

# PART III: EXHIBITS

State Timber Sale Contract  
No. 341-11-51  
Flying Fish

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.: 341-11-51

(2) Sale Name: Flying Fish

(3) Contract Expiration Date: October 1, 2012

Project Completion Dates: \_\_\_\_\_

(4) Purchaser: \_\_\_\_\_

(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.




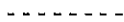


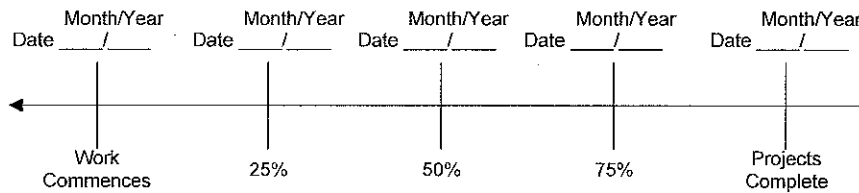
-  Cable Landing, with numbers for sequence.
-  Tractor Landing with alphabetical sequence.
-  Approximate setting boundary.
-  Spur truck roads.
-  Tractor yarding roads.
-  Temporary stream crossings.

EXHIBIT B  
OPERATIONS PLAN

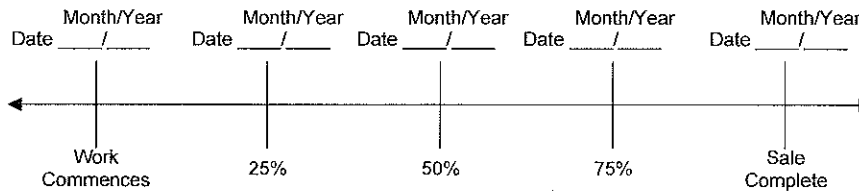
**Completion Timeline**

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 are 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 -- SAWMILL GRADE

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

(1) ORIGINAL REGISTRATION  Date \_\_\_\_\_  
 REVISION NUMBER \_\_\_\_\_  Date \_\_\_\_\_  
 CANCELLATION  Date \_\_\_\_\_

(2) TO: \_\_\_\_\_  
 (Third Party Scaling Organization)

(3) FROM: Coos (07) Phone 541-267-4136  
 (State Forestry District)  
 Address 63612 Fifth Rd. Coos Bay, OR 97420

(4) PURCHASER: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_

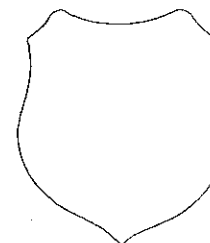
(13) SALE NAME: Flying Fish

COUNTY: Coos

(14) STATE CONTRACT NUMBER: 341-11-51

(15) STATE BRAND REGISTRATION NUMBER \_\_\_\_\_

(16) STATE BRAND INFORMATION (COMPLETE):



(17) PAINT REQUIRED: YES

COLOR: Orange

(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 (19).

(6) WESTSIDE SCALE: YES  NO   
 Use Region 6 actual taper rule. Logs over 40'.

(7) EASTSIDE SCALE:  YES   
 Use Region 6 actual taper rule. Logs over 40'.

(8) Weight Scale Sample  YES   
 (6) - (8), pink log load receipts

(9) Weight Sale  YES

(10) Per Load  YES   
 (9) and (10), yellow log load receipts

(11) APPROVED SCALING LOCATIONS <small>(as shown on the ODF Approved Locations web-site)</small>	Species	Yard	Truck	Weight

(12) NOTICE OF CANCELLATION OF BRAND:  
 Effective 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.

Distribution (See specific instructions on pg.2): ORIGINAL: Salem / COPIES: TPSO, Approved Scaling Location, Purchaser, District, Mgmt. Unit

(18) SPECIAL REQUESTS	(Check applicable)
PEELABLE CULL (all species) .....	<input type="checkbox"/>
<b>NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE</b> .....	<input checked="" type="checkbox"/>
PENCIL BUCK .....	<input type="checkbox"/>
ADD-BACK VOLUME - Deductions due to delay .....	<input checked="" type="checkbox"/>
OTHER:	

(19) REMARKS Measurement by the Load,  
Section 2020 - Log Measurement.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Operator's Name (Optional inclusion by District): \_\_\_\_\_

(20) SIGNATURES:  
 Purchaser or Authorized Representative \_\_\_\_\_ Date \_\_\_\_\_

State Forester Representative \_\_\_\_\_ Date \_\_\_\_\_

State Forester Representative PRINT NAME \_\_\_\_\_

EXHIBIT C— SAWMILL GRADE  
INSTRUCTIONS FOR FORM 343-307 (rev. 01/09)

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (12). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO).
- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number 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 (16) thru (18)), and is required to show existence on the sale. **SUM** (lump sum material). **SUB** (sub-merchantable 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 (Per MBF) entries. Per MBF, SUM, and SUB must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. Per MBF 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, Per MBF and/or subspecies will always be scaled.
- (6) Westside – Region 6 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 -- Region 6 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) Weight Scale Sample – Check box if sale is to be a Weight Scale Sample. All specifics for handling, scaling and processing will be attached or explained in the Remarks section Item (19).
- (9) Weight Sale – Check box if sale is to be sold as a weight sale. Processing procedures from approved locations to TPSO's will be explained in the Remarks section of Item (19).
- (10) Per Load – Check box if volumes on sale are per load. Specific instructions for handling and processing will be fully explained in the Remarks section of Item (19).
- (11) Show scaling locations only applicable to TPSO. Location name should appear as it does on the ODF Approved Scaling Location web site: [http://www.odf.state.or.us/DIVISIONS/management/asset\\_management/ScalingLocation.asp](http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp) Locations with scaling and processing directions specific to their location should be on a separate form. Species should be identified if not capable of receiving "all" species. Check appropriate box for either: yard, truck scale, or weight. Refer to the web site listed above for the locations approval status.
- (12) When logging and hauling is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box in Item (1), and send to TPSO.
- (13) Enter sale name and county.
- (14) Enter sale Contract number.
- (15) Enter Oregon's State Brand Registry Number **(REQUIRED)**.
- (16) Show brand assigned to timber sale. One brand only. 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) in the Remarks section Item (19).
- (17) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (18) Special Requests. These are requests that will be applied to ODF timber sales. All boxes applicable to the timber sales designated in the Exhibit C form must be "marked". If "Other" is indicated, it must contain a description and any necessary comments.
- (19) Use this space to designate any weight conversion factors, per load volumes, weight scale sample instructions or any other explanations to clarify scaling, processing and/or mailing requirements. If additional scaling locations are approved, revise original or current form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (20) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

**Salem Distribution Instructions:** Original will be mailed to Salem after it is electronically scanned and e-mailed directly to the State Forests Program/Asset Management Unit to both Timber Revenue Specialists. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

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+50	Outslope**
14 feet	12 feet*	C to D	0+00 to 8+00	Outslope**
14 feet	12 feet*	D to E	0+00 to 5+20	Outslope**
14 feet	12 feet*	D to F	0+00 to 5+30	Outslope**
14 feet	12 feet	G to H	0+00 to 12+90	Ditch
14 feet	12 feet*	H to I	0+00 to 20+80	Outslope**
14 feet	12 feet*	J to K	0+00 to 11+00	Outslope**

\*Surfaced width only applies if "WINTER AND WET WEATHER OPTION" is chosen.

\*\*Drainage shall be changed to Ditch if "WINTER AND WET WEATHER OPTION" is chosen.

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 "Road Brushing Specifications" in Exhibit G shall apply. 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 CLASSIFICATION.

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 in stable locations through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required. In areas where end-haul is required, clearing and grubbing debris shall be fully contained and hauled to a designated waste area. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees.

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.

Additional information regarding the road construction specifications between points A to B, D to E, D to F and J to K is available at the district office. Excavation shall conform to STATE-specified lines, grades, and dimensions when provided.

Unless otherwise directed, 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.

Suitable excavated material shall be used 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.

Sidecast includes any road generated excess excavation material which is not essential as part of the road prism, is not compacted, and is below the roadway. Sidecast shall not be placed where it will enter a stream course. Leaving sidecast below the road is only permissible if specifically allowed in "Full Bench and End Haul Requirements" in this Exhibit.

All fills shall be machine compacted according to the "Compaction and Processing Requirements" in this Exhibit.

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 specified in the plans or as follows: 400 divided by the radius of the curve equals the amount of extra width.

DRAINAGE

Subgrade. Subgrade shall be outsloped at 4 to 6 percent as shown on the "Forest Road Specifications" table in this Exhibit.

Ditch. Construct "V" shaped ditch 3 feet wide and to a depth of 1 foot below subgrade.

Ditchouts. Construct ditchouts to drain away from subgrade at locations marked in the field or as directed by STATE.

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 apart and as marked in the field.

SLOPES

Solid Rock

Fractured Rock

Soil - side slopes 50% and over

Soil - side slopes less than 50%

Back Slopes

Vertical to ¼ :1

½:1

½:1

½:1

Fill Slopes

1½:1

1½:1

LANDINGS. Landings shall be constructed as posted in the field. Surface is to be outsloped for drainage with general grade no more than 3 percent. Surface as shown in the "Road Surfacing" table in this Exhibit.

TURNAROUNDS. Increase subgrade width an additional 20 feet for a length of 20 feet at locations marked in the field.

SEASONAL WINTERIZATION. All unsurfaced roads or unfinished subgrades shall be waterbarred in accordance with the specifications in Exhibit H, and blocked from vehicular traffic prior to October 15, annually and as directed by STATE.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

- (1) Excavated Materials. Excavated materials shall be utilized for road construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Surplus excavated materials and waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with this Exhibit.
- (2) Controlled Blasting. Controlled blasting techniques shall be utilized for any blasting operations, and shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain material within the road prism.

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

<u>Segment</u>	<u>Work Description:</u>
A to B	Surplus excavated material shall be hauled to the fill areas between Points D to E and D to F. Root wads shall be hauled out of the construction area and up to the waste areas.
D to E	A portion of the endhaul material from the road construction between Points A to B shall be placed in the depression adjacent to the road between STA 0+75 to 2+60 (index pts 3 to 6) (approximately 1200 yards shall be placed here).
D to F	The remaining portion of the endhaul material from the road construction between Points A to B shall be placed in the depression between STA 2+70 to 4+00 (index pts 7 to 9) (approximately 2300 yards). Excavated material not used in the landing construction at Point F shall also be taken to this same waste area.
J to K	A small amount of material may be placed in the saddle between STA 8+25 to 8+85 (index pts 15 to 17). The remaining material excavated shall be hauled to the waste area at Point L. A truck-turnaround may be constructed at STA 7+70 (index pt 14). Root wads shall be hauled out of the construction area and to the waste area at Point L.
Point L	Endhaul waste material shall be placed in this corner and onto the bench below the road, to improve the grade and drainage of the existing corner. Approximately 8000 yards of material shall be hauled here from the road construction between Points J to K.

