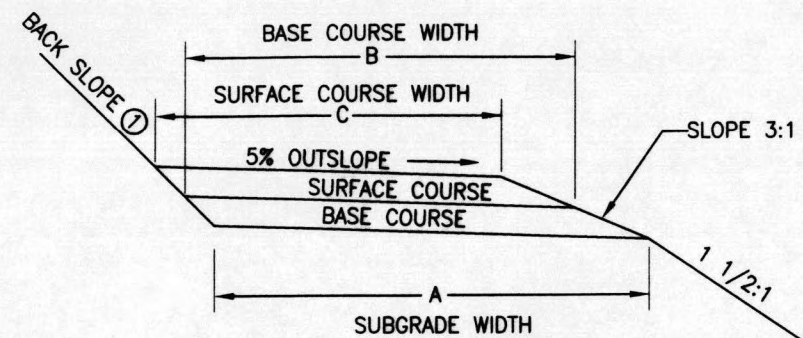
CONTRACT NAME: MUD SLINGER CT & DM REOFFER
CONTRACT NO: OR10-TS11-08

ROAD NUMBER	STA/MP	TO	STA/MP	CONST.	RENOV.	DECOM.	SUB-SOILING	IMPROVE.	BASE COURSE		SURFACE COURSE		ROAD DIMENSIONS			TYP. ROAD SECTION	SHEET NO.
									DEPTH	TYPE	DEPTH	TYPE	A	B	C		
26-7-31.1	0+00	-	6+20	X		X						Native	14'			1 & 2	4
26-7-32.2	0+00	-	0+82.3	X		X						Native	14'			1	5
26-7-32.2	0+82.3	-	4+50	X		X	X					Native	14'			1	5
27-7-5.1	0+00	-	2+77.7	X		X						Native	14'			1	6
27-7-5.1	2+77.7	-	4+37.2	X		X	X					Native	14'			1	6
SPUR 1	0+00	-	1+80	X		X	X					Native	14'			1	7
SPUR 2	0+00	-	2+45	X		X	X					Native	14'			1	7
SPUR 3	0+00	-	1+25	X		X	X					Native	14'			1	7
SPUR 4	0+00	-	1+33	X		X	X					Native	14'			1	8
SPUR 5	0+00	-	1+60	X		X	X					Native	14'			1	8
SPUR 6	0+00	-	1+40	X		X	X					Native	14'			1	8
SPUR 7	0+00	-	8+70	X		X	X					Native	14'			1 & 2	9

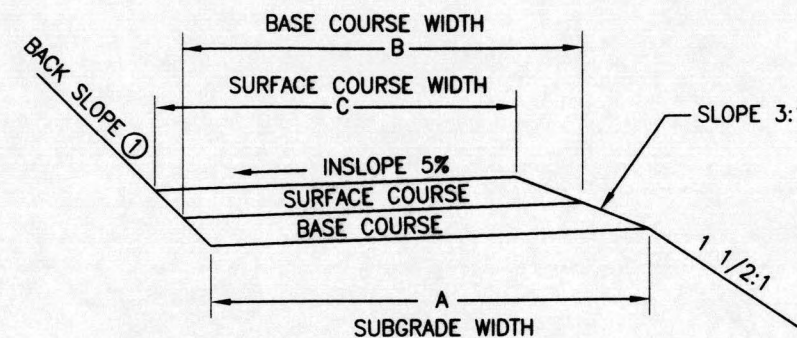
INDEX OF SHEETS	
SHEET	DESCRIPTION
1	ROAD SUMMARY
2	TYPICAL SECTIONS
3	VICINITY MAP
4	26-7-31.1 CONSTRUCTION
5	26-7-32.2 CONSTRUCTION
6	27-7-5.1 CONSTRUCTION
7	SPURS 1,2 & 3 CONSTRUCTION
8	SPURS 4,5 & 6 CONSTRUCTION
9	SPUR 7 CONSTRUCTION
10	CULVERT SUMMARY
11	CULVERT INSTALLATION
12	WATER BAR DETAIL
13	TRENCH BARRIER

REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT ROAD SUMMARY ROSEBURG DISTRICT OREGON			
ENGINEERING APPROVAL		<i>[Signature]</i>	
SUBMITTED		<i>[Signature]</i>	
RECOMMENDED		<i>[Signature]</i>	
APPROVED		<i>[Signature]</i>	
DRAWN: TOM MCNAMARA		SCALE: AS SHOWN	
DATE: 01/12/2011		SHEET 1 OF 13	
DRAWING NO. OR10-TS11-08		BLM #	

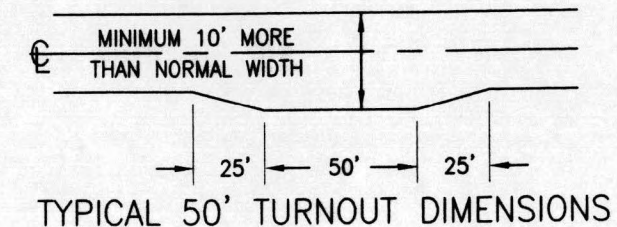




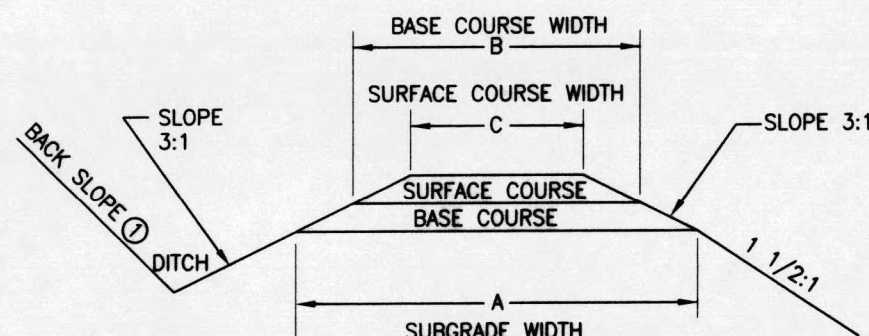
SECTION OUT SLOPE ROAD ①



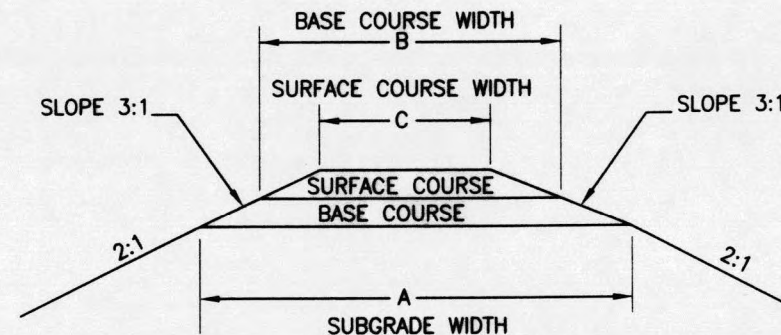
SECTION INSLOPE ROAD ②



TYPICAL 50' TURNOUT DIMENSIONS



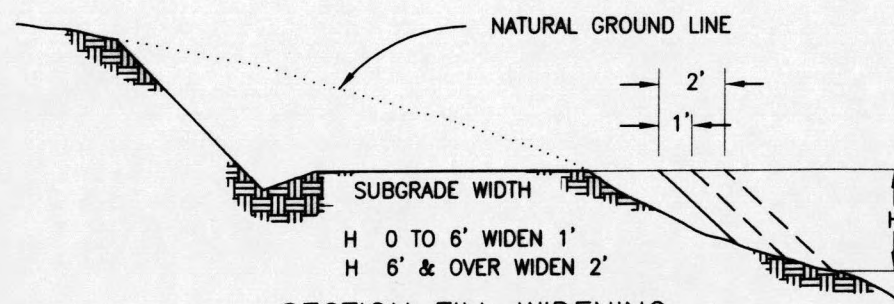
SECTION ROAD ③



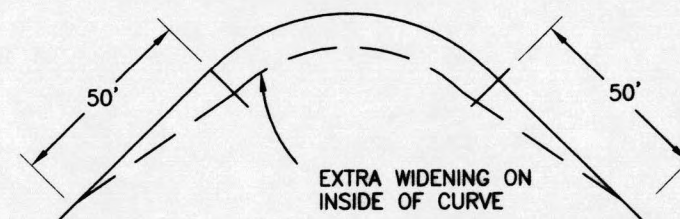
SECTION ROAD ④

NOTES:

- ① Backslope to match existing backslope unless otherwise specified.
2. 1 foot depth on all ditches; depth measured from top of road surface to lowest point of ditch.



