

PART III: EXHIBITS

State Timber Sale Contract
No. 341-08-60
Eye of the Tiger

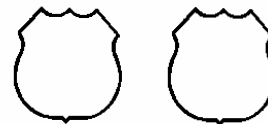
EXHIBIT B

Page 1 of 3
629-Form 341-203
Revised 06/97

OREGON DEPARTMENT OF FORESTRY

TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)



Date Received by STATE: _____

(5) State Brand Information (complete):

(1) Contract No.: 341-08-60

(2) Sale Name: Eye of the Tiger

(3) Contract Expiration Date: October 31, 2010

Project Completion Dates: Project Nos. 1, 2, and 3 – October 31, 2009

(4) Purchaser: _____

Project No. 4 – August 31, 2008

(6) Purchaser Representatives:

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

(7) State Representatives:

Projects: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

Logging: _____

Phone: _____

Cell/Other

Phone: _____

Home: _____

(8) Name of Subcontractors & Starting Dates:

Projects: No(s) _____ - _____

Date: _____

Phone: _____

No(s) _____ - _____

Date: _____

Phone: _____

No(s) _____ - _____

Date: _____

Phone: _____

No(s) _____ - _____

Date: _____

Phone: _____

Logging: Felling _____

Date: _____

Phone: _____

Yarding: _____

Date: _____

Phone: _____

(9) Comments:

(10) Operations Map: Attach a copy of timber sale Exhibit A or other suitable map which plainly shows the items listed on the instruction sheet.

EXHIBIT B

INSTRUCTION SHEET FOR OPERATIONS PLAN

SUBMIT ONE COPY OF PLAN TO STATE

Operations shall be limited to the work shown in the plan until a revised plan or supplemental plan is submitted covering additional work. Compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act. If STATE has prepared a required Forest Practices Act (FPA) "Written Plan" for operations, PURCHASER shall comply with all provisions of the Written Plan.

Explanation of Item No. (from Page 1)

- (5) All sales require you to use a brand furnished by STATE. If the State brand has not been assigned when the plan is submitted, it will be furnished and assigned later. Complete drawing. If more than one brand is assigned to the sale, complete both drawings.
- (6) The contract requires you to have a designated representative available on the sale area or work location who is authorized to receive in your behalf any notice or instruction given by STATE and to take action in regard to performance under the contract. If logging and project work is widely separated, a representative is required for each.
- (7) The STATE representative will be designated when your plan is approved and is the person who will inspect and issue instructions regarding performance.
- (8) Show names of subcontractors to be used for any or all phases of the operations. If subcontractors are not known, or are changed later, give notification to the STATE representative prior to commencement of work by subcontractor.

Show projected dates for commencement of both projects and logging. If projected dates need to be changed at a later date, notification must be given to the STATE representative by supplemental plan or otherwise, prior to commencement of such operations.

- (10) The STATE representative will furnish extra copies of Exhibit A of the contract for your use in preparing the operations map. The map shall use the following legend and show:
 1. Landing locations, approximate setting boundaries, and probable sequence of logging the settings. Number the settings in sequence.
 2. Locations of spur roads planned for construction, other than those required by the timber sale contract. Provide spur road specifications.
 3. Location of proposed tractor yarding roads. Show if and how marked on the ground.
 4. Location of temporary stream crossings.
 5. List the sequence of performing project work.
 6. Location of rock sources - attach pit development plans.



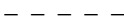
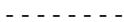


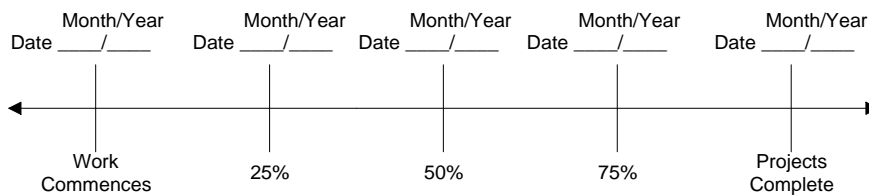
| | |
|---|---|
|  | Cable landing, with numbers for sequence. |
|  | Tractor landing with alphabetical sequence. |
|  | Approximate setting boundary. |
|  | Spur truck roads. |
|  | Tractor yarding roads. |
|  | Temporary stream crossings. |

EXHIBIT B
 OPERATIONS PLAN

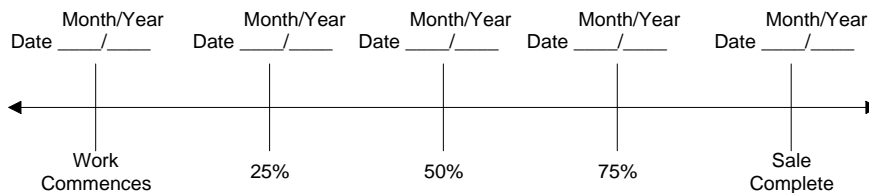
Completion Timeline

Indicate on the appropriate timeline below, the dates by which you plan to complete the work as required under this contract. The purpose of this section is to develop a plan that will ensure you complete the work as required, and meet the interim completion date(s) and contract expiration date. This plan is incorporated and made a part of the contract. When, in the opinion of STATE, operations are not commencing in a manner that meets the intent of this plan, you may be placed in violation of contract and your operations suspended until an amended plan is submitted and approved by STATE.

Projects



Harvest & Other Requirements



The Federal Endangered Species Act (ESA) prohibits a person from taking any federally listed threatened or endangered species. Taking under the federal ESA may include alteration of habitat. STATE's approval of this plan does not certify that PURCHASER's operation under the plan is lawful under the federal ESA. As provided in the timber sale contract, PURCHASERS must comply with all applicable state, federal, and local laws.

PURCHASER's compliance with this plan is not in lieu of compliance with any federal requirements related to the federal Endangered Species Act.

APPROVED: Date: _____

SUBMITTED BY:
 PURCHASER

STATE OF OREGON - DEPARTMENT OF FORESTRY

 Title _____

 Title _____

Original: Salem
 cc: District File
 Purchaser

EXHIBIT C

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1) ORIGINAL REGISTRATION Date _____
 REVISION NUMBER _____ Date _____
 CANCELLATION Date _____

(2) TO: _____
 (Third Party Scaling Organization)

(3) FROM: Forest Grove (05) Phone (503) 357-2191
 (State Forestry District)
 Address 801 Gales Creek Road, Forest Grove,
OR 97116

(4) PURCHASER: _____
 Address _____

| (5) MINIMUM SCALING SPECIFICATIONS | | | CLASS | | |
|------------------------------------|-------------------------|-------------------|---------|--------|-----|
| SPECIES | SCALING DIAMETER INCHES | *NET SCALE VOLUME | PER MBF | ** SUM | SUB |
| Conifers | -- | 10 | X | | |
| Hardwoods | -- | 10 | X | | |
| | | | | | |

* Apply minimum volume test to whole logs over 40' Westside; 20' Eastside.
 ** Sum (if indicated): see instructions and explain in Item (20).