(WINTER AND WET WEATHER OPTION)

- (3) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete culvert installations, drainage ditches, ditchouts, fill construction, and other specified work prior to the application of surfacing rock.
  - (b) Upon completion of above required work, apply, process, and compact surfacing rock in accordance with specifications in the "Compaction and Processing Requirements" in this Exhibit.



EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) Roadside Brushing. Conduct roadside brushing as specified in Exhibit G.
- (2) Excavated Materials. Excavated materials shall be utilized for road and fill construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with Exhibit D.
- (3) Bank Slough Removal. Dig out all bank slough. Bank slough material may be pulled across any road with no rock surfacing. Material may also be wasted in the roadbed, in order to fill in ruts and smooth the road surface. Bank slough material shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE.

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Segment  
H to I

Work Description:

The approach at Point H shall be improved by leveling out the roadbed and widening the approach into the upper road. Some material from the construction of Points J to K shall be wasted in this road in order to fill in the ruts in the roadbed. The corner at Point L shall be improved as described in the Specific Road Construction Instructions. A small amount of widening (3 -- 4 feet into the cutbank) shall be necessary where the top of the cutbank for the road between Points J to K encroaches into the roadbed. The material removed for the widening shall be spread in the existing roadbed.

(WINTER AND WET WEATHER OPTION)

- (4) Drainage Ditches. Restore or construct ditchlines, including ditchouts, as directed by STATE. Clean out all culvert inlets and outlets for a 10-foot radius. Re-establish or construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels.
- (5) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete culvert installations, drainage ditches, fill reconstruction, ditchouts, and other specified work prior to the application of new surfacing rock.
  - (b) Cut out all potholes and/or washboard sections from the existing surfacing.
  - (c) Apply required patching and leveling rock, as directed by STATE.
  - (d) Process (grade and mix) the existing surface and added base rock. Compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.
  - (e) Upon completion of above required work, apply, process, and compact surfacing rock in accordance to this Exhibit.

EXHIBIT D

FULL BENCH AND END-HAUL REQUIREMENTS

POINT TO POINT	STA. TO STA.	CONTAINMENT – SIDECAST	WASTE AREA LOCATION	WASTE AREA TREATMENT
A to B	0+00 to 9+00	1	1	1, 2
J to K	0+00 to 11+00	1	2	1, 2

Full Bench and End-Haul Areas General Requirements

Sidecast includes any road generated excess excavation material which is not essential as part of the road prism, is not compacted, and is below the roadway. Material shall not be sidecast unless specified above.

When controlled blasting is required, it shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain material within the road prism.

Containment/Sidecast

- (1) Full: No excavated material remains below the road.
- (2) Normal/Incidental: The amount of excavated material lost over the outside edge of the road shall not exceed 1 foot in depth.
- (3) Sidecast: Material shall be spread evenly below the road so that it does not build up behind trees, snags or other debris, and shall not exceed 3 feet in depth.

Any amount of material exceeding the containment requirements shall be removed by whatever means necessary and end-hauled to a designated waste area.

Waste Area Location

- (1) Points D to E, STA 0+75 to 2+60 and Points D to F, STA 2+70 to 4+00.
- (2) Point L.

Waste Area Treatment

- (1) Deposit at waste area, spread evenly, compact, and provide adequate drainage.
- (2) Pile woody debris separate from other waste material.

EXHIBIT D  
 ROAD SURFACING

TYPE OF ROCK	SIZE OF ROCK	AMOUNT	STOCKPILE NAME	LOCATION	APPROX. TOTAL TRUCK MEASURE VOLUME
Hard Crushed Quarry	1 ½" - 0"	1000 CY	Cougar Pass	7000/7700 road junction	1200 CY
Hard Crushed Quarry	1 ½" - 0"	1000 CY	Fish Creek	7000/7400/7500 road junction	1200 CY

ROAD SURFACING - WINTER AND WET WEATHER OPTION

TYPE OF ROCK	SIZE OF ROCK	COMPACTED DEPTH	POINT TO POINT	STATION TO STATION	APPROX. TOTAL TRUCK MEASURE VOLUME
Hard Crushed Quarry	2 ½"-0"	10"	A to B	0+00 to 17+50	1188 CY
Hard Crushed Quarry	2 ½"-0"	10"	C to D	0+00 to 8+00	540 CY
Hard Crushed Quarry	2 ½"-0"	10"	D to E	0+00 to 4+50	306 CY
Hard Crushed Quarry	2 ½"-0"	10"	D to F	0+00 to 4+50	306 CY
Hard Crushed Quarry	2 ½"-0"	3"	G to H	0+00 to 12+90	216 CY
Hard Crushed Quarry	2 ½"-0"	10"	H to I	0+00 to 19+80	1260 CY
Hard Crushed Quarry	2 ½"-0"	10"	J to K	0+00 to 10+00	648 CY
<b>LANDINGS:</b>		<b>YDS PER LANDING</b>	<b>NO. OF LDGS.</b>	<b>POINTS</b>	
Hard Crushed Quarry	Jaw Run	90	5	B, E, F, I, K	450 CY

Volumes includes additional yardage for road junctions, turnouts, turn-arounds and curve-widening.

PURCHASER may substitute a non-spec base rock for a portion of the 2 ½"-0" rock in the "WINTER AND WET WEATHER OPTION", as approved in writing by STATE.

EXHIBIT D

ROCK ACCOUNTABILITY

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 sediment will not enter streams.

Rock accountability shall be determined by the following methods, as directed by STATE. STATE shall be given 24 hours' notice prior to rocking.

Stockpile Measurement. Volume determination for rock stockpiles will be based on measurement by the STATE. Stockpiles shall be shaped for accurate measurement as directed by STATE.

ROCK ACCOUNTABILITY  
(WINTER AND WET WEATHER OPTION)

Depth Measurement. Rock shall be spread and compacted according to the depths specified in Exhibit D. 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. The depth of compacted aggregates shall not vary more than 1 inch from the depth specified in the "Road Surfacing" table in Exhibit D. The average depth for each road segment shall be the specified depth or greater. If additional rock is required because of insufficient depth, the locations and volumes to be added shall be determined by STATE.

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

Moisture Content: Compaction must take place when moisture content of the materials being compacted is favorable for effective compaction as determined by STATE.

Compaction Pass: A pass is defined as traveling a road section forward and then backward over that same section.

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. At least 3 passes shall be made over the entire width and length of each layer.

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 one or more of the approved equipment options listed below:

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
D to E, D to F, Point L	2, 3

COMPACTION AND PROCESSING REQUIREMENTS  
 (WINTER AND WET WEATHER OPTION)

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. At least 3 passes shall be made over the entire width and length of the road. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments that require rock surfacing	1

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 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. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments requiring crushed rock.	1

EXHIBIT D

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 miles to 1.8 miles per hour, as directed by STATE.
- (2) Loaded Dump Trucks. Dump trucks shall be routed over the entire cross section of the road surface. Loaded trucks shall cover all of the subgrade with a minimum of three passes.
- (3) Crawler Tractors. D-7 Caterpillar or equivalent or larger.

EXHIBIT E

CULVERT SPECIFICATIONS  
(WINTER AND WET WEATHER OPTION ONLY)

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract.

Culverts shall be constructed of corrugated double-walled polyethylene.

Polyethylene culverts shall be double-walled and meet the requirements of AASHTO M-294-06, Type S Culvert.

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

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 specified in special instructions.

The STATE Representative shall determine final culvert locations and stake the locations in the field prior to installation.

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

Cross drain culverts shall be installed at a slope steeper than the incoming ditch grade, but not less than 3 percent or greater than 10 percent.

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 culvert. The culvert trench shall be excavated 3 culvert diameters wide to permit compaction and working on each side of the culvert. Tamping shall be done in 6-inch lifts, 1 culvert diameter each side of the culvert. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert.

Backfill shall consist of job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the culvert.

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

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". 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 an energy dissipater, 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.

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

EXHIBIT E  
CULVERT LIST  
(WINTER AND WET WEATHER OPTION ONLY)

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	ROAD SEGMENT POINT TO POINT	STATION
1	18	40	CPP	A to B	0+00
2	18	40	CPP	A to B	As Directed
3	18	40	CPP	A to B	As Directed
4	18	40	CPP	C to D	As Directed
5	18	40	CPP	H to I	As Directed
6	18	40	CPP	H to I	As Directed
7	18	40	CPP	H to I	As Directed
8	18	40	CPP	J to K	As Directed
9	18	40	CPP	J to K	As Directed

CPP = Polyethylene



EXHIBIT F

CRUSHED ROCK SPECIFICATIONS

Materials. The material shall be fragments of rock crushed to the required size. The material shall be free from vegetation and lumps of clay. STATE may require screening and/or rejecting of materials utilized for production of crushed rock for the purpose of removing excess fine material.

Quality and Grading Requirements. The base material shall be rock. River gravel shall not be used. Crushed rock shall meet the grading requirements that follow.

Rock strength: for rock not produced from STATE quarries, the material from which base material is produced or manufactured shall meet the following test requirement for Aggregate Hardness - Test Method AASHTO T 96 35 percent Maximum.

<u>For 1½" minus</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	¾" sieve	50-75%
	Passing	¼" sieve	25-55%
	Passing	No. 10 sieve	10-25%
	Passing	No. 40 sieve	5-15%

The referenced sieve shall have square openings as set forth in AASHTO M 92, Woven Cloth Series. The determinations of size and gradation shall be as set forth in AASHTO T 27.

Control of gradation shall be by visual inspection by STATE.