SECTION FILL WIDENING



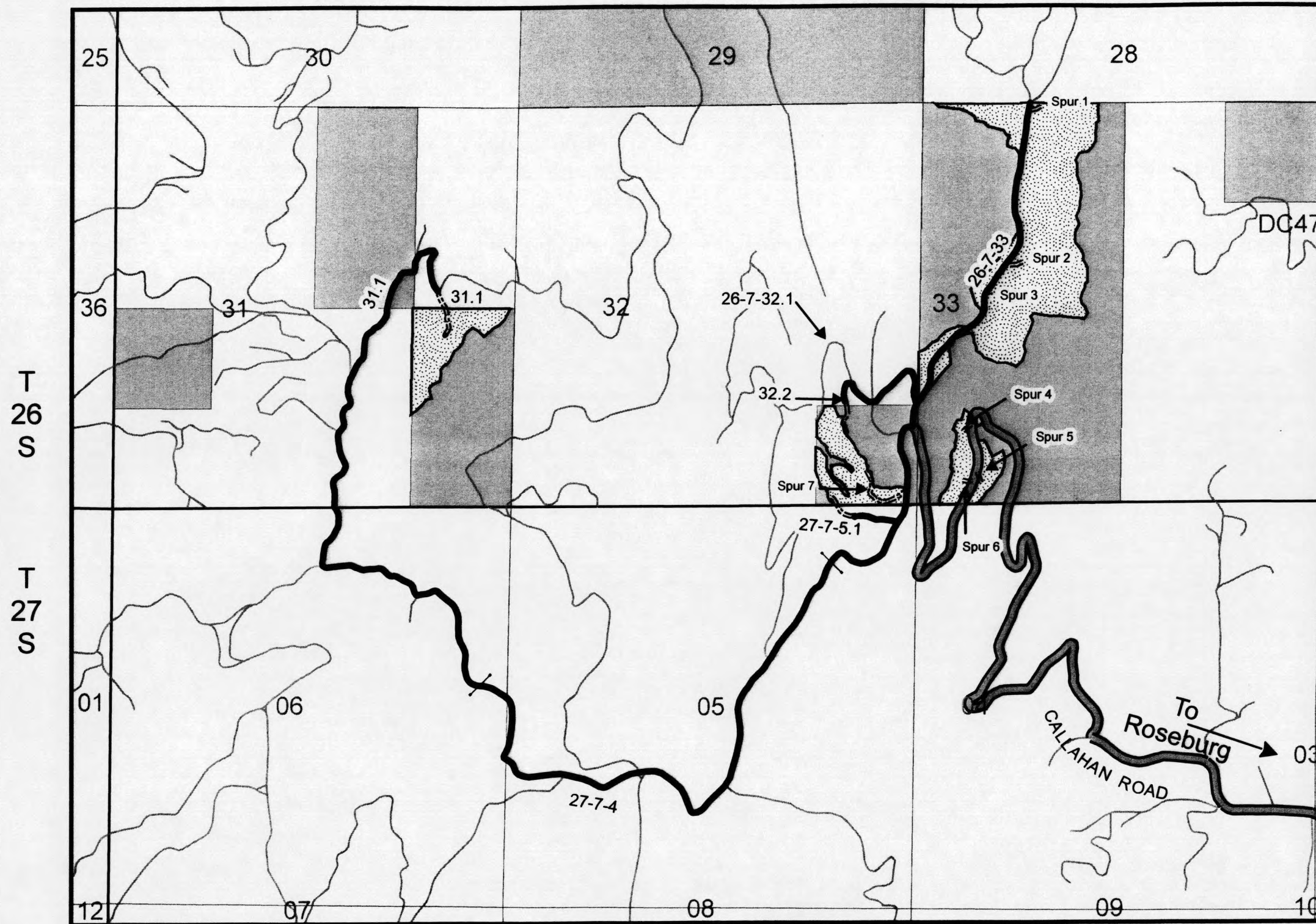
DEGREE OF CURVE	8-21	22-35	36-51	52-64	65-79	80-90
EXTRA WIDTH IN FEET	1	2	3	4	5	6

CURVE WIDENING TABLE FOR NON-DESIGN ROADS OR AS SHOWN ON PLANS. MAX 75' CURVE OR AS SHOWN ON PLANS.

REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT TYPICAL SECTIONS ROSEBURG DISTRICT OREGON			
DESIGNED	<i>Tom McCarver</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>Rodney Lipe</i>		
DRAWN: G. STACEY		SCALE: AS SHOWN	
DATE: 12/19/2006		SHEET 2 OF 13	
DRAWING NO. OR10-TS11-08		BLM #	



R 7 W



Legend

- GATE
- HAUL ROUTE
- ==== CONSTRUCTION
- COUNTY ROAD
- HARVEST AREA

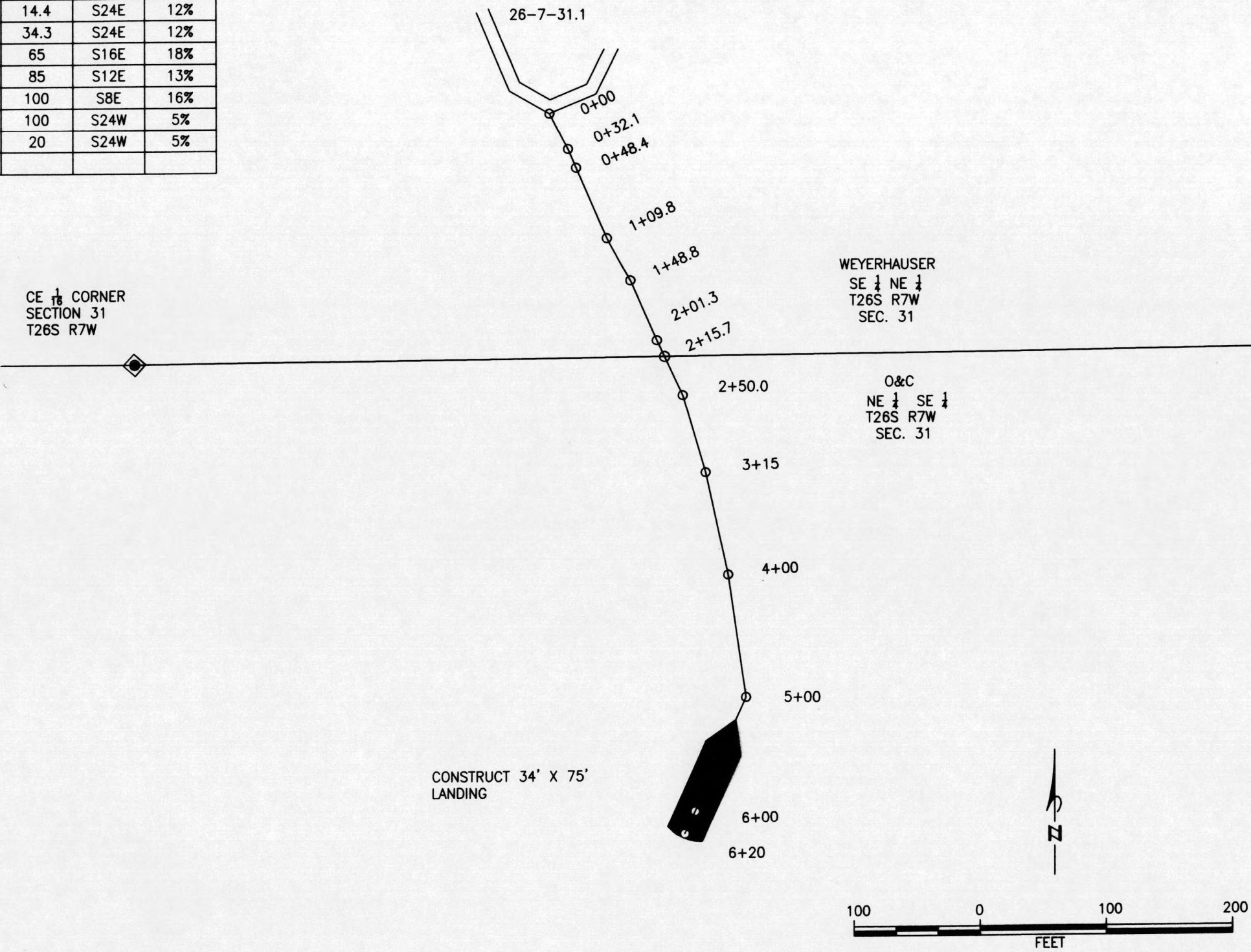
REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE			
MUDSLINGER COMMERCIAL THINNING VICINITY MAP			
ROSEBURG DISTRICT		OREGON	
DESIGNED	<i>Jim M. [Signature]</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>Rachel [Signature]</i>		
DRAWN: MGH	SCALE: AS SHOWN		
DATE: 2/5/2011	SHEET 3 OF 13		
DRAWING NO. OR10-TS11-08	BLM #		