(6) WESTSIDE SCALE: YES NO
 Actual taper all logs over 40' scaling length

(7) EASTSIDE SCALE: YES NO
 *Actual taper butt logs over 40' scaling length

(8) PENCIL BUCK YES NO
 back to Minimum Scaling Diameter _____

(9) ADD-BACK VOLUME -- YES NO
 Deductions due to delay

| (10) APPROVED SCALING LOCATIONS | Species | Yard | Truck |
|---------------------------------|---------|------|-------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

(11) NOTICE OF CANCELLATION OF BRAND:
 Effective Date: _____

 State Forester's Representative

(12) SALE NAME Eye of the Tiger
 COUNTY Washington

(13) STATE CONTRACT NUMBER 341-08-60

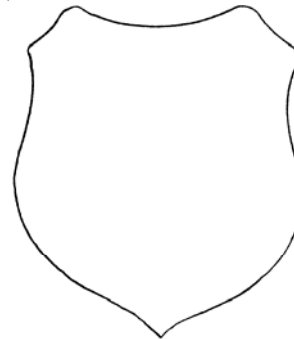
(14) SCALE: westside eastside cubic foot

(15) STATE BRAND REGISTRATION NUMBER _____

(16) BUREAU BRAND CODE NUMBER _____

(17) STATE BRAND INFORMATION:

(COMPLETE) →



(18) PAINT REQUIRED: YES
 COLOR Orange

| (19) SPECIAL SCALES |
|--|
| PEELABLE CULL (all species) |
| UTILITY/PULP (all species) |
| NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE |
| OTHER: _____ |
| OTHER: _____ |

(20) REMARKS: _____

Operator's Name (Optional inclusion by District): _____

(21) SIGNATURES:

 Purchaser or Authorized Representative Date

 State Forester Representative Date

Notify the District within one hour when branding or painting is inadequate for quick identification, the receipts are missing, not correctly or completely filled out, and/or when logs presented for scaling are impossible to scale accurately.

EXHIBIT C

INSTRUCTIONS FOR FORM 343-307 (rev. 5/01)

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (21). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO). Send 4 copies to TPSO, 1 to purchaser, 1 to Salem, and keep such copies as to district needs.
- (3) State District office, address and phone.
- (4) Enter Purchaser's business name and address as it appears on the Contract.
- (5) Minimum Scaling Specifications. Review Section 2040 or 2045, "Log Removal," of the Contract. Species, or combined species can be separate entries. Information serves as a basis for scaling (see also Items (13) thru (17)), and is required to show existence on the sale. **PerM** (per MBF). **SUM** (lump sum material). **SUB** (submerchantable material. SUB, as used by the State, references that material containing at least 10 bf (net) but less than the lower merchantable net volume limit or grade requirements for other merchantable (PerM) entries. PerM, SUM, and Sub must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. PerM and Sub require scaling therefore complete specifications. SUM need not be scaled, hence no specifications. Loads containing only SUM are to be ticketed if so instructed in Item (19). Mixed loads of SUM, PERM and/or subspecies will always be scaled.
- (6) Westside -- actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Westside).
- (7) Eastside -- actual taper/taper table segment scale. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Northwest Log Rules Eastside). Items with * follow U.S. Forest Service Eastside rules.
- (8) Pencil Buck. Check NO if a westside sale, optional for eastside sales.
- (9) Add-Back Volume. Add-Back is normally checked YES. Scaler records deductions (sap rot, weather checks, etc.) caused by an abnormal delay in removal. Enter separately on scale ticket. TPSO provides State with summaries that include this as a net volume by species. Salvage sales and certain other circumstances may require that "NO" be checked.
- (10) Show scaling locations only applicable to TPSO. Not necessary to list markets. If all species are scaled at same location, enter "ALL."
- (11) When logging is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box at top of form, and send to TPSO.
- (12) Enter sale name and county.
- (13) Enter sale Contract number.
- (14) Check Westside or Eastside log scale. Cubic foot refers to Northwest Log Rules Cubic Foot Scale.
- (15) Oregon Forest Products Brand Registry Number (optional).
- (16) DO NOT USE -- TPSO will fill in when applicable.
- (17) Show one brand only. Complete drawing. If more than one brand is assigned to the sale, (1) make separate form for each brand, and (2) on each form, explain and show other brand(s) under REMARKS, Item 19.
- (18) Check YES and designate orange.
- (19) Special Scales. These are the Special Scales that will be applied. If "Other" is indicated, please describe. Give comments in Item (19).
- (20) Use this space to designate weight conversion factors, or any other explanations to clarify scaling requirements. If additional scaling locations are approved, prepare another form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (21) Require purchaser to sign and date completed form.

EXHIBIT D
 FOREST ROAD SPECIFICATIONS

| SUBGRADE WIDTH | SURFACED WIDTH | POINT TO POINT | STATION TO STATION | DRAINAGE |
|----------------|----------------|----------------|--------------------|----------|
| 14 feet | 12 feet | A to B | 0+00 to 18+55 | Ditch |
| 14 feet | 12 feet | C to D | 0+00 to 10+50 | Ditch |
| 14 feet | 12 feet | E to F | 0+00 to 32+75 | Ditch |
| 14 feet | 12 feet | G to H | 0+00 to 10+25 | Ditch |
| 14 feet | 12 feet | I to J | 0+00 to 9+30 | Ditch |
| 14 feet | 12 feet | K to L | 0+00 to 2+00 | Ditch |
| 14 feet | 12 feet | M to N | 0+00 to 18+10 | Ditch |
| 14 feet | 12 feet | O to P | 0+00 to 3+70 | Ditch |
| 14 feet | 12 feet | Q to R | 0+00 to 9+20 | Ditch |
| 14 feet | 12 feet | S to T | 0+00 to 12+75 | Ditch |
| 14 feet | 12 feet | U to V | 3+50 to 62+00 | Ditch |
| 14 feet | 12 feet | V to W | 0+00 to 7+45 | Ditch |
| 14 feet | 12 feet | X to Y | 0+00 to 6+30 | Ditch |

CLEARING. This work shall consist of clearing, removing, and disposing of all trees, Snags, Down Timber, brush, surface objects, and protruding obstructions within the clearing limits.

Where clearing limits have not been marked, the clearing limits shall extend 10 feet back of the top of the cutslope and 5 feet out from the toe of the fill slope, or as directed by STATE. Clearing debris shall not be placed or permitted to remain in or under any road embankment sections. Clearing debris shall not be left lodged against standing trees.

All danger trees, leaners, and Snags outside the clearing limits which could fall and hit the road shall be felled.

GRUBBING. This work shall consist of the removal or digging out of stumps and protruding objects.

All stumps shall be completely removed within the limits of required grubbing. Stumps overhanging cutslopes shall be removed. Grubbing debris shall not be placed or permitted to remain in or under any road embankment sections. Grubbing debris shall not be left lodged against standing trees. Grubbing classifications are as follows:

New construction - From the top of the cutslope to the toe of the fill.

Improvements and reconstructions - 4 feet back from the shoulder of the subgrade or ditch, whichever is widest, or as marked in the field.

CLEARING AND GRUBBING DISPOSAL. Scatter through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required.

EXHIBIT D
FOREST ROAD SPECIFICATIONS

EXCAVATION. Excavation and grading shall not be done when weather and/or ground conditions are such that damage will result to existing subgrade or cause excessive erosion.

Excavation shall conform to STATE-engineered lines, grades, dimensions, and plans when provided.