CRUSHED ROCK SPECIFICATIONS  
(WINTER AND WET WEATHER OPTION)

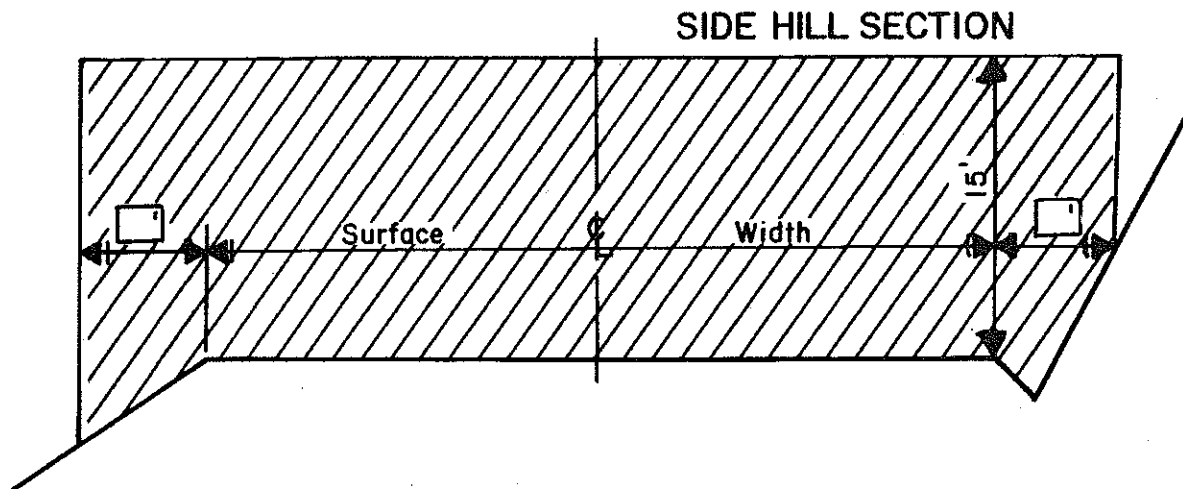
Grading Requirements

<u>For 2½" minus</u>	Passing	3" sieve	100%
	Passing	2½" sieve	90-100%
	Passing	1½" sieve	55-80%
	Passing	¾" sieve	35-55%
	Passing	¼" sieve	15-35%
	Passing	No. 10 sieve	5-15%
<u>For Jaw-Run</u>	Passing	6" sieve	100%
	Passing	3" sieve	45-65%

EXHIBIT G  
ROAD BRUSHING SPECIFICATIONS  
(FOR ROAD IMPROVEMENT ONLY)



Clearing Limits



REQUIREMENTS

The minimum height of clearing shall be 15 feet from the road surface, and the minimum width of clearing on the cutslope sides of the road shall be 5 feet horizontal distance from the shoulder of the road and 5 feet horizontal on the down slope side from the road shoulder. The minimum width of brushing on the cutslope side of the road shall be dictated by the height of the cutslope as indicated in the drawing above. In situations where site distance is an issue brushing heights on the cutslope may vary from the drawing, as directed by STATE.

Brush and trees shall be cut to a maximum height of 6 inches above the ground surface or obstructions such as rocks or existing stumps.

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, water courses, culvert inlets and outlets and sediment catching basins. Debris shall be scattered downslope from the road or placed in other stable locations. Large debris, 6 inches or larger in diameter, shall be cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

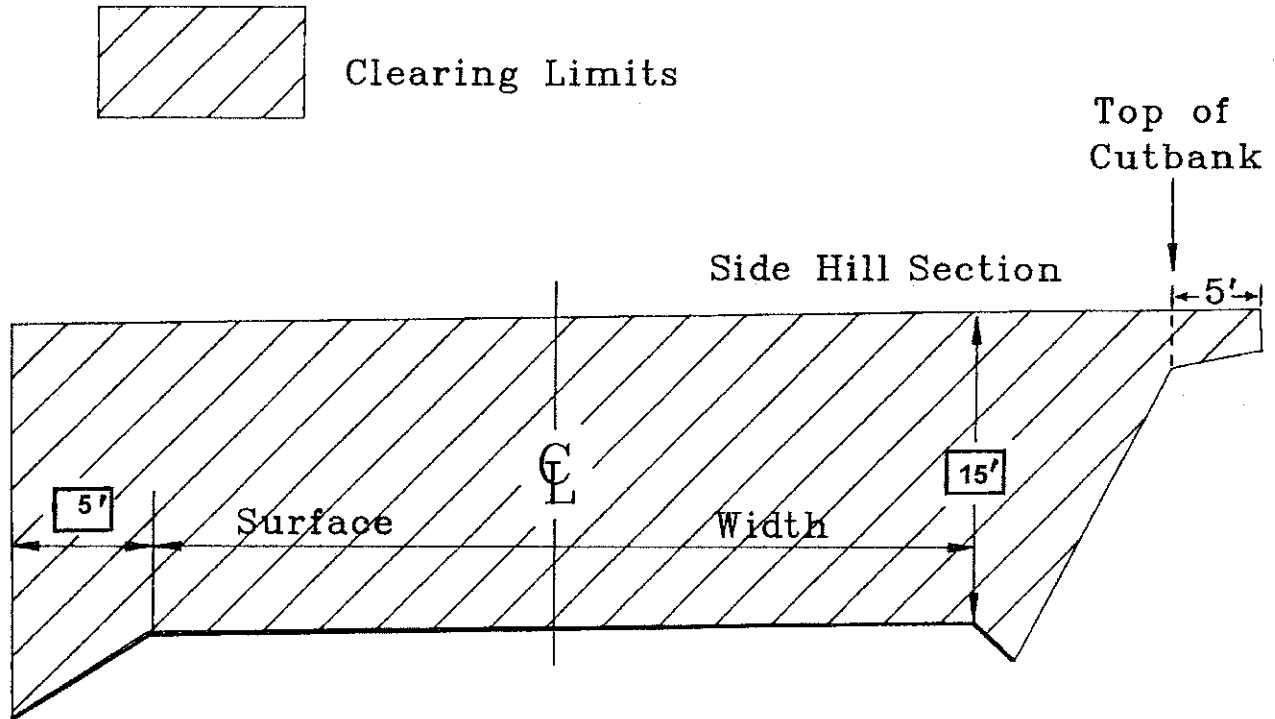
Trees larger than 6 inches in diameter at stump height, located within clearing limits but outside of the ditchline or shoulder, shall not be cut down, but shall be limbed for road visibility. Planted or established conifers, located within brushing limits but outside of the ditchline or shoulder, shall not be cut down, but shall be limbed for road visibility unless otherwise directed by STATE.

Existing debris on the roadway, cutslope, ditchline, or catch basin shall be removed and treated. Debris shall be scattered downslope from the road or placed in other stable locations. Large non-merchantable debris, 6 inches or larger in diameter, shall be cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

Merchantable blown down trees encountered shall be bucked in lengths as directed by STATE, and placed in locations acceptable to STATE, or pushed out of the road prism.

EXHIBIT G

ROAD BRUSHING SPECIFICATIONS  
(FOR ROAD CONSTRUCTION ONLY)



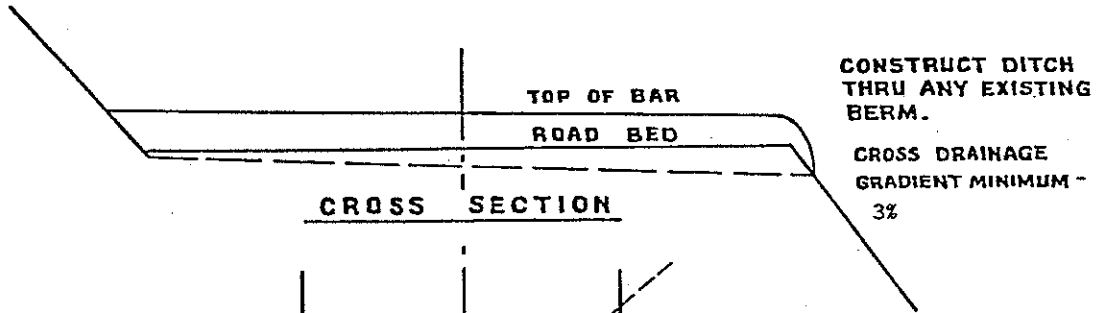
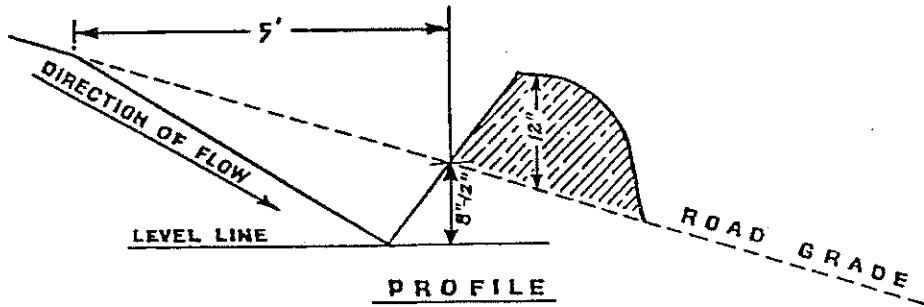
REQUIREMENTS

The minimum height of clearing shall be 15 feet from the road surface. The minimum width of brushing on the cutslope side of the road shall be dictated by the height of the cutslope as indicated in the drawing above.

Brush and trees shall be cut to a maximum height of 6 inches above the ground surface or obstructions such as rocks or existing stumps.

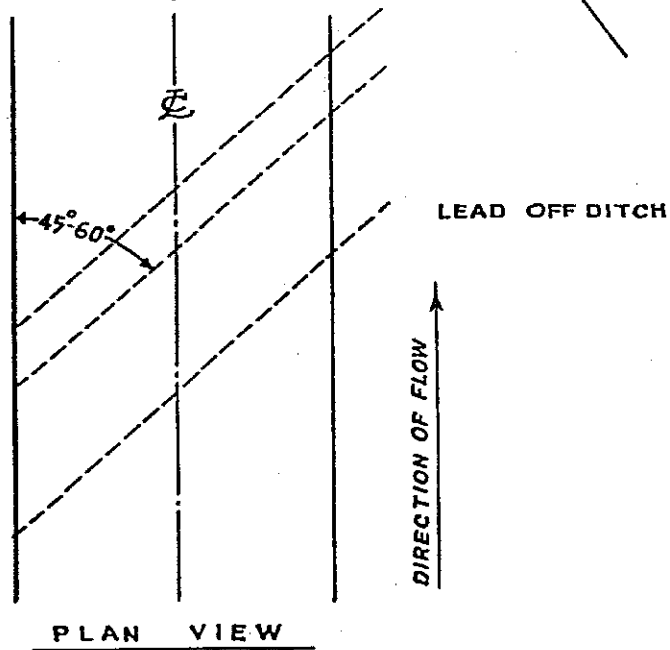
Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, water courses, culvert inlets and outlets and sediment catching basins. Debris shall be scattered downslope from the road or placed in other stable locations. Large debris, 6 inches or larger in diameter, shall be cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

EXHIBIT H  
 WATERBAR SPECIFICATIONS



SPACING OF WATERBARS

ROAD GRADE	DISTANCE
≤ 5%	300'
6-10%	200'
11-15%	100'
16-20% or greater	50'



WATERBAR SPECIFICATIONS  
 FOR CROSS DITCHING #298

EXHIBIT I

SPECIFICATIONS FOR LOG PLACEMENT IN STREAMS

**Tree Selection Criteria:** PURCHASER shall select trees from inside the Timber Sale Area, NOT from reserve timber. Trees will be felled within the timber sale boundary and placed into the main stem of Knife Creek as shown on Exhibit I. Logs will be placed into the stream by way of yarding. Place logs into the active channel where skyline corridors cross the stream reach, to provide for in-stream habitat. These operations shall occur during normal felling and yarding operations. Logs must meet the size specifications below.

**Log Size Specifications:** The Knife Creek stream reach is approximately 2,500 feet in length. A total of 24 logs will be placed into the stream with a minimum small end diameter of 20" and a minimum length of 40', approximately 16.8 MBF in total. PURCHASER may select low quality or deformed standing live trees as a source of logs. Down wood or snags shall not be used as the source for logs.