United States Department of the Interior
Bureau of Land Management
Roseburg District
777 NW Garden Valley Blvd
Roseburg, Oregon 97470

Universal Transverse Mercator Projection
Zone 10 North NAD 1983



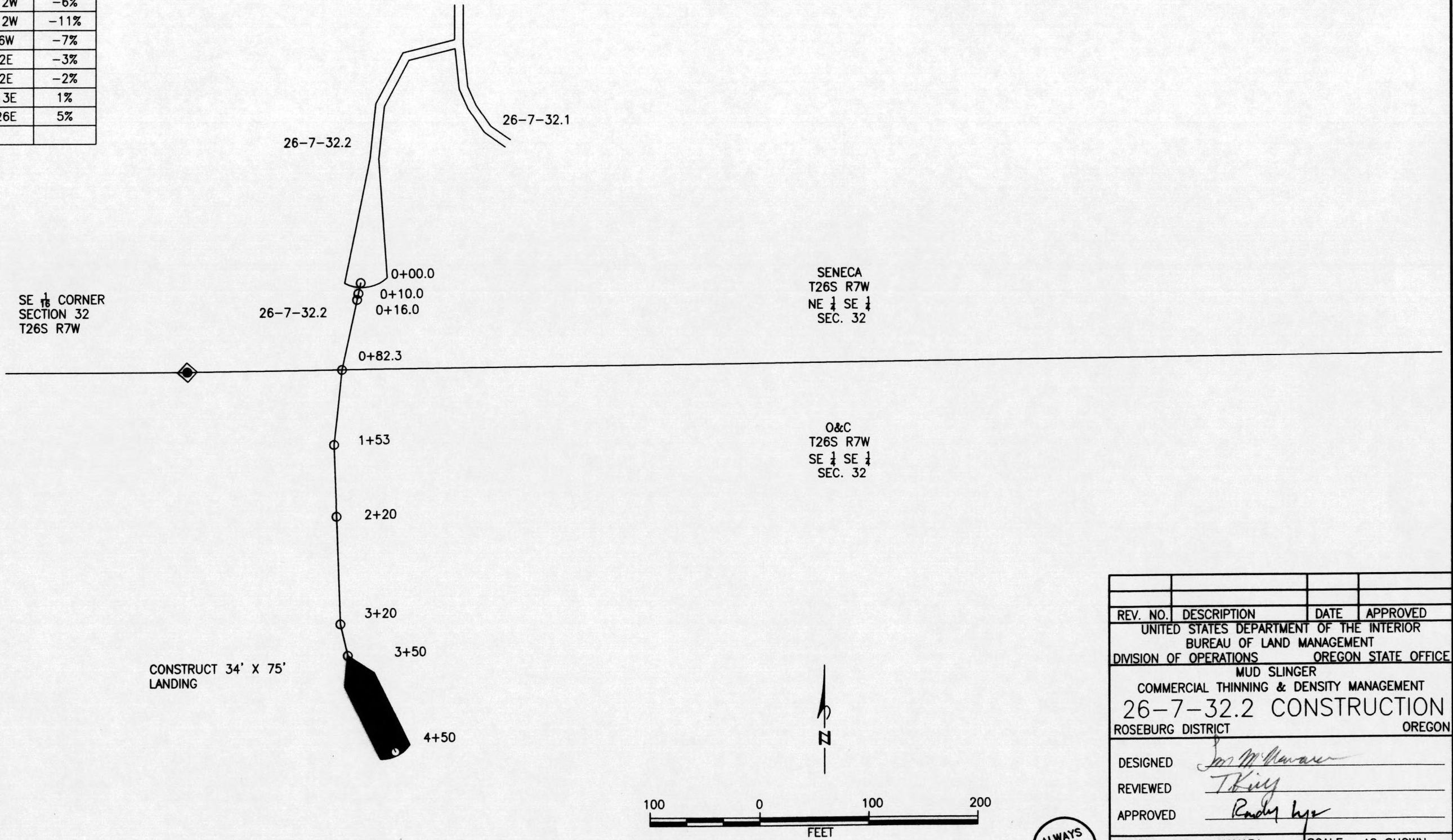
ROAD 26-7-31.1			
STA	DISTANCE	BEARING	% GRADE
0+00	32.1	S22E	11%
0+32.1	16.3	S22E	11%
0+48.4	61.4	S22E	14%
1+09.8	39.0	S22E	13%
1+48.8	52.5	S22E	13%
2+01.3	14.4	S24E	12%
2+15.7	34.3	S24E	12%
2+50	65	S16E	18%
3+15	85	S12E	13%
4+00	100	S8E	16%
5+00	100	S24W	5%
6+00	20	S24W	5%
6+20			



REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT 26-7-31.1 CONSTRUCTION ROSEBURG DISTRICT OREGON			
DESIGNED	<i>Tom McNamara</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>Randy Lipe</i>		
DRAWN: TOM McNAMARA	SCALE: AS SHOWN		
DATE: 01/14/2011	SHEET 4 OF 13		
DRAWING NO. OR10-TS11-08	BLM #		

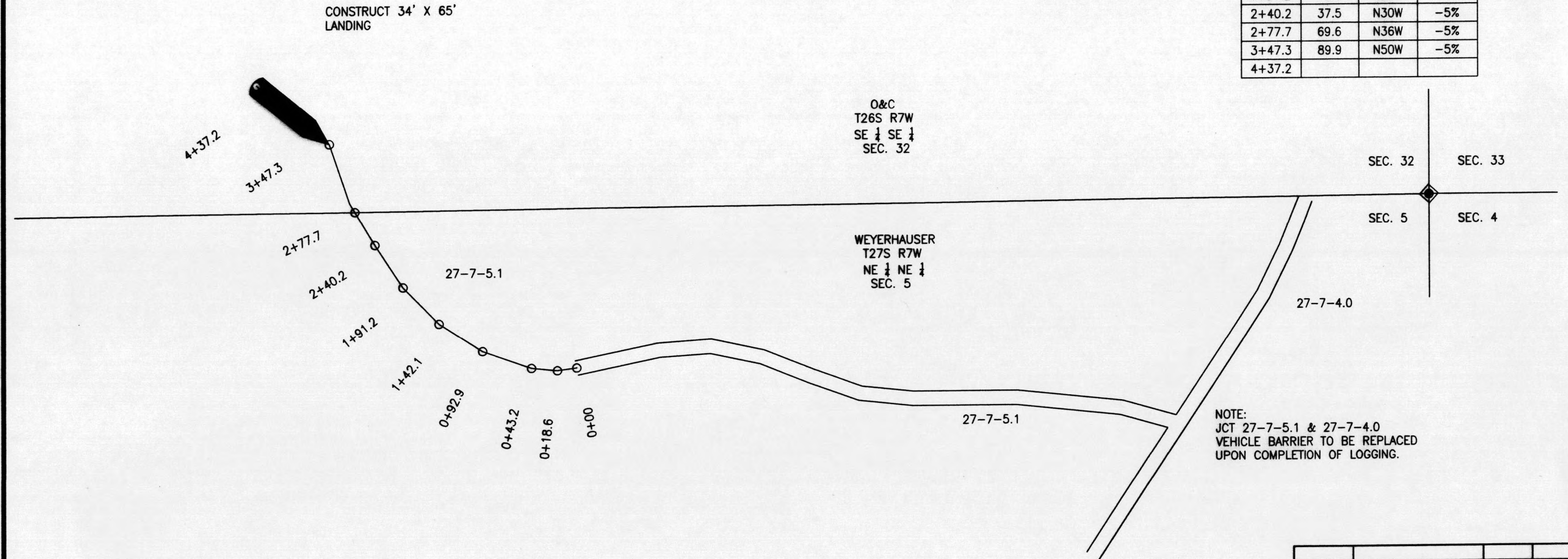


ROAD 26-7-32.2			
STA	DISTANCE	BEARING	% GRADE
0+00	10.0	S12W	-3%
0+10	6.0	S12W	-6%
0+16	66.0	S12W	-11%
0+82	71.0	S6W	-7%
1+53	67.0	S2E	-3%
2+20	100.0	S2E	-2%
3+20	30.0	S13E	1%
3+50	100.0	S26E	5%
4+50			



REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE			
MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT 26-7-32.2 CONSTRUCTION ROSEBURG DISTRICT OREGON			
DESIGNED	<i>Tom McNamara</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>Randy Lyle</i>		
DRAWN: TOM McNAMARA	SCALE: AS SHOWN		
DATE: 12/29/2010	SHEET 5 OF 13		
DRAWING NO. OR10-TS11-08	BLM #		

ROAD 27-7-5.1			
STA	DISTANCE	BEARING	% GRADE
0+00	18.6	N83W	12%
0+18.6	24.6	N83W	12%
0+43.2	49.7	N69W	3%
0+92.9	49.2	N56W	-1%
1+42.1	49.1	N43W	-1%
1+91.2	49.0	N32W	-1%
2+40.2	37.5	N30W	-5%
2+77.7	69.6	N36W	-5%
3+47.3	89.9	N50W	-5%
4+37.2			

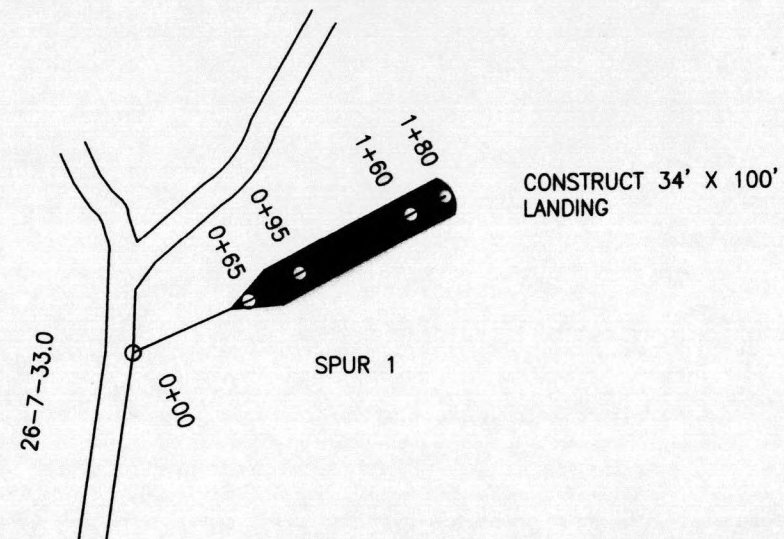


NOTE:
JCT 27-7-5.1 & 27-7-4.0
VEHICLE BARRIER TO BE REPLACED
UPON COMPLETION OF LOGGING.

REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE			
MUD SLINGER COMMERICAL THINNING & DENSITY MANAGEMENT 27-7-5.1 CONSTRUCTION ROSEBURG DISTRICT OREGON			
DESIGNED	<i>Tom McNamara</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>Rachel M. King</i>		
DRAWN: TOM McNAMARA		SCALE: AS SHOWN	
DATE: 12/29/2010		SHEET 6 OF 13	
DRAWING NO. OR10-TS11-08			BLM #

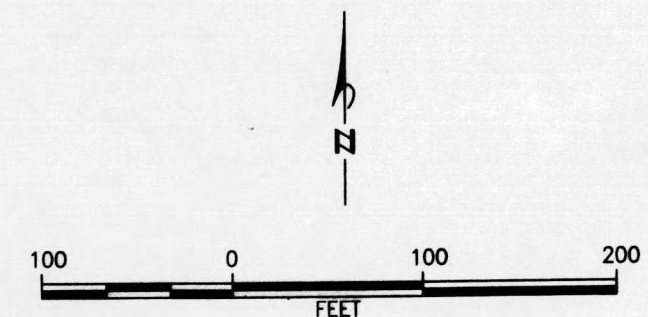
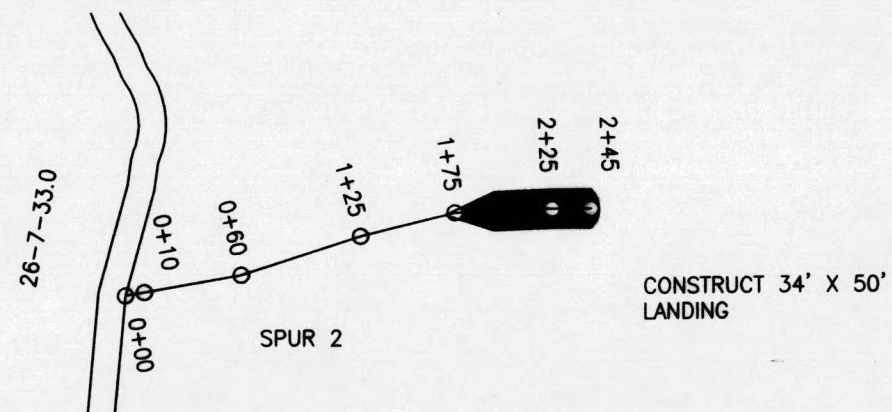


SPUR # 1			
STA	DISTANCE Feet	BEARING	% GRADE
0+00	65	N66E	-5%
0+65	30	N62E	-4%
0+95	65	N62E	2%
1+60	20	N62E	4%
1+80			

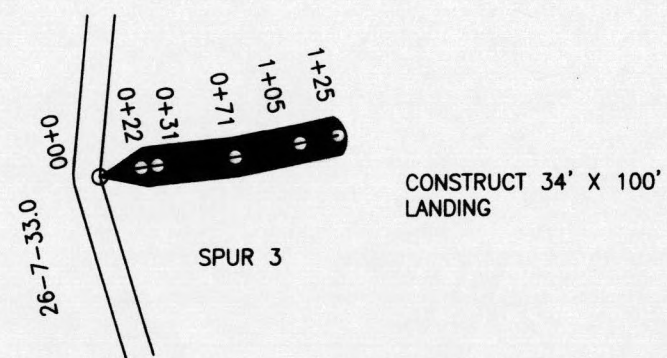


O&C
T26S, R7W
NW 1/4
SECTION 33

SPUR # 2			
STA	DISTANCE Feet	BEARING	% GRADE
0+00	10	N80E	7%
0+10	50	N80E	5%
0+60	65	N72E	1%
1+25	50	N76E	4%
1+75	50	N88E	1%
2+25	20	N88E	1%
2+45			



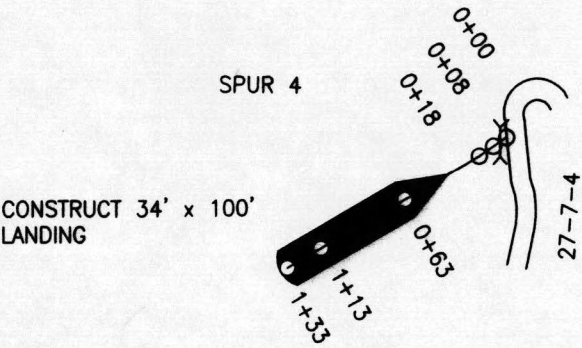
SPUR # 3			
STA	DISTANCE Feet	BEARING	% GRADE
0+00	22	N78E	11%
0+22	9	N82E	10%
0+31	40	N84E	9%
0+71	34	N78E	9%
1+05	20	N78E	-1
1+25			



REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE			
MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT SPURS 1, 2 & 3 CONST. ROSEBURG DISTRICT OREGON			
DESIGNED	<i>Tom McNamara</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>Rodney</i>		
DRAWN: TOM MCNAMARA		SCALE: AS SHOWN	
DATE: 11/23/2010		SHEET 7 OF 13	
DRAWING NO. OR10-TS11-08			BLM #



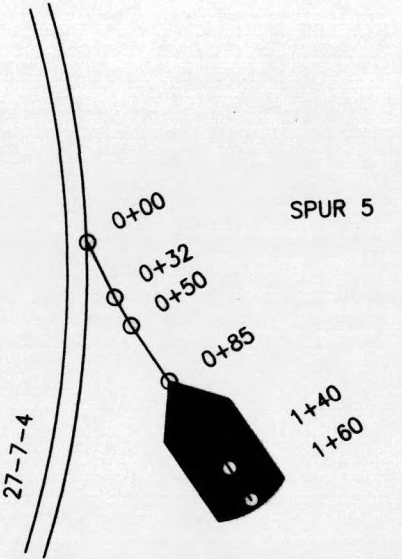
SPUR # 4			
STA	DISTANCE Feet	BEARING	% GRADE
0+00	8	S56W	18%
0+08	10	S56W	17%
0+18	45	S60W	17%
0+63	50	S60W	8%
1+13	20	S60W	5%
1+33			



STA 0+08 INSTALL
TEMP. CULVERT
18" X 30'

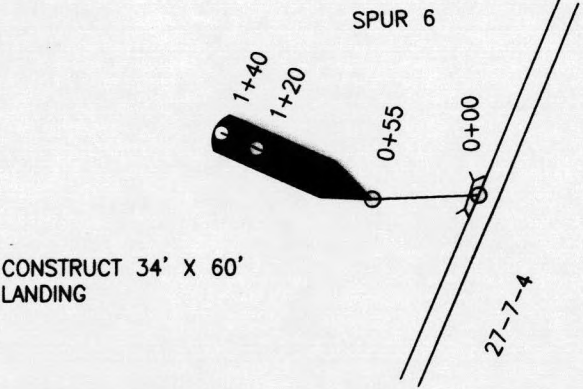
O&C
T26S, R7W
SW $\frac{1}{4}$, SW $\frac{1}{4}$
SECTION 33

SPUR # 5			
STA	DISTANCE Feet	BEARING	% GRADE
0+00	32	S26E	1%
0+32	18	S30E	-10%
0+50	35	S34E	-11%
0+85	55	S34E	-5%
1+40	20	S34E	-2%
1+60			

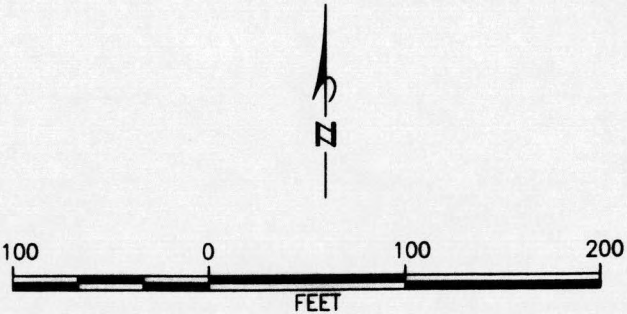


CONSTRUCT 40' X 50'
LANDING

SPUR # 6			
STA	DISTANCE Feet	BEARING	% GRADE
0+00	55	S88W	9%
0+55	65	N66W	-3%
1+20	20	N66W	-4%
1+40			



STA 0+05 INSTALL
TEMP. CULVERT
18" X 30'

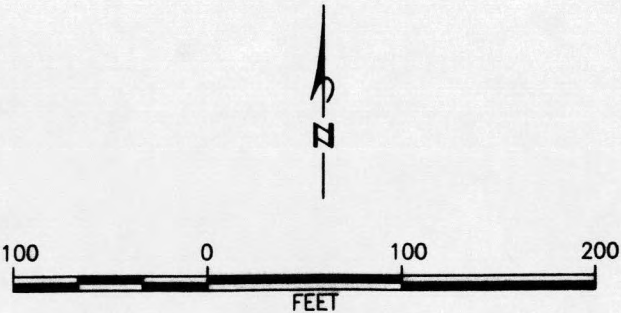
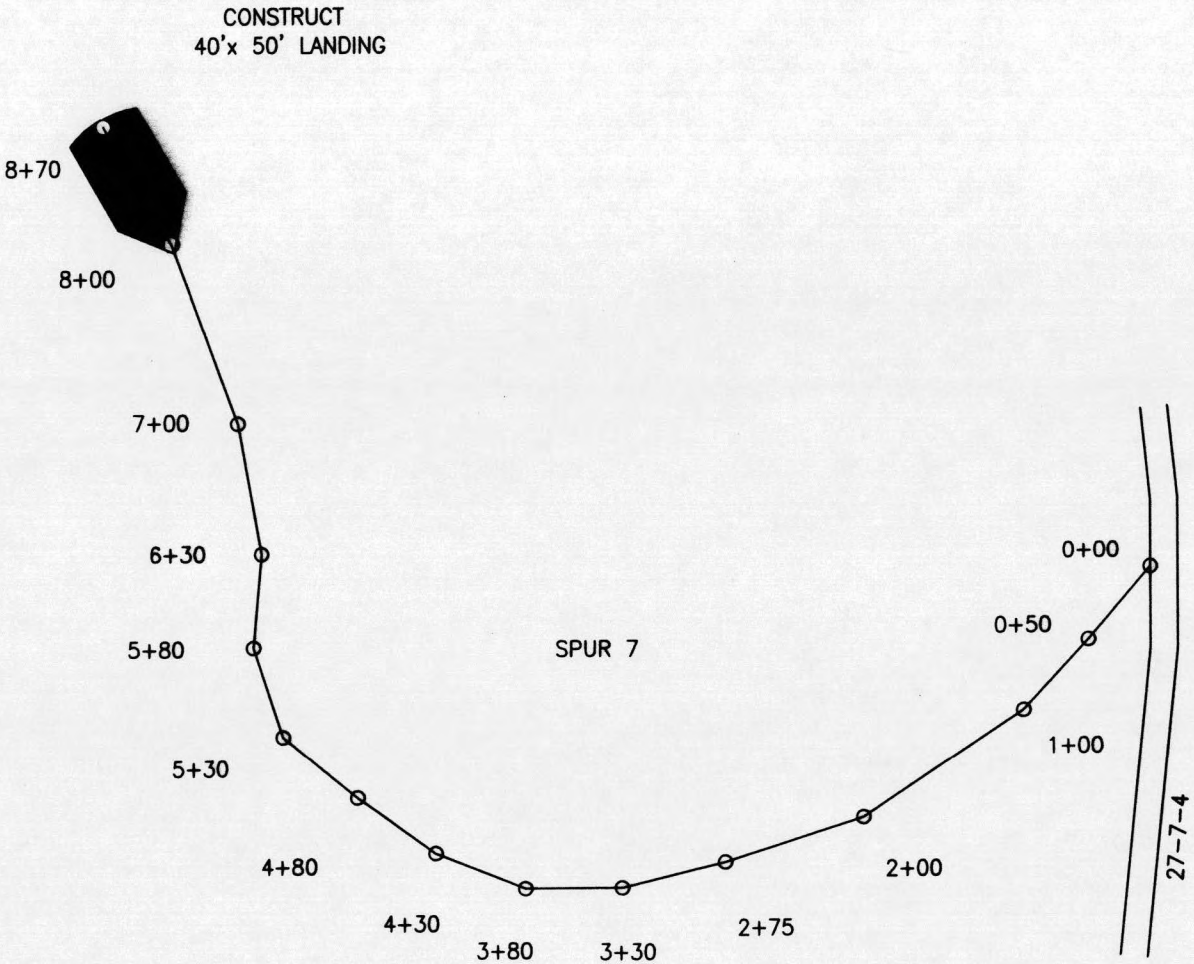