All suitable excavated material shall be used where possible for the formation of fills, shoulders, and drainage structure backfills. Embankment materials shall be free of woody debris, brush, muck, sod, frozen material, and other deleterious materials. All fills and drainage structure backfills shall be machine compacted according to the specifications in Exhibit E.

Unless road design plans show otherwise, all roads shall be on a balanced cross section, except when the slope is over 50 percent, the road shall be on full bench for the width specified.

Excess excavation shall not be sidecast where material will enter a stream course or where material will accumulate in areas deemed a high landslide hazard location by STATE.

ROAD WIDTH LIMITATIONS. PURCHASER shall obtain advance written approval from STATE to construct the road to a greater width than specified. Extra subgrade width shall be required for:

Fill Widening. Add to each fill shoulder 1 foot for fills 3 feet to 6 feet high; 2 feet for fills over 6 feet high.

Curve Widening. Widen the inside shoulder of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

Ditch. Construct "V" ditch 2 feet wide and to a depth of 1 foot below subgrade. Subgrade shall be crowned at 4 to 6 percent. Construct ditchouts away from subgrade at locations marked in the field.

Outslope. Road subgrade shall be outsloped at 4 to 6 percent.

TURNOUTS. Increase roadbed width an additional 8 feet for both subgrade and surfacing. Length shall be at least 25 feet, or as staked on the ground, plus 25-foot approaches at each end.

Location: Intervisible but not greater than 750 feet.

GRADING

| | <u>Back Slopes</u> | <u>Fill Slopes</u> |
|------------------------------------|--------------------|-----------------------|
| Rock | Vertical to 1/4:1 | Not steeper than 1½:1 |
| Common - side slopes 50% and over | 1/2:1 | |
| Common - side slopes less than 50% | 3/4:1 | |
| Common - turnpike (level) section | 2:1 | |

Top of cutslope shall be rounded.

LANDINGS. Landings shall be constructed as posted in the field, no less than 50 feet wide and no more than 70 feet wide, unless otherwise approved by STATE. Surface is to be crowned for drainage, with general grade no more than 3 percent. Surface as shown on Exhibit E.

TURNAROUNDS. Increase subgrade width an additional 20 feet for a length of 20 feet.

EXHIBIT D

ROAD CONSTRUCTION AND IMPROVEMENT INSTRUCTIONS

| <u>SEGMENT</u> | <u>STATION</u> | <u>WORK DESCRIPTION</u> |
|----------------|-----------------------------|--|
| A to B | 0+00 | Point A. Junction with South Lousignont Road Begin road improvement, crown road, begin ditch improvement. |
| | 18+55 | Point B. |
| C to D | 0+00 | Point C. Begin road improvement, crown road, begin ditch improvement. |
| | 10+50 | Point D. |
| E to F | 0+00 | Point E. Begin road construction, crown and ditch road. |
| | 4+00 | Install Culvert No. 1 (18" x 30'). |
| | 6+30 | Point G. Spur to the left. |
| | 6+40 | Install Culvert No. 2 (18" x 30'). |
| | 9+50 | Install Culvert No. 3 (18" x 30'). |
| | 12+75 | Point I. Spur to the left. |
| | 14+30 | Point K. Spur to the right. |
| | 19+75 | Install Culvert No. 4 (18" x 30'). |
| | 22+80 | Install Culvert No. 5 (18" x 30'). Begin constructing ditches on both sides of the road. |
| | 26+00 | End ditching on both sides. |
| | 28+60 | Install Culvert No. 6 (18" x 30'). |
| 32+75 | Point F. Construct landing. | |
| G to H | 0+00 | Point G. Begin road construction, crown and ditch road. |
| | 10+25 | Point H. Construct landing. |

EXHIBIT D

ROAD CONSTRUCTION AND IMPROVEMENT INSTRUCTIONS

| <u>SEGMENT</u> | <u>STATION</u> | <u>WORK DESCRIPTION</u> |
|----------------|----------------|---|
| I to J | 0+00 | Point I. Begin road construction, crown and ditch road. |
| | 9+30 | Point J. Construct Landing. |
| K to L | 0+00 | Point K. Begin road construction, crown and ditch road. Install Culvert No. 7 (18" x 30'). |
| | 2+00 | Point L. |
| M to N | 0+00 | Point M. Begin road construction, crown and ditch road. |
| | 4+50 | Install Culvert No. 8 (18" x 30'). |
| | 7+00 | Install Culvert No. 9 (18" x 30'). |
| | 12+75 | Point O. Spur to the right. Install Culvert No. 10 (18" x 30'). |
| | 18+10 | Point N. Construct Landing. |
| O to P | 0+00 | Point O. Begin road construction, crown and ditch road. |
| | 3+70 | Point P. Construct Landing. |
| Q to R | 0+00 | Point Q. Begin road construction, crown and ditch road. |
| | 1+25 | Install Culvert No. 11 (18" x 30'). |
| | 9+20 | Point R. Construct Landing. |
| S to T | 0+00 | Point S. Begin road construction, crown and ditch road. |
| | 12+75 | Point T. Construct Landing. |

EXHIBIT D

ROAD CONSTRUCTION AND IMPROVEMENT INSTRUCTIONS

| <u>SEGMENT</u> | <u>STATION</u> | <u>WORK DESCRIPTION</u> |
|----------------|----------------|--|
| U to V | 0+00 | Point U. Junction with Lousignont Road. Begin road vacating. Construct tank trap in accordance with Exhibit H. |
| | 0+85 | Widen stream channel by pulling back stream banks to the natural contours. Use pullback material to block road. |
| | 3+10 | Remove existing culvert. Construct tank trap in accordance with Exhibit H. |
| | 3+50 | Point Y. Begin road improvement, crown road, begin ditch improvement. |
| | 6+40 | Remove existing culvert and install Culvert No. 13 (18" x 30'). |
| | 11+00 | Remove existing culvert and install Culvert No. 14 (18" x 30'). |
| | 15+00 | Fill in waterbar, leave existing culvert in place. |
| | 21+50 | Remove existing culvert and install Culvert No. 15 (18" x 30'). |
| | 24+25 | Remove existing culvert and install Culvert No. 16 (24" x 30'). |
| | 31+00 | Fill in waterbar, leave existing culvert in place. |
| | 33+50 | Remove existing culvert and Install Culvert No. 17 (18" x 40'). |
| | 39+85 | Fill in waterbar, leave existing culvert in place. |
| | 44+75 | Fill in waterbar, leave existing culvert in place. |
| | 47+35 | Remove existing culvert and Install Culvert No. 18 (18" x 34'). |
| | 48+75 | Fill in waterbar, leave existing culvert in place. |
| | 51+00 | Fill in waterbar, leave existing culvert in place. |
| | 54+80 | Fill in waterbar, leave existing culvert in place. |
| | 57+00 | Fill in waterbar, leave existing culvert in place. |
| | 59+00 | Fill in waterbar, leave existing culvert in place. |
| | 62+00 | Point V. |

EXHIBIT D

ROAD CONSTRUCTION AND IMPROVEMENT INSTRUCTIONS

| <u>SEGMENT</u> | <u>STATION</u> | <u>WORK DESCRIPTION</u> |
|----------------|----------------|--|
| V to W | 0+00 | Point V. Begin road construction, crown and ditch road. |
| | 7+45 | Point W. Construct Landing. |
| <hr/> | | |
| X to Y | 0+00 | Point X. Begin road construction, crown and ditch road. Install Culvert No. 19 (18" x 40'). |
| | 3+50 | Install Culvert No. 20 (18" x 34'). |
| | 6+30 | Point Y. Install Culvert No. 21 (18" x 40'). |