**Log Placement Specifications:** Logs shall be placed in the stream in groups averaging four logs per group. Groups shall be placed where cable roads cross the stream in the course of normal logging activities and as indicated on the Exhibit I map. The large end of each log shall be placed in the active stream channel. Orientation of logs in the stream shall be determined by the PURCHASER; however, the objective is to place as much of the log within the active channel to provide for in stream habitat.

EXHIBIT I

SPECIFICATIONS FOR FISH LOG STOCKPILE

**Tree Selection Criteria:** PURCHASER shall select trees from within the posted boundary of Area 1. Trees shall be felled, bucked and yarded concurrent with normal felling and yarding operations. Trees shall not be obtained from stream buffers or Green Tree Retention Areas. Fish log volume (54 MBF) has been removed from the cruise. Logs must meet the size specifications below.

**Log Size Specifications:**

Thirty-six (36) logs meeting the following specifications are to be yarded and stockpiled.

<u>Length</u>	<u>Small End Diameter</u>	<u>Number of Logs</u>
60 feet	20"	12
60 feet	22"	12
60 feet	24"	12

PURCHASER may select low quality or deformed standing live trees as a source of logs. Down wood or snags shall not be used as source for fish logs. Logs are to be painted with suitable markings to distinguish them from merchantable logs and decked separately on the landing.

**Log Placement Specifications:** The stockpile site is located at Point E shown on Exhibit A. Logs are to be yarded to Point E and stacked with a log loader. Logs will be stacked directly on the landing. A temporary decking location may be utilized during yarding as approved by the STATE. Upon completion of harvest operations, the spur road shall be blocked at or near Point C as directed by STATE.

# PART IV: OTHER INFORMATION

State Timber Sale Contract  
No. 341-11-51  
Flying Fish

## NOTICE OF TRANSFER OF STATE TIMBER

### Instructions

629:-Form-301-010

Complete Section 1. Mark the box which applies to you/your company in Section 2. Complete Section 3 and obtain signatures.

### SECTION 1

On \_\_\_\_\_, state timber sale purchaser (Transferor)  
\_\_\_\_\_, sold, exchanged or otherwise transferred to  
\_\_\_\_\_, (Transferee) state timber originating from State  
Timber Sale Contract No. \_\_\_\_\_.

Transferee hereby certifies that they:

- (a) Will not export the unprocessed state timber which is the subject of this transaction;
- (b) Will not sell, transfer, exchange or otherwise convey the unprocessed timber which is the subject of this transaction to any other person without first obtaining a like certification from that person.
- (c) Are not prohibited by OAR's 629-31-005 through 045 from purchasing state timber or logs directly from the State Forester, or this is a sale of Western Red Cedar for domestic processing.

### SECTION 2

- Have not exported unprocessed timber originating from private lands in Oregon in the last 24 months.
- This is a sale of hardwood logs for domestic processing.
- This is a sale of Western Red Cedar for domestic processing.
- This is a sale of pulp logs or cull logs processed at domestic pulp mills, domestic chip plants or other domestic operations for the purpose of conversion of the logs into chips.

### SECTION 3

The parties understand that falsely entering into this certification, or failure to comply with the terms of this certification is a violation of the Forest Conservation and Shortage Relief Act of 1990 and OAR Chapter 629, Division 31, and is subject to any and all penalties contained therein.

Transferor:

Transferee:

Signed \_\_\_\_\_

Signed \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

Dated \_\_\_\_\_

Dated \_\_\_\_\_

[Note: For the purpose of this form, the definition of unprocessed timber is the same as in OAR 629-31-005]

Mail To: State Forester  
2600 State Street  
Salem, OR 97310

State Timber Sale Contract  
No. 341-11-51  
Flying Fish

**WRITTEN PLAN**

**SALE NAME:** Flying Fish

**LOCATION:** Sec. 01, T23S, R11W, W.M., Coos County, Oregon and Sec. 06, T23S, R10W, W.M., Coos County, OR

**LANDOWNER:** Oregon Department of Forestry, 63612 Fifth Road, Coos Bay, OR

**CONTRACT PURCHASER:**

**NOTIFICATION NO.:**

**SITUATION AND PROTECTED RESOURCE**

The protected resource is Fish Creek, Knife Creek, and a Type F tributary to Knife Creek.

The protected resource is Fish Creek, Knife Creek, and a Type F tributary to Knife Creek.

**LAYOUT**

Landings have been provided to enable best possible deflection for suspension of logs while yarding the sale area.

**STREAM BUFFER**

A minimum 100 foot horizontal distance no harvest buffer has been posted on the ground.

**FELLING AND BUCKING**

1. Trees shall be directionally felled parallel to or away from stream riparian management areas (RMA's) as feasible.
2. High stumps shall be left as need to minimize accumulation of logs in stream channels.

**YARDING**

1. Operator will use a machine and logging system capable of fully suspending logs through the Type F buffer.
2. Operator will fully suspend logs when sufficient deflection is available.

**OPERATIONS PLAN**

Purchaser shall attach a yarding plan indicating landing locations, machinery, and procedures to be used to obtain adequate suspension in the sale area and to minimize impacts during the felling process.

PREPARED BY: Nick Morris  
State Lands Forester  
September 23, 2010

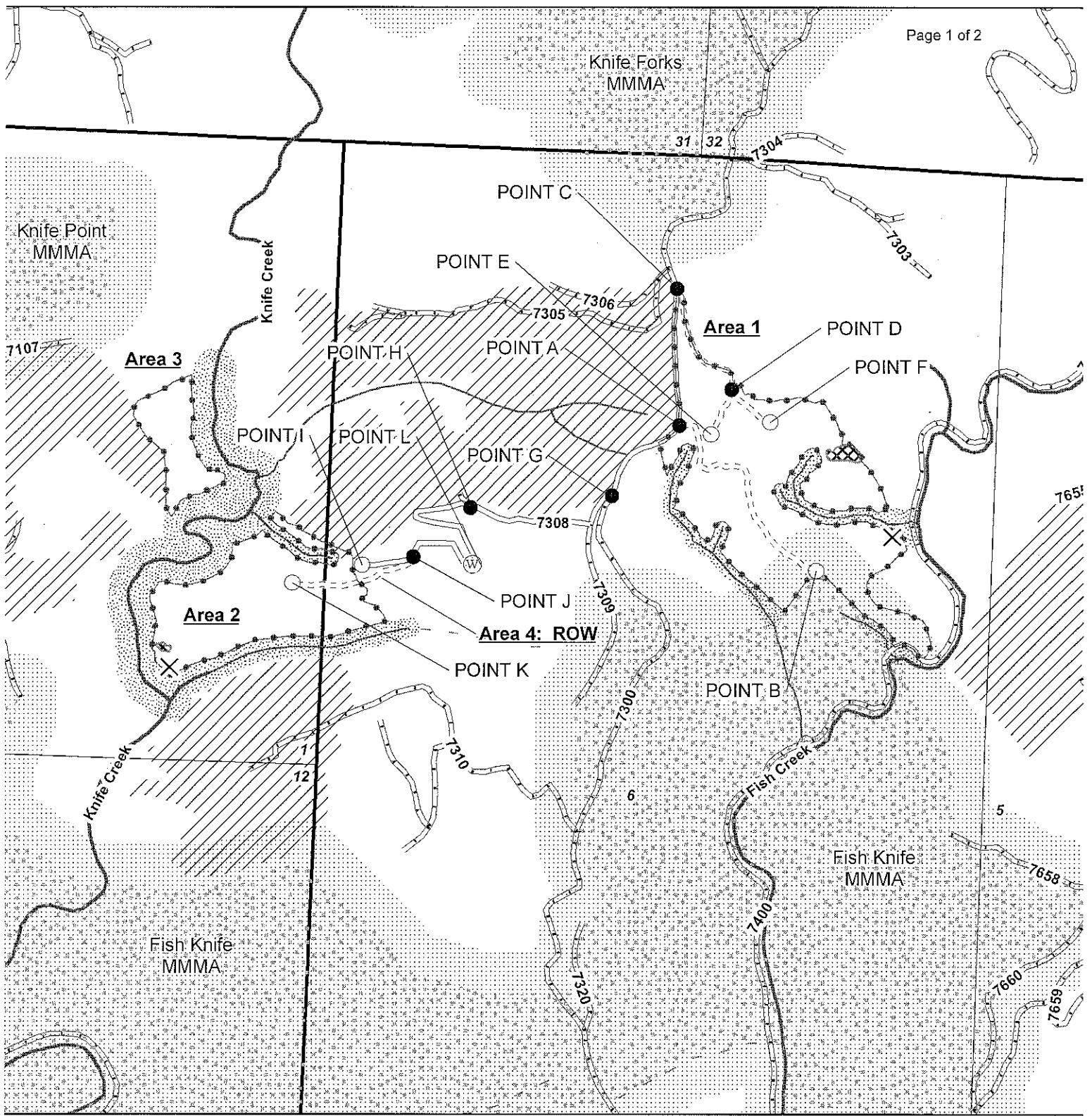
\_\_\_\_\_  
PURCHASER REPRESENTATIVE

DATE:

\_\_\_\_\_  
OPERATOR REPRESENTATIVE (if listed on notification)

DATE:





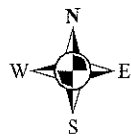
### EXHIBIT 'A'

Flying Fish  
 Timber Sale No. 341-11-51  
 Portions of Section 01, T23S, R11W, W.M. &  
 Portions of Section 06, T23S, R10W, W.M.  
 Coos County, Oregon

UNIT	HARVEST TYPE	NET ACRES
Area 1	CC	45
Area 2	CC	24
Area 3	CC	7
Area 4	ROW	<1
		76