REV. NO.	DESCRIPTION	DATE	APPROVED
	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS		OREGON STATE OFFICE
	MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT SPURS 4, 5 & 6 CONST.		ROSEBURG DISTRICT OREGON
DESIGNED	<i>T. King</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>R. M. King</i>		
DRAWN: TOM MCNAMARA	SCALE: AS SHOWN		
DATE: 11/23/2010	SHEET 8 OF 13		
DRAWING NO. OR10-TS11-08	BLM #		



SPUR # 7			
STA	DISTANCE Feet	BEARING	% GRADE
0+00	50	S40W	-16%
0+50	50	S42W	-13%
1+00	100	S56W	-8%
2+00	75	S72W	-14%
2+75	55	S76W	-14%
3+30	50	W	-14%
3+80	50	N68W	-14%
4+30	50	N54W	-14%
4+80	50	N50W	-14%
5+30	50	N18W	-14%
5+80	50	N5E	-18%
6+30	70	N10W	-12%
7+00	100	N20W	-5%
8+00	70	N30W	-1%
8+70			

BLM
T26S, R7W
SE1, SE1
SECTION 32



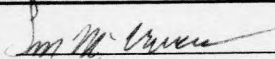
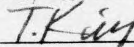
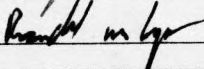
REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE			
MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT SPUR 7 CONSTRUCTION ROSEBURG DISTRICT OREGON			
DESIGNED	<i>[Signature]</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>Rudolf [Signature]</i>		
DRAWN: TOM MCNAMARA		SCALE: AS SHOWN	
DATE: 12/29/2010		SHEET 9 OF 13	
DRAWING NO. OR10-TS11-08			BLM #



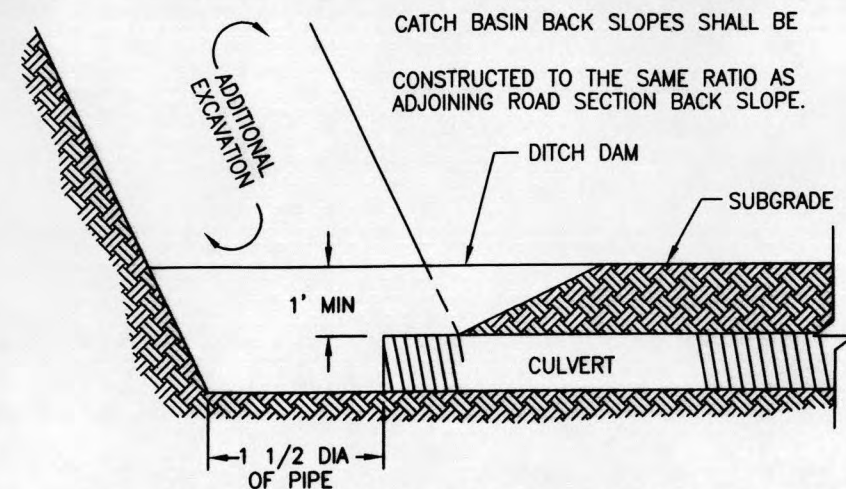
[illegible][illegible]

1. DESIGNED CULVERT LENGTHS AND LOCATIONS ARE APPROXIMATE.
2. ALL CULVERTS HAVE 2 2/3" X 1/2" CORRUGATIONS UNLESS OTHERWISE SPECIFIED.
3. SEE CULVERT INSTALLATION SHEET.
4. DOWN SPOUT TYPES:
 - a. FULL
 - b. HALF
 - c. FLUME
5. ELBOW TYPES:
 - a. CONVENTIONAL OR FABRICATED
 - b. TURNER TYPE
 - c. SLIP JOINT
6. INCLUDE SPECIAL SECTIONS, STRUCTURES, HEADWALLS, FOOTINGS, AND OTHER DATA.

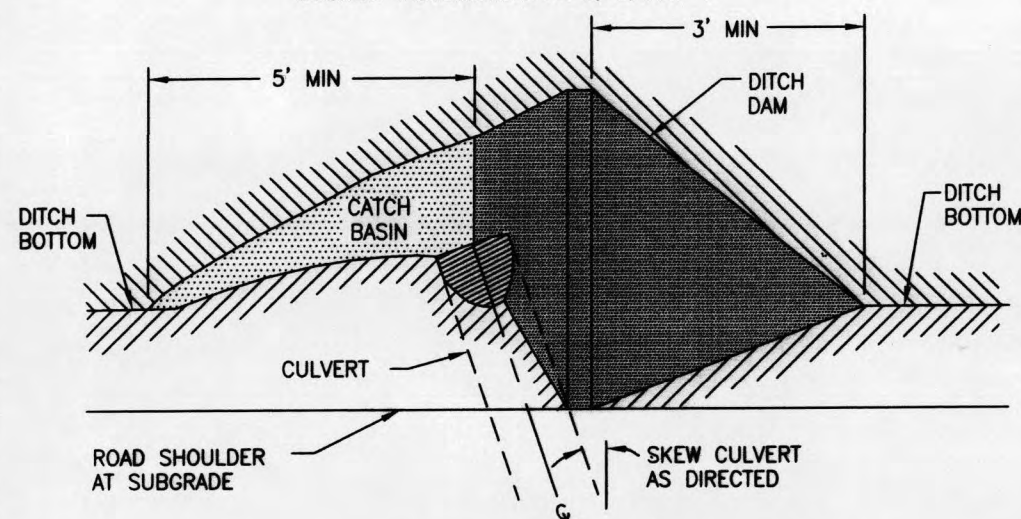
GAGE CHART		
GAGE	DEC. EQUIV INCHES	
	STEEL	ALUM.
10	0.1380	0.1350
12	0.1090	0.1050
14	0.0790	0.0750
16	0.0640	0.0600

REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE			
MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT CULVERT SUMMARY			
ROSEBURG DISTRICT		OREGON	
DESIGNED			
REVIEWED			
APPROVED			
DRAWN: G. STACEY		SCALE: AS SHOWN	
DATE: 07/267/2007		SHEET 10 OF 13	
DRAWING NO. OR10-TS11-08			BLM #