EXHIBIT E
 ROAD SURFACING SPECIFICATIONS

| TYPE OF ROCK | SIZE OF ROCK | COMPACTED DEPTH | POINT TO POINT | STATION TO STATION | APPROX. TOTAL TRUCK MEASURE VOLUME |
|------------------------|--------------|-----------------|--------------------------|-----------------------|------------------------------------|
| Crushed | 3"-0" | 10" | E to F | 0+00 to 32+75 | 1900 CY |
| Crushed | 3"-0" | 10" | G to H | 0+00 to 10+25 | 595 CY |
| Crushed | 3"-0" | 10" | I to J | 0+00 to 9+30 | 539 CY |
| Crushed | 3"-0" | 10" | K to L | 0+00 to 2+00 | 116 CY |
| Crushed | 3"-0" | 10" | M to N | 0+00 to 18+10 | 1050 CY |
| Crushed | 3"-0" | 10" | O to P | 0+00 to 3+70 | 215 CY |
| Crushed | 3"-0" | 10" | Q to R | 0+00 to 9+20 | 534 CY |
| Crushed | 3"-0" | 10" | S to T | 0+00 to 12+75 | 740 CY |
| Crushed | 3"-0" | Spot Rock | U to V | 3+50 to 62+00 | 100 CY |
| Crushed | 3"-0" | 10" | V to W | 0+00 to 7+45 | 432 CY |
| Crushed | 3"-0" | 10" | X to Y | 0+00 to 6+30 | 365 CY |
| CURVE WIDENING: | | | STATIONS OF CURVE | POINT TO POINT | |
| Crushed | 3"-0" | 10" | 2 | X to Y | 20 CY |
| TURNOUTS: | | | NO. OF T. O. | | |
| Crushed | 3"-0" | 10" | 2 | E to F | 56 CY |
| Crushed | 3"-0" | 10" | 1 | G to H | 28 CY |
| Crushed | 3"-0" | 10" | 1 | I to J | 28 CY |
| Crushed | 3"-0" | 10" | 2 | M to N | 56 CY |
| Crushed | 3"-0" | 10" | 1 | Q to R | 28 CY |
| Crushed | 3"-0" | 10" | 2 | S to T | 56 CY |
| TURNAROUNDS: | | | NO. OF T.A. | | |
| Crushed | 3"-0" | 10" | 1 | E to F | 16 CY |
| Crushed | 3"-0" | 10" | 1 | G to H | 16 CY |
| Crushed | 3"-0" | 10" | 1 | I to J | 16 CY |
| Crushed | 3"-0" | 10" | 1 | M to N | 16 CY |
| Crushed | 3"-0" | 10" | 1 | O to P | 16 CY |
| Crushed | 3"-0" | 10" | 1 | Q to R | 16 CY |
| Crushed | 3"-0" | 10" | 1 | S to T | 16 CY |
| Crushed | 3"-0" | 10" | 1 | V to W | 16 CY |

EXHIBIT E

ROAD SURFACING SPECIFICATIONS

| TYPE OF ROCK | SIZE OF ROCK | COMPACTED DEPTH | NO. OF LDGS. | LOCATION | APPROX. TOTAL TRUCK MEASURE VOLUME |
|-------------------|--------------|-----------------|---------------------|----------|------------------------------------|
| LANDINGS: | | | | | |
| Crushed | 3"-0" | 10" | 1 | Point F | 80 CY |
| Crushed | 3"-0" | 10" | 1 | Point H | 80 CY |
| Crushed | 3"-0" | 10" | 1 | Point J | 80 CY |
| Crushed | 3"-0" | 10" | 1 | Point N | 80 CY |
| Crushed | 3"-0" | 10" | 1 | Point P | 80 CY |
| Crushed | 3"-0" | 10" | 1 | Point R | 80 CY |
| Crushed | 3"-0" | 10" | 1 | Point T | 80 CY |
| Crushed | 3"-0" | 10" | 1 | Point W | 80 CY |
| JUNCTIONS: | | | NO. OF JCTS. | | |
| Crushed | 3"-0" | 10" | 1 | Point E | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point G | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point I | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point K | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point L | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point M | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point O | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point Q | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point S | 20 CY |
| Crushed | 3"-0" | 10" | 1 | Point X | 30 CY |

Roads shall be uniformly graded and approved by STATE prior to rocking.

Any additional turnarounds or turnouts crated during any operation associated with this timber sale shall be rocked at PURCHASER's expense and as instructed by STATE.

Turnouts and turnarounds shall be rocked concurrently with the road.

End-dumping of riprap shall not be allowed, unless otherwise approved in writing by STATE.

EXHIBIT E

CRUSHED ROCK SPECIFICATIONS

Materials. The material shall be well graded and consistent.

Quality and Grading Requirements. The stone base materials shall be crushed rock. River gravel shall not be used.

If material is specified as durable, it must meet the following test requirements:

Hardness - Test Method AASHTO T 96: 30% Maximum

Durability - Test Method ODOT TM 208
Passing No. 20 Sieve: 30% Maximum

For the purpose of crushing rock specified under the projects in Section 2610, "Project Work," PURCHASER shall utilize a two-stage rock crusher, or equivalent, unless otherwise approved by STATE.

The rock crusher shall be calibrated to produce rock as specified in Exhibit E. Prior to the commencement of production crushing, PURCHASER shall sample, test, and provide rock test results meeting STATE specifications. STATE may then sample and test crushed rock for approval to proceed. PURCHASER shall take one sample of each 2,000 cubic yards of crushed rock material produced thereafter, using approved AASHTO sampling procedures. PURCHASER shall submit samples to a certified laboratory or shall perform testing for gradation requirements using AASHTO T 11 and AASHTO T 27 testing procedures. Prior to testing, each sample shall be split, making one-half of the sample, with proper identification, available for testing by STATE. Each sample and the results of PURCHASER testing shall be made available to STATE within 24 hours of sampling. Any rock crushed prior to STATE approval to proceed shall not be credited to the required rock quantity. Any subsequent rock tests not meeting STATE specifications shall be reason for rejection of that portion of crushed rock produced after that test and shall not be credited to the required rock quantity. STATE may sample the crushed rock at any time during the operation. Results of STATE's tests shall prevail over all other test results.

| | | | |
|------------------|---------|-----------|---------|
| <u>For 3"-0"</u> | Passing | 3½" sieve | 100% |
| | Passing | 3" sieve | 95-100% |
| | Passing | 1½" sieve | 55-75% |
| | Passing | ¼" sieve | 30-45% |

Of the fraction passing 1/4" sieve, 40% to 60% shall pass the No. 10 sieve.

EXHIBIT E

ROCK ACCOUNTABILITY

The rock shall meet the quality and size specifications in Exhibit E. A sample of the rock shall be supplied to STATE for testing and approval prior to spreading or stockpiling. PURCHASER shall obtain subgrade approval from STATE prior to rocking. Rocking shall be limited to periods when weather conditions are acceptable to STATE and when sediments will not enter streams.