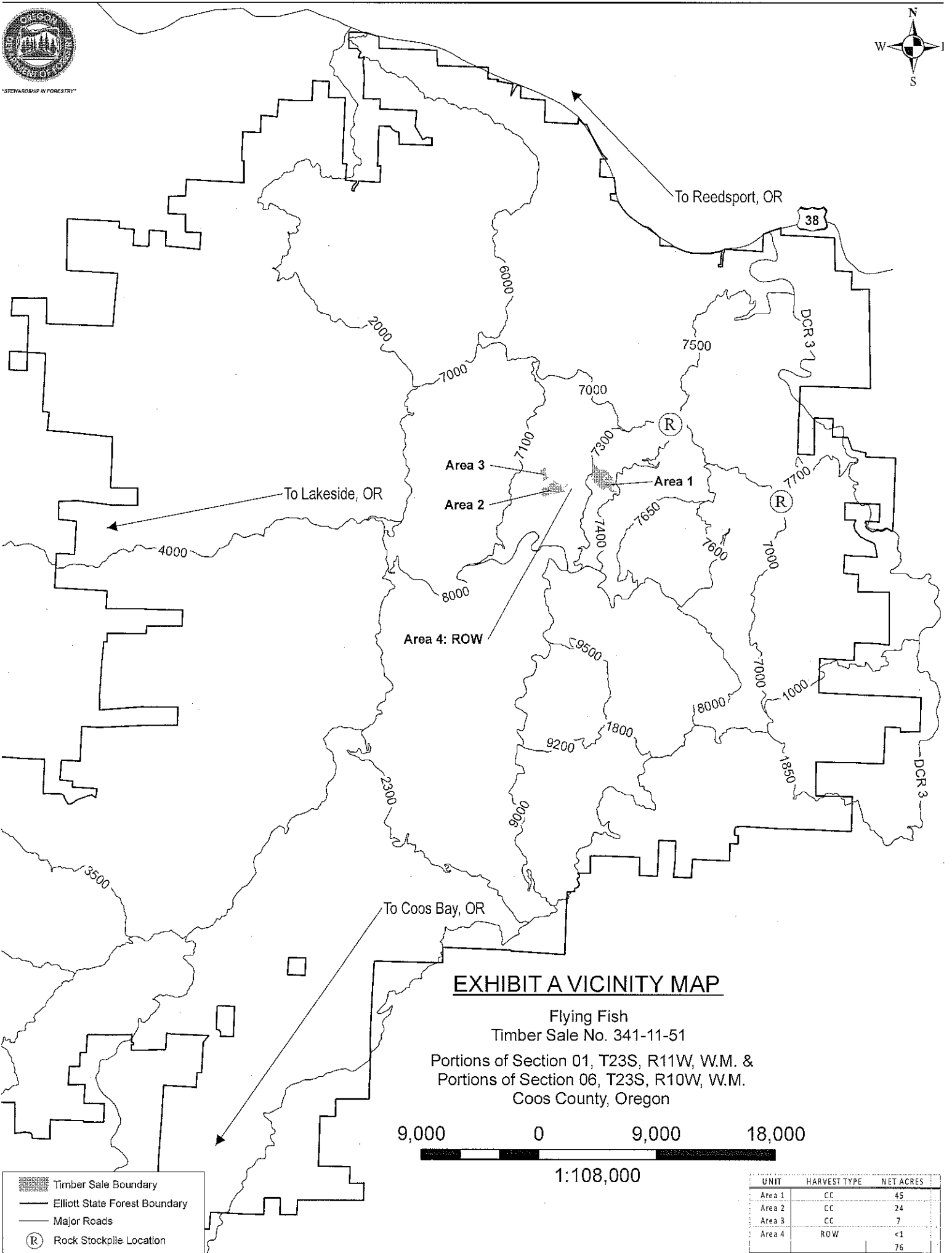
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Timber Sale Boundary	<b>Streams</b>
GTR	Type F Perennial
Single Tree	Type N Perennial
Pod	Type N Seasonal
<b>Project Points</b>	Unclassified
Landing	Stream Buffers
Road Point	Seasonally Restricted Area
Waste Area	Marbled Murrelet Management Area
<b>Roads</b>	Reforestation Area
State Maintained	
Purchaser Maintained	
New Road Construction	

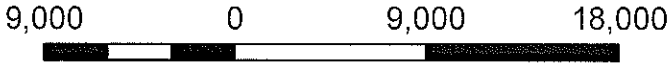


"STEWARDSHIP IN FORESTRY"



### EXHIBIT A VICINITY MAP

Flying Fish  
Timber Sale No. 341-11-51  
Portions of Section 01, T23S, R11W, W.M. &  
Portions of Section 06, T23S, R10W, W.M.  
Coos County, Oregon



1:108,000

- Timber Sale Boundary
- Elliott State Forest Boundary
- Major Roads
- Rock Stockpile Location

UNIT	HARVEST TYPE	NET ACRES
Area 1	CC	45
Area 2	CC	24
Area 3	CC	7
Area 4	ROW	<1
		76

# PART III: EXHIBITS

State Timber Sale Contract  
No. 341-11-51  
Flying Fish

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.: 341-11-51

(2) Sale Name: Flying Fish

(3) Contract Expiration Date: October 1, 2012

Project Completion Dates: \_\_\_\_\_

(4) Purchaser: \_\_\_\_\_

(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.



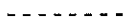
Cable Landing, with numbers for sequence.



Tractor Landing with alphabetical sequence.



Approximate setting boundary.



Spur truck roads.



Tractor yarding roads.



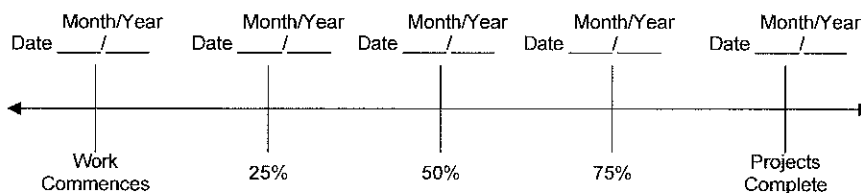
Temporary stream crossings.

EXHIBIT B  
OPERATIONS PLAN

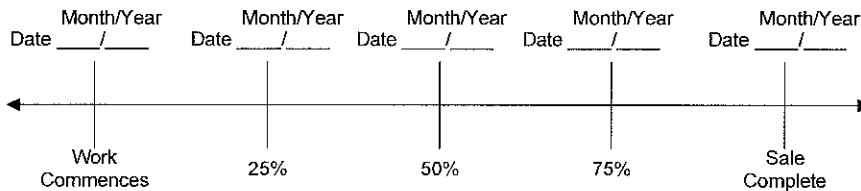
**Completion Timeline**

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 \_\_\_\_\_

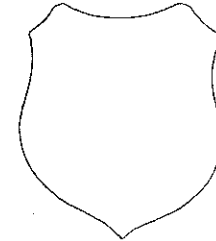
Original: Salem  
cc: District File  
Purchaser

EXHIBIT C – SAWMILL GRADE

SCALING INSTRUCTIONS – LOCATION APPROVAL – BRAND INFORMATION

- (1) ORIGINAL REGISTRATION  Date \_\_\_\_\_  
 REVISION NUMBER \_\_\_\_\_  Date \_\_\_\_\_  
 CANCELLATION  Date \_\_\_\_\_
- (2) TO: \_\_\_\_\_  
 (Third Party Scaling Organization)
- (3) FROM: Coos (07) Phone 541-267-4136  
 (State Forestry District)  
 Address 63612 Fifth Rd. Coos Bay, OR 97420
- (4) PURCHASER: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 Phone Number: \_\_\_\_\_

- (13) SALE NAME: Flying Fish  
 COUNTY: Coos
- (14) STATE CONTRACT NUMBER: 341-11-51
- (15) STATE BRAND REGISTRATION NUMBER \_\_\_\_\_
- (16) STATE BRAND INFORMATION (COMPLETE):



(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 (19).

- (6) WESTSIDE SCALE: YES  NO   
 Use Region 6 actual taper rule. Logs over 40'.
- (7) EASTSIDE SCALE: YES  NO   
 Use Region 6 actual taper rule. Logs over 40'.
- (8) Weight Scale Sample YES  NO   
 (6) – (8), pink log load receipts
- (9) Weight Sale YES  NO
- (10) Per Load YES  NO   
 (9) and (10), yellow log load receipts

- (17) PAINT REQUIRED: YES   
 COLOR: Orange

(18) SPECIAL REQUESTS (Check applicable)

PEELABLE CULL (all species) .....

**NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE** .....

PENCIL BUCK .....

ADD-BACK VOLUME - Deductions due to delay .....

OTHER: \_\_\_\_\_

- (19) REMARKS Measurement by the Load,  
Section 2020 – Log Measurement.  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Operator's Name (Optional inclusion by District): \_\_\_\_\_

(11) APPROVED SCALING LOCATIONS  
 (as shown on the ODF Approved Locations web-site)

Species	Yard	Truck	Weight

- (20) SIGNATURES:
- \_\_\_\_\_  
 Purchaser or Authorized Representative Date
- \_\_\_\_\_  
 State Forester Representative Date
- \_\_\_\_\_  
 State Forester Representative PRINT NAME

- (12) NOTICE OF CANCELLATION OF BRAND:  
 Effective 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- SAWMILL GRADE  
INSTRUCTIONS FOR FORM 343-307 (rev. 01/09)

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (12). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO).
- (3) State District office, address and phone.
- (4) Enter Purchaser's business name, address, and phone number 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 (16) thru (18)), and is required to show existence on the sale. **SUM** (lump sum material). **SUB** (sub-merchantable 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 (Per MBF) entries. Per MBF, SUM, and SUB must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. Per MBF 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, Per MBF and/or subspecies will always be scaled.
- (6) Westside -- Region 6 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 -- Region 6 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) Weight Scale Sample -- Check box if sale is to be a Weight Scale Sample. All specifics for handling, scaling and processing will be attached or explained in the Remarks section Item (19).
- (9) Weight Sale -- Check box if sale is to be sold as a weight sale. Processing procedures from approved locations to TPSO's will be explained in the Remarks section of Item (19).
- (10) Per Load -- Check box if volumes on sale are per load. Specific instructions for handling and processing will be fully explained in the Remarks section of Item (19).
- (11) Show scaling locations only applicable to TPSO. Location name should appear as it does on the ODF Approved Scaling Location web site: [http://www.odf.state.or.us/DIVISIONS/management/asset\\_management/ScalingLocation.asp](http://www.odf.state.or.us/DIVISIONS/management/asset_management/ScalingLocation.asp) Locations with scaling and processing directions specific to their location should be on a separate form. Species should be identified if not capable of receiving "all" species. Check appropriate box for either: yard, truck scale, or weight. Refer to the web site listed above for the locations approval status.
- (12) When logging and hauling is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box in Item (1), and send to TPSO.
- (13) Enter sale name and county.
- (14) Enter sale Contract number.
- (15) Enter Oregon's State Brand Registry Number **(REQUIRED)**.
- (16) Show brand assigned to timber sale. One brand only. 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) in the Remarks section Item (19).
- (17) Check yes for Paint Required and designate "Orange" for color. Non required removal volumes may sometimes require blue paint.
- (18) Special Requests. These are requests that will be applied to ODF timber sales. All boxes applicable to the timber sales designated in the Exhibit C form must be "marked". If "Other" is indicated, it must contain a description and any necessary comments.
- (19) Use this space to designate any weight conversion factors, per load volumes, weight scale sample instructions or any other explanations to clarify scaling, processing and/or mailing requirements. If additional scaling locations are approved, revise original or current form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (20) Require purchaser to sign and date completed form in addition to State Forester Representative, sign and print name on the form.

**Salem Distribution Instructions:** Original will be mailed to Salem after it is electronically scanned and e-mailed directly to the State Forests Program/Asset Management Unit to both Timber Revenue Specialists. Scaling instructions for each brand should be scanned separately, for each approved TPSO.