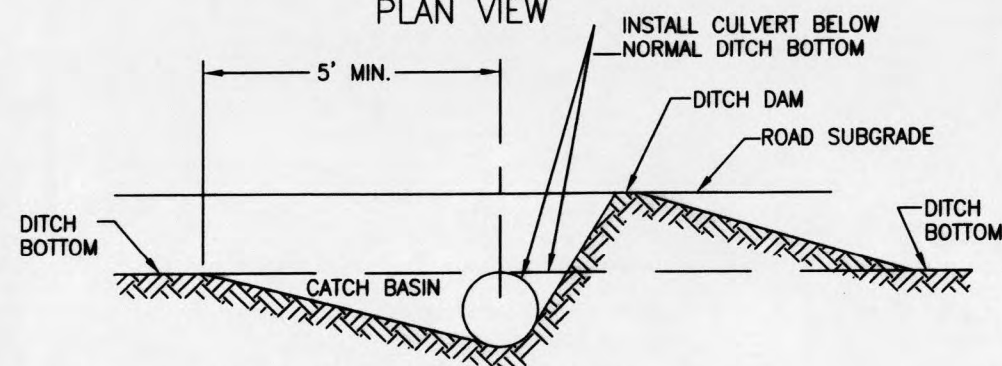




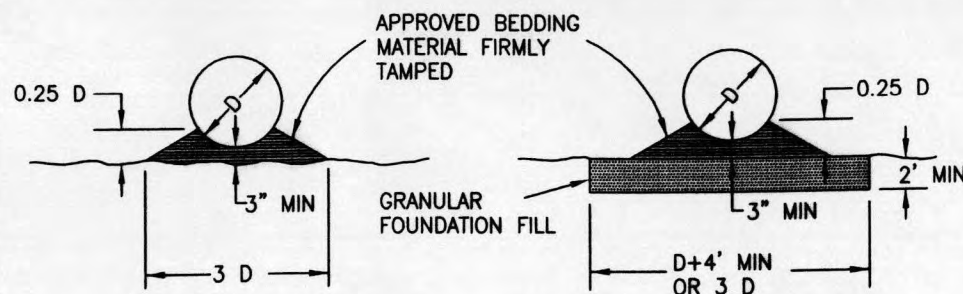
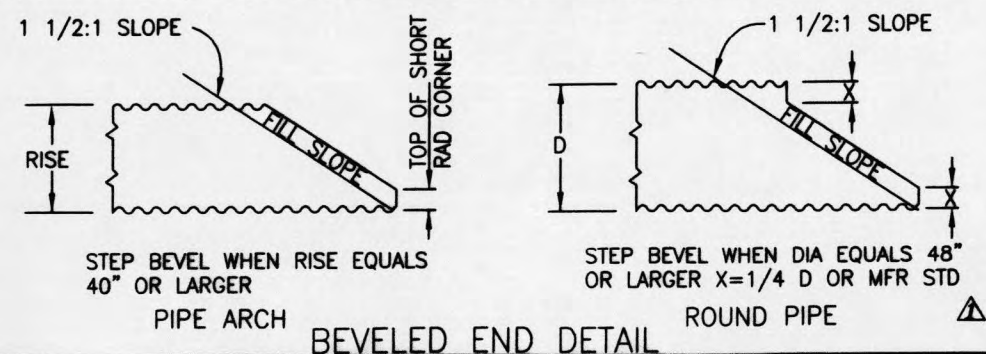
CROSS SECTION AT CATCH BASIN
CULVERT INSTALATION TYPE 2, 3, AND 4



PLAN VIEW



CATCH BASIN ELEVATION

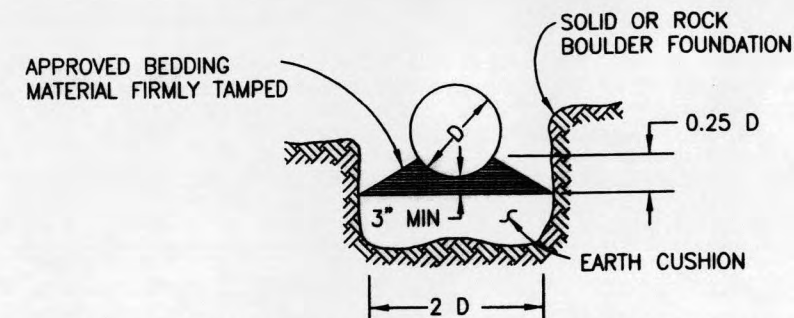


BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT

BEDDING OF CULVERTS ON STABLE NATURAL GROUND FOUNDATION OR COMPACTED EMBANKMENT

BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT

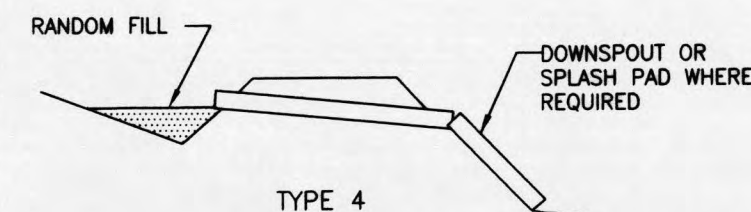
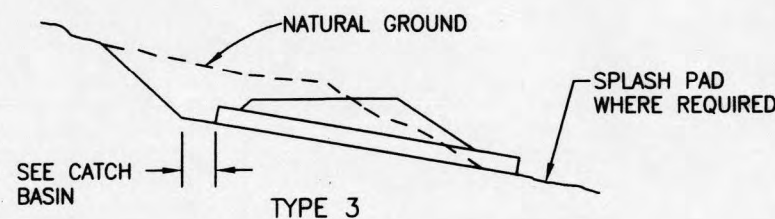
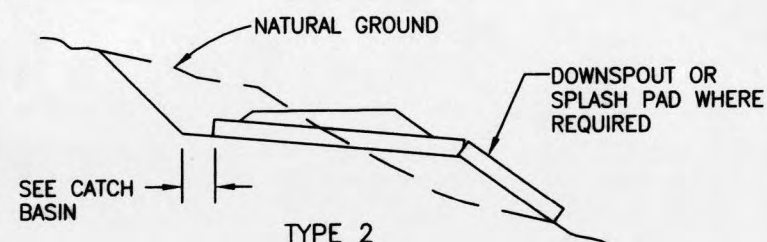
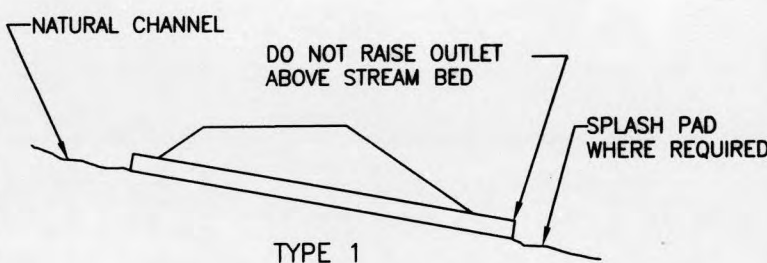
BEDDING OF CULVERTS ON SOFT SPONGY OR UNSTABLE SOIL FOUNDATION



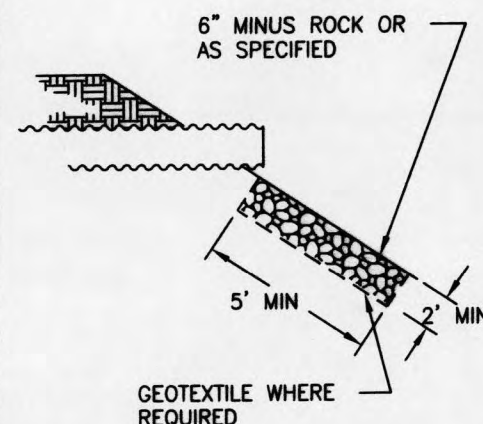
BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT. EARTH CUSHIONING OF SILTY CLAY LOAM OR SAND MAY BE USED IF MATERIAL CAN BE PLACED IN THE DRY CONDITION. IF THE EXCAVATION IS WET, USE GRANULAR FOUNDATION FILL MATERIAL. MAINTAIN 8" MIN DEPTH BETWEEN HIGH POINTS OF ROCKS AND/OR BOULDERS AND THE BOTTOM OF THE CULVERT.