Rock accountability shall be determined by depth measurement. STATE shall be given 24 hours' notice prior to rocking.

Depth Measurement. Surfacing rock shall be spread and compacted according to the depths specified in Exhibit E. Truck measure volumes are given, but shall not limit the amount of rock spread.

Depth shall be determined in the most compacted area of the surface cross section. If additional rock is required because of insufficient depth, it shall be added by truck measure to those areas that were slighted. The conversion from compacted yardage to truck yardage is 1.3 multiplied by the compacted yardage equals truck yardage.

The depth of compacted aggregates shall not vary more than 1 inch from the depth specified in Exhibit E. The average depth for each road segment shall be the specified depth or greater.

Junctions shall have a surfaced area of at least 20 square yards each at the compacted depths specified in Exhibit E.

Turnouts shall have a surfaced area of at least 70 square yards each at the depths shown in Exhibit E.

Turnarounds shall have a surfaced area of at least 44 square yards each at the depths shown in Exhibit E.

Landings shall have a surfaced area of at least 280 square yards each at the depths shown in Exhibit E.

Curve Surfacing. Extra surface width shall be required for the inside of all curves as follows: 400 divided by the radius of the curve equals the amount of extra width to be surfaced at the depths shown in Exhibit E.

EXHIBIT E

COMPACTION AND PROCESSING REQUIREMENTS

Subgrade. Subgrade surfaces of the road segments listed below shall be graded and compacted prior to rocking. Compaction shall be accomplished by traveling all surfaces from shoulder to shoulder until visible deformation ceases, or in the case of a sheepsfoot roller, the roller "walks out." At least 3 passes shall be made over the entire width and length of the road. A pass is defined as traveling a road section in one direction and then back over that same section again. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE:

Subgrade shall be crowned at 4 to 6 percent unless otherwise specified.

| ROAD SEGMENT | COMPACTION EQUIPMENT OPTIONS |
|--------------|------------------------------|
| All Segments | 1 |

Fills. Embankments and fills shall be placed in (approximately) horizontal layers not more than 8 inches in depth. Each layer shall be separately, and thoroughly, compacted. Compaction equipment shall be operated over the entire width of each layer until visible deformation of the layers ceases or, in the case of a sheepsfoot roller, the roller "walks out." At least 3 passes shall be made over the entire width and length of each layer. A pass is defined as traveling a fill layer in one direction and then back over that same layer again.

Placing individual rocks or boulders with more depth than the allowed layer thickness shall be permitted, provided the embankment will accommodate them. Such rocks and boulders shall be at least 6 inches below the subgrade. They shall be carefully distributed and the voids filled with finer material, forming a dense and compacted mass. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE:

| ROAD SEGMENT | COMPACTION EQUIPMENT OPTIONS |
|--------------|------------------------------|
| All Segments | 2 |

Crushed Rock. The rock shall be uniformly mixed and spread in layers on the approved roadbed. Each layer of crushed rock shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted in layers not to exceed 6 inches in depth. When more than 1 layer is required, each shall be shaped and compacted before the succeeding layer is placed. Any irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and adding or removing material until the surface is smooth and uniform. Each layer shall be compacted with a minimum of 3 passes over the entire width and length of the road. A pass is defined as traveling a road section in one direction and then back over that same section again. Compaction shall be accomplished by using the approved equipment listed below or others approved by STATE:

Rock shall be compacted and processed during the same project period it is spread, unless otherwise approved in writing by STATE.

Rock shall be crowned at 4 to 6 percent unless otherwise specified.

| ROAD SEGMENT | COMPACTION EQUIPMENT OPTIONS |
|--------------|------------------------------|
| All Segments | 1 |

EXHIBIT E

COMPACTION EQUIPMENT OPTIONS

- (1) Vibratory Rollers. The drum shall have a smooth surface, a diameter not less than 48 inches, a width not less than 58 inches, and a turning radius of 15 feet or less. Vibration frequency shall be regulated in steps to 1400, 1500, and 1600 VPM, corresponding to engine speeds of 1575, 1690, and 1800 RPM. The centrifugal force developed shall be 7 tons at 1600 VPM. It shall be activated by a power unit of not less than 25 horsepower. The vibratory roller shall be self-propelled and operated at speeds ranging from 0.9 mile to 1.8 miles per hour as directed by STATE.
- (2) Crawler Tractors. D-7 Caterpillar or equivalent or larger.

EXHIBIT F

ROCK PIT DEVELOPMENT AND USE

- (1) PURCHASER shall conduct the Operations relative to the disposal of waste material in such manner that silt, rock, debris, dirt, or clay shall not be washed, conveyed, or otherwise deposited in any stream. All waste shall be deposited at an approved "waste disposal site."
- (2) Where overburden removal limits have not been staked, they shall extend for a distance of at least 20 feet beyond the developed rock source. Overburden and woody debris shall be hauled to a designated waste area. Overburden shall be spread evenly, grass seeded, and compacted at the waste area and woody debris stacked separately. Prior to drilling or rock removal, completion of overburden removal shall be approved in writing by STATE.
- (3) The rock pit floor shall be developed to provide drainage away from the rock pit. Rock pit drainage ditches shall be developed and maintained. Benches shall be constructed at intervals of 40 feet or less in height and shall be a minimum of 20 feet in width. Any gravel or talus slopes shall be left with a working face at an angle of 60 degrees or less. There shall be a minimum of 1 bench with an access road to it. Said bench shall be easily accessible with tractors.
- (4) Blasting shall be accomplished using timing devices, delay charges, low intensity shots, or other suitable means to contain as much material as possible in the rock pit prism.
- (5) Pit face shall be developed in a uniform manner.
- (6) Oversized material that is produced or encountered during development shall be broken down and utilized for crushing.
- (7) PURCHASER shall prepare a written development plan for the pit area. The plan shall be submitted to STATE for approval prior to conducting any operation in the pit area.
The plan shall include, but not be limited to:
 - (a) Location of benches and roads to benches.
 - (b) Disposal site for debris and overburden.
- (8) Upon completion of use, the pit site and access roads shall be left in a condition free from overburden and debris. Rock pit roads shall be waterbarred to provide drainage and blocked as directed by STATE.

EXHIBIT G

CULVERT SPECIFICATIONS

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract. Culverts shall be constructed of corrugated galvanized or aluminized steel. Corrugated polyethylene shall be used for sizes up to 36 inches in diameter. All culverts shall conform to the material and fabricating requirements of the "Standard Specifications for Highway Construction" prepared by the Highway Division of the Oregon State Department of Transportation. Corrugation types and shapes other than those meeting the above minimum Highway requirements, shall be approved in writing by STATE.

Culverts shall be located according to the alignment and grade as shown on the Plan and Profile, and/or as staked in the field, or as stipulated in special instructions.

Culvert grade shall slope away from ditch grade at least 2 percent unless otherwise specified.

Cross drains on road grade in excess of 3 percent shall be skewed at least 30 degrees from perpendicular to the road centerline, except cross-drain culverts at the low point of dips in roads shall not be skewed.

Culverts less than 36 inches in diameter shall be installed with the lock seam on the inlet end placed within 45 degrees of the bottom of the trench.