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+50	Outslope**
14 feet	12 feet*	C to D	0+00 to 8+00	Outslope**
14 feet	12 feet*	D to E	0+00 to 5+20	Outslope**
14 feet	12 feet*	D to F	0+00 to 5+30	Outslope**
14 feet	12 feet	G to H	0+00 to 12+90	Ditch
14 feet	12 feet*	H to I	0+00 to 20+80	Outslope**
14 feet	12 feet*	J to K	0+00 to 11+00	Outslope**

\*Surfaced width only applies if "WINTER AND WET WEATHER OPTION" is chosen.

\*\*Drainage shall be changed to Ditch if "WINTER AND WET WEATHER OPTION" is chosen.

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 "Road Brushing Specifications" in Exhibit G shall apply. 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 CLASSIFICATION.

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 in stable locations through openings in the timber outside of the cleared right-of-way, except areas where end-haul is required. In areas where end-haul is required, clearing and grubbing debris shall be fully contained and hauled to a designated waste area. Clearing and grubbing debris shall be left in a stable location, and not left lodged against standing trees.



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.

Additional information regarding the road construction specifications between points A to B, D to E, D to F and J to K is available at the district office. Excavation shall conform to STATE-specified lines, grades, and dimensions when provided.

Unless otherwise directed, 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.

Suitable excavated material shall be used 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.

Sidecast includes any road generated excess excavation material which is not essential as part of the road prism, is not compacted, and is below the roadway. Sidecast shall not be placed where it will enter a stream course. Leaving sidecast below the road is only permissible if specifically allowed in "Full Bench and End Haul Requirements" in this Exhibit.

All fills shall be machine compacted according to the "Compaction and Processing Requirements" in this Exhibit.

**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 specified in the plans or as follows: 400 divided by the radius of the curve equals the amount of extra width.

**DRAINAGE**

**Subgrade.** Subgrade shall be outsloped at 4 to 6 percent as shown on the "Forest Road Specifications" table in this Exhibit.

**Ditch.** Construct "V" shaped ditch 3 feet wide and to a depth of 1 foot below subgrade.

**Ditchouts.** Construct ditchouts to drain away from subgrade at locations marked in the field or as directed by STATE.

**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 apart and as marked in the field.

<u>SLOPES</u>	<u>Back Slopes</u>	<u>Fill Slopes</u>
Solid Rock	Vertical to ¼:1	
Fractured Rock	½:1	
Soil - side slopes 50% and over	½:1	1½:1
Soil - side slopes less than 50%	½:1	1½:1

**LANDINGS.** Landings shall be constructed as posted in the field. Surface is to be outsloped for drainage with general grade no more than 3 percent. Surface as shown in the "Road Surfacing" table in this Exhibit.

**TURNAROUNDS.** Increase subgrade width an additional 20 feet for a length of 20 feet at locations marked in the field.

**SEASONAL WINTERIZATION.** All unsurfaced roads or unfinished subgrades shall be waterbarred in accordance with the specifications in Exhibit H, and blocked from vehicular traffic prior to October 15, annually and as directed by STATE.

EXHIBIT D  
FOREST ROAD SPECIFICATIONS

GENERAL ROAD CONSTRUCTION INSTRUCTIONS:

- (1) Excavated Materials. Excavated materials shall be utilized for road construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Surplus excavated materials and waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with this Exhibit.
- (2) Controlled Blasting. Controlled blasting techniques shall be utilized for any blasting operations, and shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain material within the road prism.

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

<u>Segment</u>	<u>Work Description:</u>
A to B	Surplus excavated material shall be hauled to the fill areas between Points D to E and D to F. Root wads shall be hauled out of the construction area and up to the waste areas.
D to E	A portion of the endhaul material from the road construction between Points A to B shall be placed in the depression adjacent to the road between STA 0+75 to 2+60 (index pts 3 to 6) (approximately 1200 yards shall be placed here).
D to F	The remaining portion of the endhaul material from the road construction between Points A to B shall be placed in the depression between STA 2+70 to 4+00 (index pts 7 to 9) (approximately 2300 yards). Excavated material not used in the landing construction at Point F shall also be taken to this same waste area.
J to K	A small amount of material may be placed in the saddle between STA 8+25 to 8+85 (index pts 15 to 17). The remaining material excavated shall be hauled to the waste area at Point L. A truck-turnaround may be constructed at STA 7+70 (index pt 14). Root wads shall be hauled out of the construction area and to the waste area at Point L.
Point L	Endhaul waste material shall be placed in this corner and onto the bench below the road, to improve the grade and drainage of the existing corner. Approximately 8000 yards of material shall be hauled here from the road construction between Points J to K.

(WINTER AND WET WEATHER OPTION)

- (3) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete culvert installations, drainage ditches, ditchouts, fill construction, and other specified work prior to the application of surfacing rock.
  - (b) Upon completion of above required work, apply, process, and compact surfacing rock in accordance with specifications in the "Compaction and Processing Requirements" in this Exhibit.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

- (1) Roadside Brushing. Conduct roadside brushing as specified in Exhibit G.
- (2) Excavated Materials. Excavated materials shall be utilized for road and fill construction and hauled in where necessary. Surplus excavation materials shall be hauled to the waste areas as marked in the field and/or designated on Exhibit A. Waste materials shall be sloped and compacted for drainage. Fills shall be thoroughly compacted in accordance with Exhibit D.
- (3) Bank Slough Removal. Dig out all bank slough. Bank slough material may be pulled across any road with no rock surfacing. Material may also be wasted in the roadbed, in order to fill in ruts and smooth the road surface. Bank slough material shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE.

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

Segment  
H to I

Work Description:

The approach at Point H shall be improved by leveling out the roadbed and widening the approach into the upper road. Some material from the construction of Points J to K shall be wasted in this road in order to fill in the ruts in the roadbed. The corner at Point L shall be improved as described in the Specific Road Construction Instructions. A small amount of widening (3 – 4 feet into the cutbank) shall be necessary where the top of the cutbank for the road between Points J to K encroaches into the roadbed. The material removed for the widening shall be spread in the existing roadbed.

(WINTER AND WET WEATHER OPTION)

- (4) Drainage Ditches. Restore or construct ditchlines, including ditchouts, as directed by STATE. Clean out all culvert inlets and outlets for a 10-foot radius. Re-establish or construct culvert sediment basins. Waste materials from drainage ditches and sediment basins shall not be pulled across existing surfacing rock, but shall be placed in nearby waste areas and uniformly sloped and compacted for drainage, as directed by STATE. Damaged culvert inlets and/or outlets shall be repaired by opening them with a hydraulic jack, or cutting off the culvert end to allow for free passage of water at peak flow levels.
- (5) Subgrade Preparation and Application of Surfacing Rock.
  - (a) Complete culvert installations, drainage ditches, fill reconstruction, ditchouts, and other specified work prior to the application of new surfacing rock.
  - (b) Cut out all potholes and/or washboard sections from the existing surfacing.
  - (c) Apply required patching and leveling rock, as directed by STATE.
  - (d) Process (grade and mix) the existing surface and added base rock. Compact in accordance to the "Compaction and Processing Requirements" in this Exhibit.
  - (e) Upon completion of above required work, apply, process, and compact surfacing rock in accordance to this Exhibit.

EXHIBIT D  
FULL BENCH AND END-HAUL REQUIREMENTS

POINT TO POINT	STA. TO STA.	CONTAINMENT – SIDECAST	WASTE AREA LOCATION	WASTE AREA TREATMENT
A to B	0+00 to 9+00	1	1	1, 2
J to K	0+00 to 11+00	1	2	1, 2

Full Bench and End-Haul Areas General Requirements

Sidecast includes any road generated excess excavation material which is not essential as part of the road prism, is not compacted, and is below the roadway. Material shall not be sidecast unless specified above.

When controlled blasting is required, it shall be accomplished using timing devices, delayed charges, low intensity shots, or other suitable means to contain material within the road prism.

Containment/Sidecast

- (1) Full: No excavated material remains below the road.
- (2) Normal/Incidental: The amount of excavated material lost over the outside edge of the road shall not exceed 1 foot in depth.
- (3) Sidecast: Material shall be spread evenly below the road so that it does not build up behind trees, snags or other debris, and shall not exceed 3 feet in depth.

Any amount of material exceeding the containment requirements shall be removed by whatever means necessary and end-hauled to a designated waste area.

Waste Area Location

- (1) Points D to E, STA 0+75 to 2+60 and Points D to F, STA 2+70 to 4+00.
- (2) Point L.

Waste Area Treatment

- (1) Deposit at waste area, spread evenly, compact, and provide adequate drainage.
- (2) Pile woody debris separate from other waste material.

EXHIBIT D  
 ROAD SURFACING

TYPE OF ROCK	SIZE OF ROCK	AMOUNT	STOCKPILE NAME	LOCATION	APPROX. TOTAL TRUCK MEASURE VOLUME
Hard Crushed Quarry	1 ½" - 0"	1000 CY	Cougar Pass	7000/7700 road junction	1200 CY
Hard Crushed Quarry	1 ½" - 0"	1000 CY	Fish Creek	7000/7400/7500 road junction	1200 CY

ROAD SURFACING - WINTER AND WET WEATHER OPTION

TYPE OF ROCK	SIZE OF ROCK	COMPACTED DEPTH	POINT TO POINT	STATION TO STATION	APPROX. TOTAL TRUCK MEASURE VOLUME
Hard Crushed Quarry	2 ½"-0"	10"	A to B	0+00 to 17+50	1188 CY
Hard Crushed Quarry	2 ½"-0"	10"	C to D	0+00 to 8+00	540 CY
Hard Crushed Quarry	2 ½"-0"	10"	D to E	0+00 to 4+50	306 CY
Hard Crushed Quarry	2 ½"-0"	10"	D to F	0+00 to 4+50	306 CY
Hard Crushed Quarry	2 ½"-0"	3"	G to H	0+00 to 12+90	216 CY
Hard Crushed Quarry	2 ½"-0"	10"	H to I	0+00 to 19+80	1260 CY
Hard Crushed Quarry	2 ½"-0"	10"	J to K	0+00 to 10+00	648 CY
LANDINGS:		YDS PER LANDING	NO. OF LDGS.	POINTS	
Hard Crushed Quarry	Jaw Run	90	5	B, E, F, I, K	450 CY

Volumes includes additional yardage for road junctions, turnouts, turn-arounds and curve-widening.

PURCHASER may substitute a non-spec base rock for a portion of the 2 ½"-0" rock in the "WINTER AND WET WEATHER OPTION", as approved in writing by STATE.

EXHIBIT D

ROCK ACCOUNTABILITY

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 sediment will not enter streams.

Rock accountability shall be determined by the following methods, as directed by STATE. STATE shall be given 24 hours' notice prior to rocking.

Stockpile Measurement. Volume determination for rock stockpiles will be based on measurement by the STATE. Stockpiles shall be shaped for accurate measurement as directed by STATE.