BEDDING OF CULVERTS IN SOLID ROCK OR BOULDER FOUNDATION

BEDDING OF CULVERTS

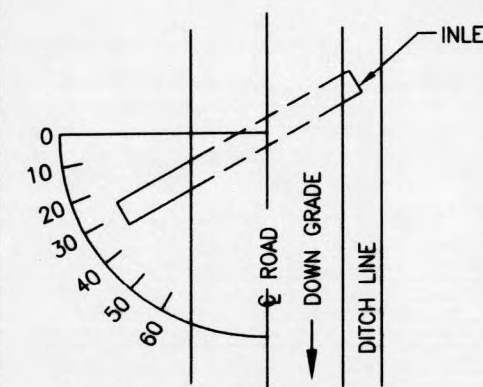


CULVERT INSTALLATION TYPES



SPLASH PAD SHALL BE 1' WIDER THAN PIPE DIA ON EACH SIDE

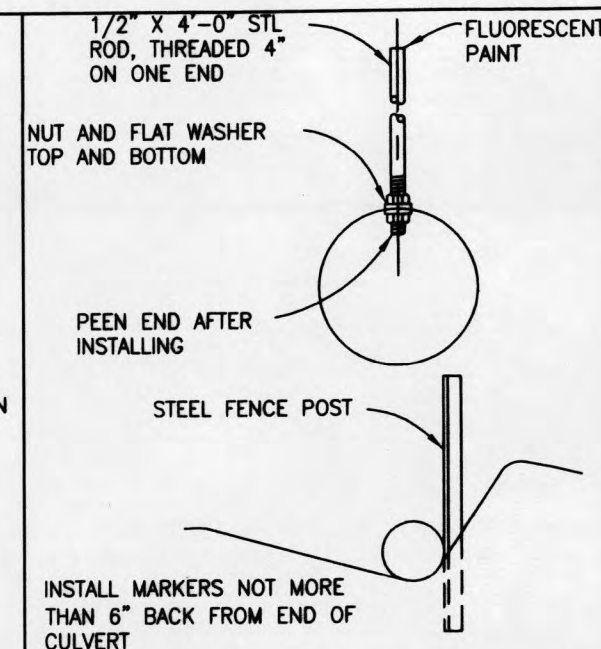
SPLASH PAD



THE GRADE OF CROSS DRAINS SHALL BE AT LEAST 2% GREATER THAN THE GRADE OF THE DITCH

SKREW DIAGRAM

ALWAYS THINK SAFETY

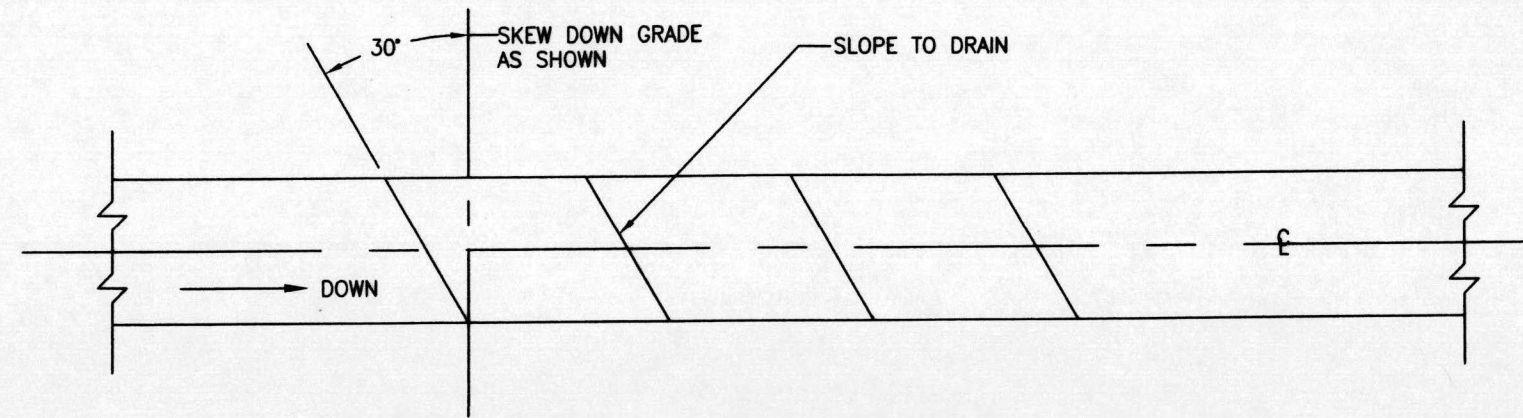


CULVERT MARKER INSTALLATION

REV. NO.	DESCRIPTION	DATE	APPROVED
	UNITED STATES DEPARTMENT OF THE INTERIOR		
	BUREAU OF LAND MANAGEMENT		
	DIVISION OF OPERATIONS		OREGON STATE OFFICE
	MUD SLINGER		
	COMMERCIAL THINNING & DENSITY MANAGEMENT		
	CULVERT INSTALLATION		
	ROSEBURG DISTRICT		OREGON

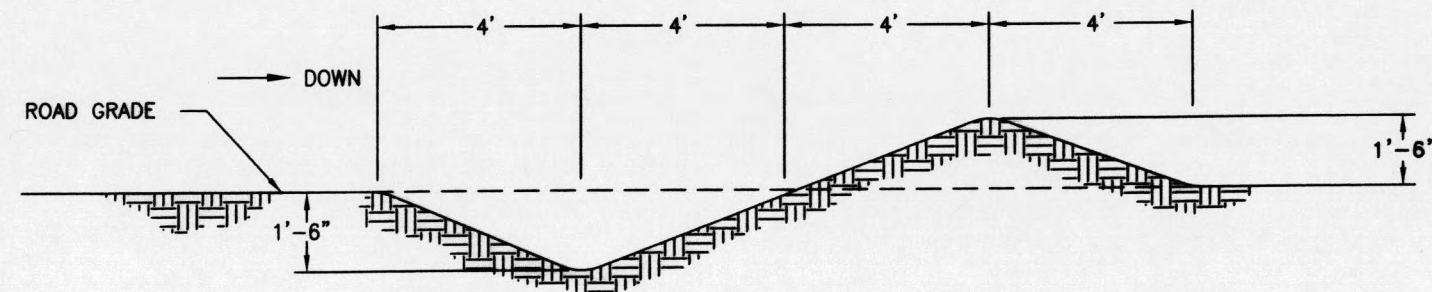
DESIGNED: *James M. Hough*
REVIEWED: *T. King*
APPROVED: *Robert M. King*

DRAWN: BILL HOUGH SCALE: AS SHOWN
DATE: 12/17/01 SHEET 11 OF 13
DRAWING NO. OR10-TS11-08 BLM #



ROAD PLAN

SCALE: NONE



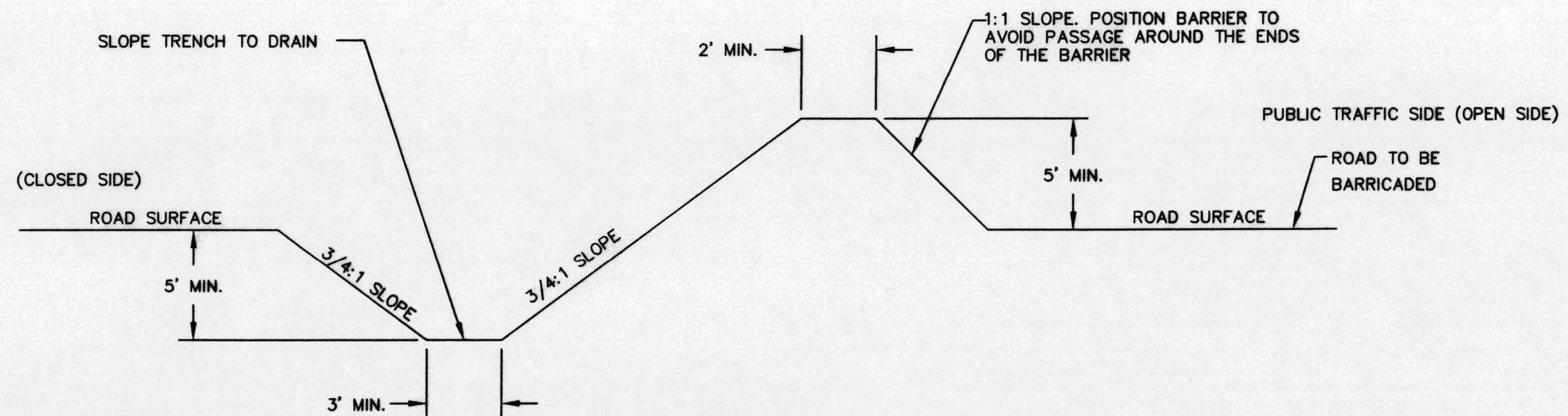
ROAD PROFILE

SCALE: NONE

WATERBAR SPACING IN FEET	
ROAD GRADIENT IN %	SPACING
3 TO 5	300
6 TO 10	200
11 TO 15	150
16 TO 20	75
21 TO 35	50



REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT WATER BAR DETAIL ROSEBURG DISTRICT OREGON			
DESIGNED	<i>Sam M. Linder</i>		
REVIEWED	<i>T. Kelly</i>		
APPROVED	<i>Rudolf M. Linder</i>		
DRAWN: Bill Hough		SCALE: AS SHOWN	
DATE: 5/19/04		SHEET 12 OF 13	
DRAWING NO. OR10-TS11-08		BLM #	



TRENCH BARRIER
SCALE: NONE



REV. NO.	DESCRIPTION	DATE	APPROVED
UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT DIVISION OF OPERATIONS OREGON STATE OFFICE MUD SLINGER COMMERCIAL THINNING & DENSITY MANAGEMENT TRENCH BARRIER DETAIL ROSEBURG DISTRICT OREGON			
DESIGNED	<i>Jim McManis</i>		
REVIEWED	<i>T. King</i>		
APPROVED	<i>David M. King</i>		
DRAWN: G. STACEY		SCALE: AS SHOWN	
DATE: 07/27/2007		SHEET 13 OF 13	
DRAWING NO. OR10-TS11-08		BLM #	