The foundation and trench walls for all culverts shall be free from logs, stumps, limbs, stones, and other objects which would dent or damage the pipe. The culvert trench shall be excavated 3 pipe diameters wide to permit compaction and working on each side of the pipe. Tamping shall be done in 6-inch lifts, 1 pipe diameter each side of the pipe to 95 percent density or over. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert.

A bedding of granulated material or crushed rock as specified shall be placed to provide a wide band of support and to transmit the load from above evenly over the entire length of the pipe.

Backfill shall consist of granulated material, crushed rock, or job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the pipe.

Transporting of the pipe shall be done carefully. Dragging or allowing free fall from trucks or into trenches shall not be permitted.

Joining shall be done with bands of like material and corrugations. Manufacturers' instructions shall be followed for prefabricated pipe assembly.

Polyethylene joints shall be made with split couplings, corrugated to engage the pipe corrugations, and shall engage a minimum of 4 corrugations, 2 on each side of the pipe joint.

A manufacturer's certification that the product was manufactured, tested, and supplied in accordance with this specification shall be furnished to the Project Engineer upon request.

EXHIBIT G
 CULVERT SPECIFICATIONS

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be as follows: 12" for culverts 18" to 36" and 18" for culverts 42" to 96" (add 6" for roads which will not be rocked). Minimum vertical cover for other designs shall be as specified by STATE.

Lengths of individual culvert sections shall be not less than 10 feet, unless otherwise provided for in special instructions.

The ends of each culvert shall be free of logs and debris which would restrict the free flow of water. The intake end of relief culverts shall be provided with a sediment catching basin 3 feet in diameter at the bottom. The outlet end of any culvert which would allow water to erode embankment soil shall be provided with a half round or other approved slope protection device. Construct lead-off ditches away from culvert outlets where the slope gradients restrict the free flow of water.

Following are the minimum standard gauges for pipe and coupling bands. Some culverts may require different gauges and may be found in the culvert listing.

| Dia. | Steel Pipe Gauge | Band Gauges | Band Widths (") | | Hugger Band Widths (") | |
|--------|------------------|-------------|-----------------|---------|------------------------|---------|
| | | | Annular | Helical | Annular | Helical |
| 12-15 | -- | -- | 7 | 12 | 13 1/8 | 10 1/2 |
| 18-24 | -- | -- | 12 | 12 | 13 1/8 | 10 1/2 |
| 30-36 | -- | -- | 12 | 12 | 13 1/8 | 10 1/2 |
| 42 | 14 | 16 | 12 | 12 | 13 1/8 | 10 1/2 |
| 48 | 14 | 16 | 24 | 24 | 13 1/8 | 10 1/2 |
| 54 | 14 | 16 | 24 | 24 | 13 1/8 | 10 1/2 |
| 60 | 12 | 16 | 24 | 24 | 13 1/8 | 10 1/2 |
| 66-72 | 12 | 16 | 24 | 24 | 13 1/8 | 10 1/2 |
| 78 | 12 | 16 | 24 | 24 | 13 1/8 | 10 1/2 |
| 84 | 12 | 16 | 24 | 24 | 14 3/4 | 10 1/2 |
| 90-120 | 12 | 16 | 26 | 26 | N/A | N/A |

Culverts larger than 60" in diameter shall have 3" x 1" corrugations.

Polyethylene culverts shall be double walled and meet the requirements of AASHTO M-294-901, Type S.

EXHIBIT G
 CULVERT LIST

| CULVERT NO. | DIAMETER (INCHES) | LENGTH (FEET) | ROAD SEGMENT POINT TO POINT | STATION |
|-------------|-------------------|---------------|-----------------------------|---------|
| 1 | 18 | 30 | E to F | 4+00 |
| 2 | 18 | 30 | E to F | 6+40 |
| 3 | 18 | 30 | E to F | 9+50 |
| 4 | 18 | 30 | E to F | 19+75 |
| 5 | 18 | 30 | E to F | 22+80 |
| 6 | 18 | 30 | E to F | 28+60 |
| 7 | 18 | 30 | K to L | 0+00 |
| 8 | 18 | 30 | M to N | 4+50 |
| 9 | 18 | 30 | M to N | 7+00 |
| 10 | 18 | 30 | M to N | 12+75 |
| 11 | 18 | 30 | Q to R | 1+25 |
| 12 | -- | -- | -- | -- |
| 13 | 18 | 30 | U to V | 6+40 |
| 14 | 18 | 30 | U to V | 11+00 |
| 15 | 18 | 30 | U to V | 21+50 |
| 16 | 24 | 30 | U to V | 24+25 |
| 17 | 18 | 40 | U to V | 33+50 |
| 18 | 18 | 34 | U to V | 47+35 |
| 19 | 18 | 40 | X to Y | 0+00 |
| 20 | 18 | 34 | X to Y | 3+50 |
| 21 | 18 | 40 | X to Y | 6+30 |

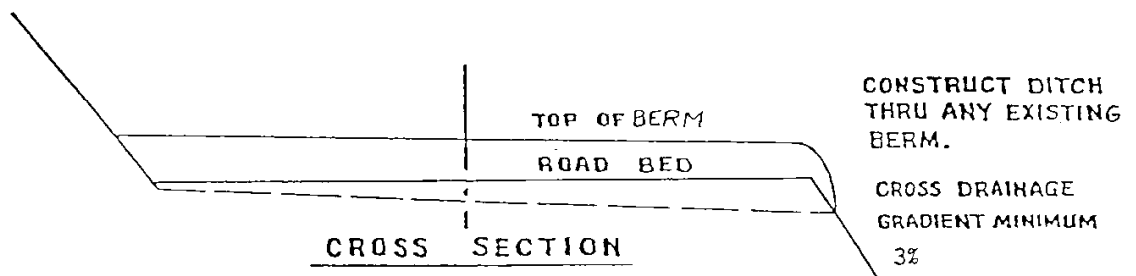
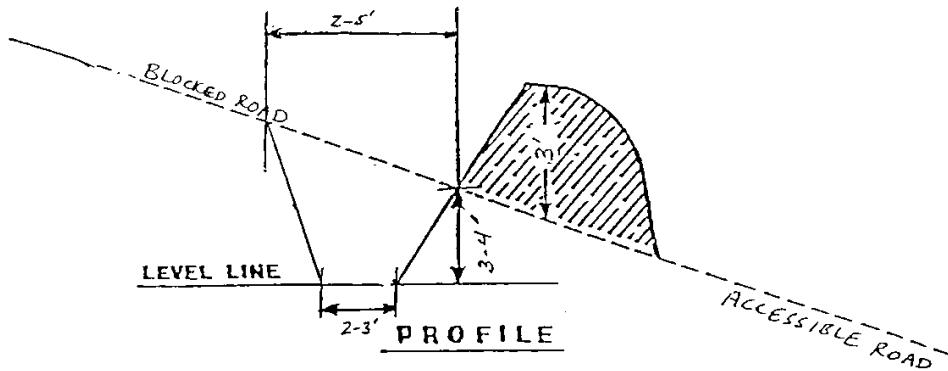
The intake ends of culverts shall be marked by driving or placing steel posts within 6 inches of the downgrade side. Posts shall be painted with a rust-resistant paint and be a minimum of 5 feet long, with the spade driven 2 feet into the ground.

Tamping is required.