ROCK ACCOUNTABILITY  
(WINTER AND WET WEATHER OPTION)

Depth Measurement. Rock shall be spread and compacted according to the depths specified in Exhibit D. 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. The depth of compacted aggregates shall not vary more than 1 inch from the depth specified in the "Road Surfacing" table in Exhibit D. The average depth for each road segment shall be the specified depth or greater. If additional rock is required because of insufficient depth, the locations and volumes to be added shall be determined by STATE.

EXHIBIT D

COMPACTION AND PROCESSING REQUIREMENTS

Moisture Content: Compaction must take place when moisture content of the materials being compacted is favorable for effective compaction as determined by STATE.

Compaction Pass: A pass is defined as traveling a road section forward and then backward over that same section.

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. At least 3 passes shall be made over the entire width and length of each layer.

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 one or more of the approved equipment options listed below:

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
D to E, D to F, Point L	2, 3

COMPACTION AND PROCESSING REQUIREMENTS  
 (WINTER AND WET WEATHER OPTION)

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. At least 3 passes shall be made over the entire width and length of the road. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments that require rock surfacing	1

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 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. Compaction shall be accomplished by using one or more of the approved equipment options listed below:

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments requiring crushed rock.	1

EXHIBIT D

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 miles to 1.8 miles per hour, as directed by STATE.
- (2) Loaded Dump Trucks. Dump trucks shall be routed over the entire cross section of the road surface. Loaded trucks shall cover all of the subgrade with a minimum of three passes.
- (3) Crawler Tractors. D-7 Caterpillar or equivalent or larger.



EXHIBIT E

CULVERT SPECIFICATIONS  
(WINTER AND WET WEATHER OPTION ONLY)

All culvert materials shall be furnished and installed by PURCHASER, unless otherwise specified in the Contract.

Culverts shall be constructed of corrugated double-walled polyethylene.

Polyethylene culverts shall be double-walled and meet the requirements of AASHTO M-294-06, Type S Culvert.

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

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 specified in special instructions.

The STATE Representative shall determine final culvert locations and stake the locations in the field prior to installation.

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

Cross drain culverts shall be installed at a slope steeper than the incoming ditch grade, but not less than 3 percent or greater than 10 percent.

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 culvert. The culvert trench shall be excavated 3 culvert diameters wide to permit compaction and working on each side of the culvert. Tamping shall be done in 6-inch lifts, 1 culvert diameter each side of the culvert. Bedrock shall be excavated as required to provide a uniform foundation for the full length of the culvert.

Backfill shall consist of job-excavated soil free of stumps, limbs, rocks, or other objects which would damage the culvert.

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

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". 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 an energy dissipater, 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.

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

EXHIBIT E  
CULVERT LIST  
(WINTER AND WET WEATHER OPTION ONLY)

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	ROAD SEGMENT POINT TO POINT	STATION
1	18	40	CPP	A to B	0+00
2	18	40	CPP	A to B	As Directed
3	18	40	CPP	A to B	As Directed
4	18	40	CPP	C to D	As Directed
5	18	40	CPP	H to I	As Directed
6	18	40	CPP	H to I	As Directed
7	18	40	CPP	H to I	As Directed
8	18	40	CPP	J to K	As Directed
9	18	40	CPP	J to K	As Directed

CPP = Polyethylene

EXHIBIT F

CRUSHED ROCK SPECIFICATIONS

Materials. The material shall be fragments of rock crushed to the required size. The material shall be free from vegetation and lumps of clay. STATE may require screening and/or rejecting of materials utilized for production of crushed rock for the purpose of removing excess fine material.

Quality and Grading Requirements. The base material shall be rock. River gravel shall not be used. Crushed rock shall meet the grading requirements that follow.

Rock strength: for rock not produced from STATE quarries, the material from which base material is produced or manufactured shall meet the following test requirement for Aggregate Hardness - Test Method AASHTO T 96 35 percent Maximum.

<u>For 1½" minus</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	¾" sieve	50-75%
	Passing	¼" sieve	25-55%
	Passing	No. 10 sieve	10-25%
	Passing	No. 40 sieve	5-15%

The referenced sieve shall have square openings as set forth in AASHTO M 92, Woven Cloth Series. The determinations of size and gradation shall be as set forth in AASHTO T 27.

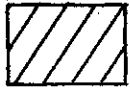
Control of gradation shall be by visual inspection by STATE.

CRUSHED ROCK SPECIFICATIONS  
 (WINTER AND WET WEATHER OPTION)

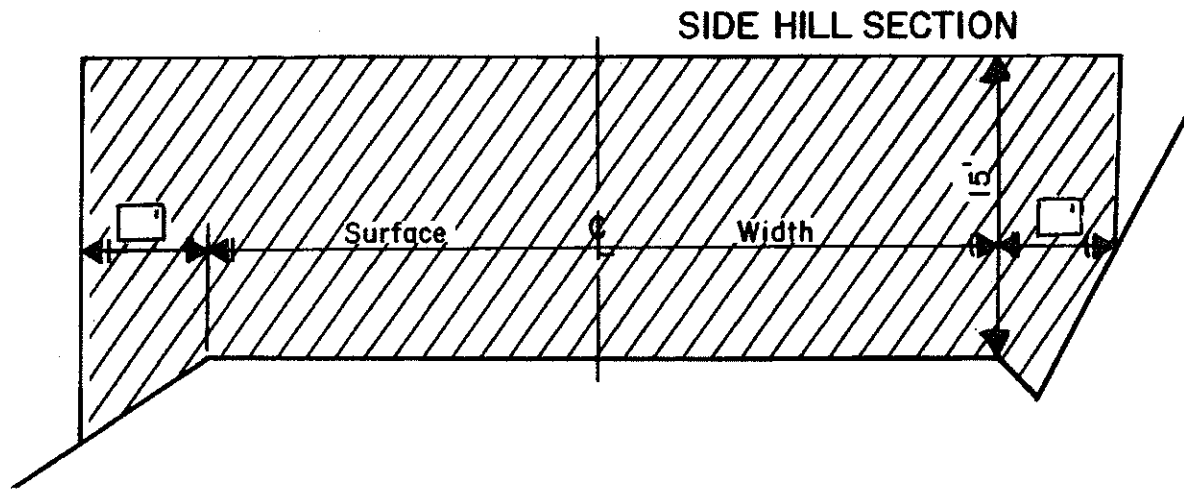
Grading Requirements

<u>For 2½" minus</u>	Passing	3" sieve	100%
	Passing	2½" sieve	90-100%
	Passing	1½" sieve	55-80%
	Passing	¾" sieve	35-55%
	Passing	¼" sieve	15-35%
	Passing	No. 10 sieve	5-15%
<u>For Jaw-Run</u>	Passing	6" sieve	100%
	Passing	3" sieve	45-65%

EXHIBIT G  
ROAD BRUSHING SPECIFICATIONS  
(FOR ROAD IMPROVEMENT ONLY)



Clearing Limits



REQUIREMENTS

The minimum height of clearing shall be 15 feet from the road surface, and the minimum width of clearing on the outslope sides of the road shall be 5 feet horizontal distance from the shoulder of the road and 5 feet horizontal on the down slope side from the road shoulder. The minimum width of brushing on the outslope side of the road shall be dictated by the height of the outslope as indicated in the drawing above. In situations where site distance is an issue brushing heights on the outslope may vary from the drawing, as directed by STATE.

Brush and trees shall be cut to a maximum height of 6 inches above the ground surface or obstructions such as rocks or existing stumps.

Debris resulting from the brushing operation shall be removed from the roadway, outslope, ditches, water courses, culvert inlets and outlets and sediment catching basins. Debris shall be scattered downslope from the road or placed in other stable locations. Large debris, 6 inches or larger in diameter, shall be cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

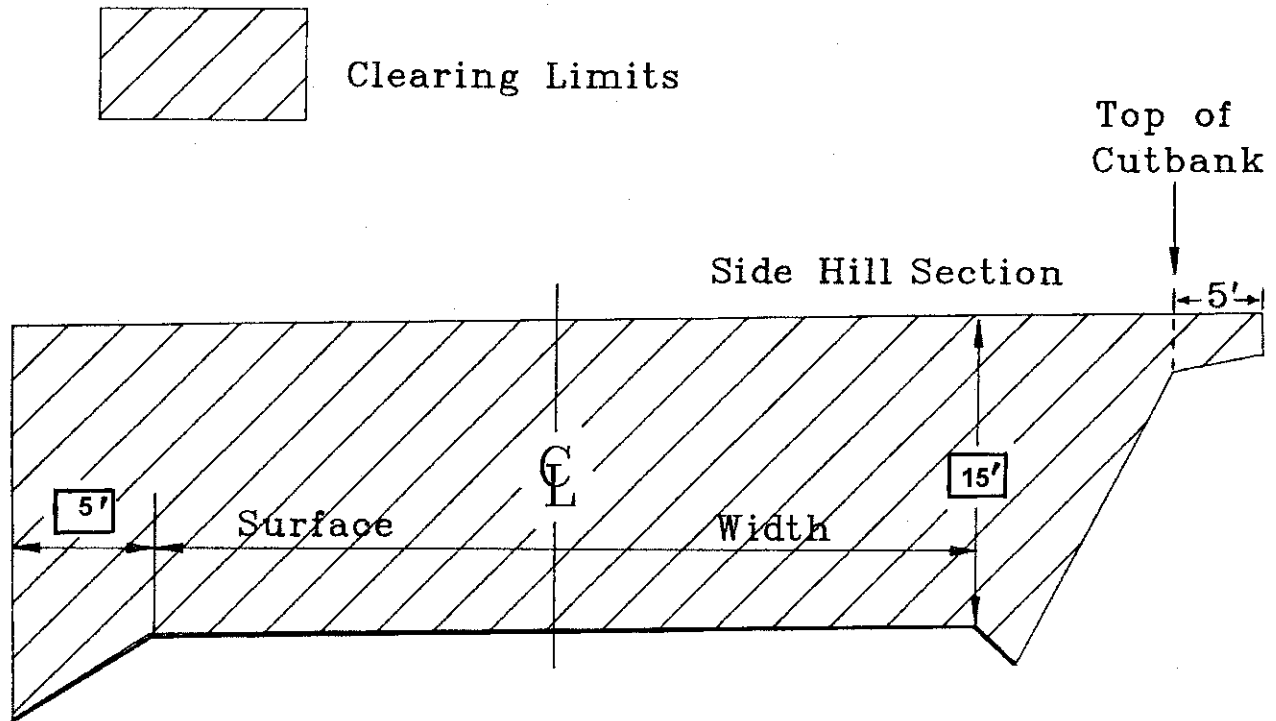
Trees larger than 6 inches in diameter at stump height, located within clearing limits but outside of the ditchline or shoulder, shall not be cut down, but shall be limbed for road visibility. Planted or established conifers, located within brushing limits but outside of the ditchline or shoulder, shall not be cut down, but shall be limbed for road visibility unless otherwise directed by STATE.