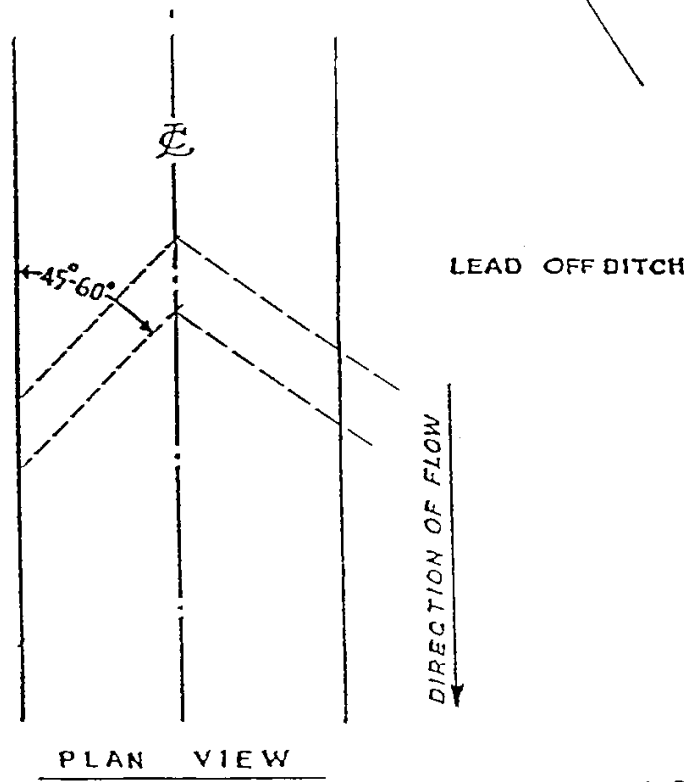
All metal culverts scheduled for replacement shall become property of PURCHASER and be removed from STATE land in the same project period in which replacement occurred.

EXHIBIT H

TANK TRAP SPECIFICATIONS



Tank trap shall be installed in a "V" shape. It should be sloped to drain with a relief ditch through the down slope edge of the road. The trench shall be behind the berm for approaching traffic.



TANK TRAP SPECIFICATIONS

EXHIBIT I

SEEDING AND FERTILIZING

This work shall consist of preparing seedbeds and furnishing and placing required seed and fertilizer.

Seeding Seasons. Seeding shall be performed only from March 1 through June 15 and August 15 through October 31. Seeding materials shall not be applied during windy weather or when the ground is excessively wet or frozen. Areas of disturbed soil shall be seeded by the end of the project period in which work was started. PURCHASER shall notify STATE 24 hours prior to seeding.

Soil Preparation. Areas to be seeded that have been damaged by erosion or other causes shall be restored prior to seeding. All areas to be seeded shall be finished and then cultivated to provide a reasonably firm, but friable seedbed. A minimum of 1/2 inch of surface soil shall be in a loose condition.

Application Methods for Seed and Fertilizer

Dry Method. Mechanical seeders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders, or other approved mechanical seeding equipment shall be used to apply the seed and fertilizer in the amounts and mixtures specified. Hand-operated seeding devices may be used when seed and fertilizer are applied in dry form.

Application Rates for Seed and Fertilizer

Seed listed below shall be applied at the following rates per acre:

| <u>Species</u> | <u>Lb./Acre</u> | <u>Mixture</u> | <u>Pure Live Seed</u> | <u>Poison and/or Repellent</u> |
|--------------------|-----------------|----------------|-----------------------|--------------------------------|
| Highland Bentgrass | 12 | 40% | 98% | 0 |
| Annual Ryegrass | 6 | 20% | 98% | 0 |
| Perennial Ryegrass | 9 | 30% | 98% | 0 |
| White Dutch Clover | 3 | 10% | 98% | 0 |

Fertilizer: Chemical analysis shall be 16-20-0 and shall be applied at the rate of 300 pounds per acre.

EXHIBIT I

MULCHING

This work shall consist of furnishing and placing required mulch. Only areas of disturbed soil within 100 feet of streams are required to have mulch applied. Mulch shall consist of straw that is free of noxious weeds.

Mulching Period. Straw mulch shall be applied within 24 hours of spreading grass seed and fertilizer.

Application Rates for Mulch

Place straw mulch to a reasonably uniform thickness of 1½ to 2½ inches. This rate requires between 2 and 3 tons of dry mulch per acre.

EXHIBIT J

NORTH FORK LOUSIGNONT STREAM ENHANCEMENT INSTRUCTIONS

GENERAL INSTRUCTIONS:

- (a) Work shall be conducted only during periods of low water flows and between July 1 and August 31, annually, unless otherwise approved in writing by STATE. STATE shall be notified a minimum of 48 hours prior to beginning work. STATE has prepared the required FPA "Written Plan" for this work.
- (b) Stream crossings will be limited to those necessary to access the sites and whenever possible equipment will operate from the banks to minimize stream disturbance.
- (c) Turbidity shall not exceed 10% above natural stream turbidities as a result of work. The turbidity may be exceeded for a limited duration (per OAR 340-41-0036), provided all practicable erosion control measures have been implemented. Oil spill response materials will be on site before work begins.
- (d) Trees required for stream enhancement work shall be obtained from sale area, locations along the road, as marked in the field, or at other locations acceptable to STATE. Trees are marked with an orange painted "S."

Trees shall be uprooted, cut to length, and delivered to the project site, as directed by STATE. Trees will be transported by log truck, or other means so that roads are not damaged (i.e. trees cannot be dragged on road surface).

- (e) Access routes will be selected to minimize disturbance to the riparian area, and equipment transporting trees to the sites will take care to avoid damage to existing in-stream logs, riparian or other trees. Trees that are cleared to gain access will be placed in the creek or used to block access trails.
- (f) A minimum 1½ cubic-yard, track-mounted excavator shall be used for all placement. An articulated clamshell bucket is highly recommended.
- (g) All areas of bare or disturbed soils shall be seeded with an approved grass seed mix. Fertilizer shall not be used. All access trails will be thoroughly blocked to prevent access using large woody debris or boulders, water barred, de-compacted, and mulched upon completion, as directed by STATE.

SPECIFIC INSTRUCTIONS:

All instructions as to left or right bank are given looking upstream.

Location Work Description

Site No. 1 Materials: Five trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of five tree tops at least 30 feet long.

Working upstream: Place the root wad end of the first tree downstream of the meander bend with the opposite end angled upstream towards the right bank. Place the small ends of two trees under the existing large log at the meander bend and the root wad ends over the trunk of the first tree. Place the root wad ends of two trees against the left bank and the tops angled onto the right bank. Place the five tree tops between and around the five previously placed trees.

EXHIBIT J

NORTH FORK LOUSIGNONT STREAM ENHANCEMENT INSTRUCTIONS

Site No. 2 Materials: Five trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of five tree tops at least 30 feet long.

Working upstream: Place the root wad end of the first log against the left bank with the top angled downstream into meander bend. Place the root wad end of the second tree against the right bank with top angled onto the left bank. Place the root wad of the third tree in mid-channel with the top against the upstream side of an alder on the right bank. Place the root wad of the fourth tree against the left bank and immediately upstream of the third tree with the top against the upstream side of an alder on the right bank. Place the root of the fifth tree against the right bank with the opposite end on the left bank. Place the five tree tops between and around the five previously placed trees.

Site No. 3 Materials: Five trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of five tree tops at least 30 feet long.

Working Upstream: Wedge the top of one tree into the alders on the left bank with the root wad angled downstream. Place the root wad of the second tree against the left bank with the top wedged into the alders on the right bank. Place the root wad of the third tree against the right bank with the opposite end wedged into alders on left bank. Place the root wad of the fourth tree into the small tributary on the left bank with top angled downstream. Wedge the top of the fifth tree into the alders on the left bank with the root wad placed against the right bank.

Site No. 4 Materials: Five trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of five tree tops at least 30 feet long.

Place the root wad of the first tree against the left bank with the opposite end angled downstream at the bend. Place the root wad of the second tree against the left bank with the opposite end angled downstream and against the first tree. Place the root wad of the third tree against the left bank with the top onto the right bank and against the upstream side of alders. Place the root wad of the fourth and fifth tree against the right bank with opposite ends onto the left bank. Place the five tree tops between and around the five previously placed trees.

Site No. 5 Materials: Four trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of four tree tops at least 30 feet long.

Place the root wad of the first tree against the right bank at the bend with the opposite end extending downstream in mid channel. Place the root wad of the second tree against the existing log on the left bank with the opposite end angled downstream and over the top of the first tree. Place the root wad of the third tree against the same existing log on left bank with the top onto the right bank and between alders. Place the root wad of the fourth tree against the right bank with the top over the existing log and onto the left bank and wedged into the alders. Place the four tree tops between and around the four previously placed trees.

EXHIBIT J

NORTH FORK LOUSIGNONT STREAM ENHANCEMENT INSTRUCTIONS

Site No. 6 Materials: Five trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of five tree tops at least 30 feet long.

Place the root wad of the first log against the left bank with opposite end angled downstream. Place the root wad of the second tree against the right bank with the top angled downstream and over the first log. Place the root wad of the third log against the right bank with the opposite end wedged into alders on left bank. Place the root wad of the fourth log against the left bank immediately upstream of the third log with the opposite end wedged into alders on right bank. Place the root wad of the fifth log against the left bank with the top angled downstream and over the third and fourth logs. Place the five tree tops between and around the five previously placed trees.

Site No. 7 Materials: Three trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of three tree tops at least 30 feet long.

Place the root wad of the first tree in mid-channel with the opposite end wedged into the alders on the left bank. Place the root wad of the second tree against the right bank with opposite end immediately upstream of the first root wad and onto the left bank. Place the root wad of the third tree in mid-channel with the opposite end into small tributary on the right bank. Place the three tree tops between and around the three previously placed trees.

Site No. 8 Materials: Four trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of four tree tops at least 30 feet long.

Place root wad of first tree against right bank with opposite end pointing downstream. Place root wad of second tree against right bank immediately upstream of the first tree with opposite end onto left bank and between alders. Place the root wad of third tree against right bank immediately downstream of existing log with opposite end pointing downstream. Place root wad of fourth tree against trunk of third tree with opposite end onto left bank and into alders.

Site No. 9 Three trees with a DBH of at least 22 inches and at least 50-foot long with attached root wads. The largest diameter portion of three tree tops at least 30 feet long.

Place root wad of first tree against left bank with top onto right bank. Place root wad of second tree against left bank with opposite end into alders on right bank. Place root wad of third tree against right bank immediately upstream of second tree and opposite end into alders on left bank.

State Timber Sale Contract
No. 341-08-60
Eye of the Tiger

EXHIBIT K

SPECIFICATIONS FOR SLASH TREATMENT

Description of Work To Be Done

Operation Area: Area 3 – approximately 50 acres of vine maple pulling, as indicated on Exhibit A.

Slash Treatment: Move or pull brush and/or vine maple Slash to create openings for understory initiation. Spacing may be varied to accommodate stumps, large woody material, rocky areas, etc.

Reserved Material: All trees, Snags, logs, and other Down Wood designated in Sections 2220 through 2250, "Reserved Timber."

Protective Measures: Shall comply with applicable Forest Practice Rules and with the terms of this Contract including, but not limited to, Section 2355, "Ground-Based Operations," and Section 2415, "Protection of Watershed."

Equipment Type, Equipment Operation, and Conduct of Work

The specifications given below are requirements for complying with the terms of this Contract:

Equipment: Shall be a track-mounted machine with a ground-pressure rating of less than 10 PSI and a net horsepower rating of 135 HP or more.

The machine shall be capable of a minimum horizontal reach of 20 feet and a minimum vertical reach of 10 feet.

Operator: Must be experienced in operating similar equipment on forest site preparation Operations, be able to operate the equipment proficiently, and be willing and able to perform the Operations as directed by STATE.

Support: Including transport, other equipment, replacements, supplies, maintenance, and repairs shall be furnished as required to complete work and shall be furnished without cost to STATE, other than as agreed under the terms of this Contract.

Work Scheduling: Work shall be accomplished only during dry weather conditions and started within 14 calendar days after completion of Yarding activities on Area 3. Operations shall provide for continual operation until Contract work is completed, unless interrupted by poor weather, fire closures, or other uncontrollable circumstances. Equipment breakdowns shall be repaired without undue delay, and provision shall be made for replacement of equipment to prevent prolonged delays. Operations shall not be allowed as described in Section 2455, "Seasonal Restrictions," of the Contract, or during any other period when Operations might damage sites or affect stream flows. Any exception to these instructions must be authorized in writing by STATE.

STATE Representative: Designated to provide directions for the conduct of work and to inspect work to determine when Contract requirements have been satisfied.

PART IV: OTHER INFORMATION

State Timber Sale Contract
No. 341-08-60
Eye of the Tiger

Written Plan For Eye of the Tiger Timber Sale; # 341-08-60

Timber Harvest

LEGAL DESCRIPTION: Portions of sections 16, 17, 20, and 21, T03N, R05W, WM, Washington County, Oregon.

PROTECTED RESOURCE: The entire sale area is within the Salmon Anchor Habitat Stream Management Area. Three Type F streams; Lousignont Creek, North Lousignont Creek, and Morgan Creek all flow adjacent to or through the sale area. Several small perennial and seasonal Type N streams are also within and adjacent to the sale.

DESCRIPTION OF THE AREA: North Lousignont Creek runs adjacent to the north sale boundary, South Lousignont Creek runs through Area 4, and Morgan Creek flows through Area 3 of the sale. The vegetation along the streams are conifer and alder mix. The slopes adjacent to the streams range from 10%-60%.

PROTECTION MEASURES: All Type F Streams located within the sale area have been posted with orange 'Riparian Management Zone' flagging and Buffer Zone Signs. No timber will be cut within 100 feet of the Type F aquatic zone. No Timber will be cut within 50 feet of the Perennial Type N aquatic zone. Trees to be thinned shall be directionally felled so that they do not fall or slide into the protected aquatic zone.

A Stream Enhancement project will be completed during the sale for North Lousignont Creek. Work will be limited to the in stream work period between July 1 to August 31.

Ground based yarding equipment shall not be allowed within the RMA.

Cable corridors through the RMA will be spaced at a minimum of 100 foot intervals.

Reviewed by: *Erik Marcy* Date: *11-21-07*
Erik Marcy
Unit Forester

Prepared by Tara Carlson
November 6, 2007