Existing debris on the roadway, outslope, ditchline, or catch basin shall be removed and treated. Debris shall be scattered downslope from the road or placed in other stable locations. Large non-merchantable debris, 6 inches or larger in diameter, shall be cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

Merchantable blown down trees encountered shall be bucked in lengths as directed by STATE, and placed in locations acceptable to STATE, or pushed out of the road prism.

EXHIBIT G

ROAD BRUSHING SPECIFICATIONS  
(FOR ROAD CONSTRUCTION ONLY)



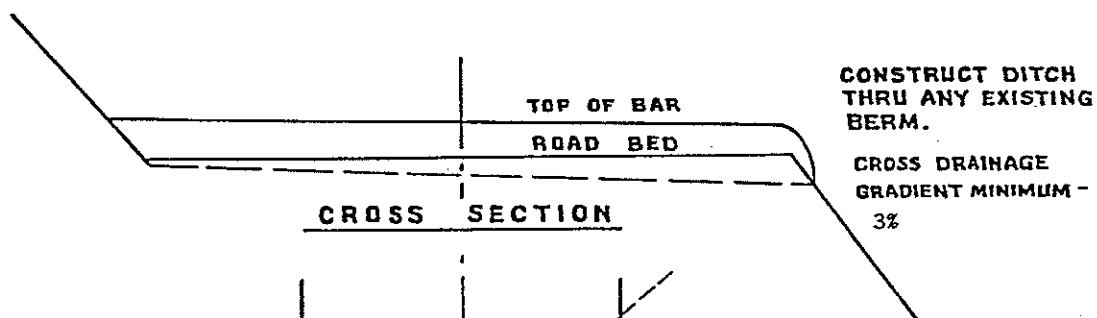
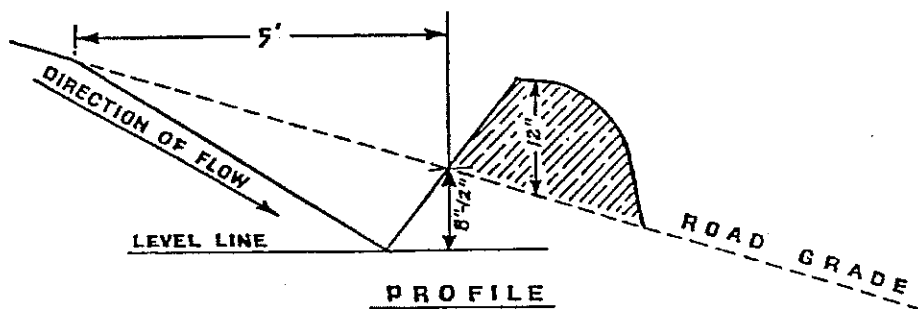
REQUIREMENTS

The minimum height of clearing shall be 15 feet from the road surface. The minimum width of brushing on the cutslope side of the road shall be dictated by the height of the cutslope as indicated in the drawing above.

Brush and trees shall be cut to a maximum height of 6 inches above the ground surface or obstructions such as rocks or existing stumps.

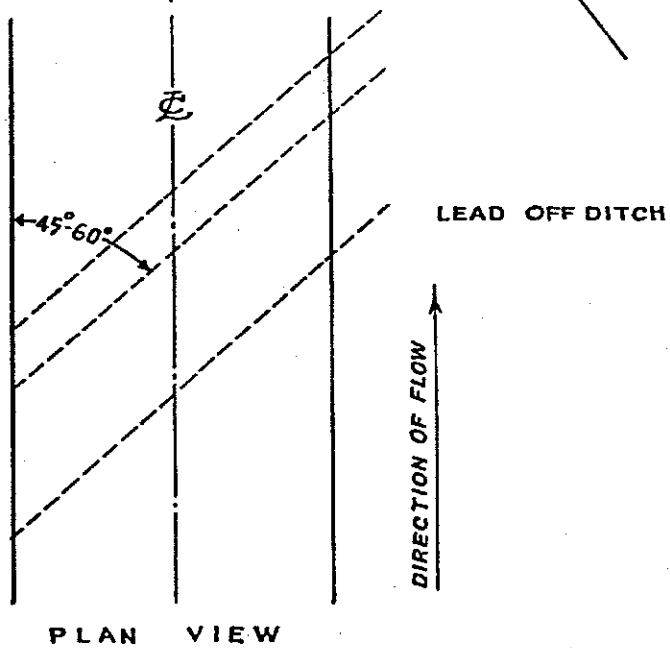
Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, water courses, culvert inlets and outlets and sediment catching basins. Debris shall be scattered downslope from the road or placed in other stable locations. Large debris, 6 inches or larger in diameter, shall be cut into lengths 6 feet or less to facilitate rapid decay, unless otherwise approved by STATE.

EXHIBIT H  
 WATERBAR SPECIFICATIONS



SPACING OF WATERBARS

ROAD GRADE	DISTANCE
≤ 5%	300'
6-10%	200'
11-15%	100'
16-20% or greater	50'



**WATERBAR SPECIFICATIONS  
 FOR CROSS DITCHING #298**

## EXHIBIT I

### SPECIFICATIONS FOR LOG PLACEMENT IN STREAMS

**Tree Selection Criteria:** PURCHASER shall select trees from inside the Timber Sale Area, NOT from reserve timber. Trees will be felled within the timber sale boundary and placed into the main stem of Knife Creek as shown on Exhibit I. Logs will be placed into the stream by way of yarding. Place logs into the active channel where skyline corridors cross the stream reach, to provide for in-stream habitat. These operations shall occur during normal felling and yarding operations. Logs must meet the size specifications below.

**Log Size Specifications:** The Knife Creek stream reach is approximately 2,500 feet in length. A total of 24 logs will be placed into the stream with a minimum small end diameter of 20" and a minimum length of 40', approximately 16.8 MBF in total. PURCHASER may select low quality or deformed standing live trees as a source of logs. Down wood or snags shall not be used as the source for logs.

**Log Placement Specifications:** Logs shall be placed in the stream in groups averaging four logs per group. Groups shall be placed where cable roads cross the stream in the course of normal logging activities and as indicated on the Exhibit I map. The large end of each log shall be placed in the active stream channel. Orientation of logs in the stream shall be determined by the PURCHASER; however, the objective is to place as much of the log within the active channel to provide for in stream habitat.

EXHIBIT I

SPECIFICATIONS FOR FISH LOG STOCKPILE

**Tree Selection Criteria:** PURCHASER shall select trees from within the posted boundary of Area 1. Trees shall be felled, bucked and yarded concurrent with normal felling and yarding operations. Trees shall not be obtained from stream buffers or Green Tree Retention Areas. Fish log volume (54 MBF) has been removed from the cruise. Logs must meet the size specifications below.

**Log Size Specifications:**

Thirty-six (36) logs meeting the following specifications are to be yarded and stockpiled.

<u>Length</u>	<u>Small End Diameter</u>	<u>Number of Logs</u>
60 feet	20"	12
60 feet	22"	12
60 feet	24"	12

PURCHASER may select low quality or deformed standing live trees as a source of logs. Down wood or snags shall not be used as source for fish logs. Logs are to be painted with suitable markings to distinguish them from merchantable logs and decked separately on the landing.

**Log Placement Specifications:** The stockpile site is located at Point E shown on Exhibit A. Logs are to be yarded to Point E and stacked with a log loader. Logs will be stacked directly on the landing. A temporary decking location may be utilized during yarding as approved by the STATE. Upon completion of harvest operations, the spur road shall be blocked at or near Point C as directed by STATE.



# PART IV: OTHER INFORMATION

State Timber Sale Contract  
No. 341-11-51  
Flying Fish

## NOTICE OF TRANSFER OF STATE TIMBER

### Instructions

629:-Form-301-010

Complete Section 1. Mark the box which applies to you/your company in Section 2. Complete Section 3 and obtain signatures.

### SECTION 1

On \_\_\_\_\_, state timber sale purchaser (Transferor)  
\_\_\_\_\_, sold, exchanged or otherwise transferred to  
\_\_\_\_\_, (Transferee) state timber originating from State  
Timber Sale Contract No. \_\_\_\_\_.

Transferee hereby certifies that they:

- (a) Will not export the unprocessed state timber which is the subject of this transaction;
- (b) Will not sell, transfer, exchange or otherwise convey the unprocessed timber which is the subject of this transaction to any other person without first obtaining a like certification from that person.
- (c) Are not prohibited by OAR's 629-31-005 through 045 from purchasing state timber or logs directly from the State Forester, or this is a sale of Western Red Cedar for domestic processing.

### SECTION 2

- Have not exported unprocessed timber originating from private lands in Oregon in the last 24 months.
- This is a sale of hardwood logs for domestic processing.
- This is a sale of Western Red Cedar for domestic processing.
- This is a sale of pulp logs or cull logs processed at domestic pulp mills, domestic chip plants or other domestic operations for the purpose of conversion of the logs into chips.

### SECTION 3

The parties understand that falsely entering into this certification, or failure to comply with the terms of this certification is a violation of the Forest Conservation and Shortage Relief Act of 1990 and OAR Chapter 629, Division 31, and is subject to any and all penalties contained therein.

Transferor:

Transferee:

Signed \_\_\_\_\_

Signed \_\_\_\_\_

Title \_\_\_\_\_

Title \_\_\_\_\_

Dated \_\_\_\_\_

Dated \_\_\_\_\_

[Note: For the purpose of this form, the definition of unprocessed timber is the same as in OAR 629-31-005]

Mail To: State Forester  
2600 State Street  
Salem, OR 97310

State Timber Sale Contract  
No. 341-11-51  
Flying Fish

**WRITTEN PLAN**

**SALE NAME:** Flying Fish

**LOCATION:** Sec. 01, T23S, R11W, W.M., Coos County, Oregon and Sec. 06, T23S, R10W, W.M., Coos County, OR

**LANDOWNER:** Oregon Department of Forestry, 63612 Fifth Road, Coos Bay, OR

**CONTRACT PURCHASER:**

**NOTIFICATION NO.:**

**SITUATION AND PROTECTED RESOURCE**

The protected resource is Fish Creek, Knife Creek, and a Type F tributary to Knife Creek.

The protected resource is Fish Creek, Knife Creek, and a Type F tributary to Knife Creek.

**LAYOUT**

Landings have been provided to enable best possible deflection for suspension of logs while yarding the sale area.

**STREAM BUFFER**

A minimum 100 foot horizontal distance no harvest buffer has been posted on the ground.

**FELLING AND BUCKING**

1. Trees shall be directionally felled parallel to or away from stream riparian management areas (RMA's) as feasible.
2. High stumps shall be left as need to minimize accumulation of logs in stream channels.

**YARDING**

1. Operator will use a machine and logging system capable of fully suspending logs through the Type F buffer.
2. Operator will fully suspend logs when sufficient deflection is available.

**OPERATIONS PLAN**

Purchaser shall attach a yarding plan indicating landing locations, machinery, and procedures to be used to obtain adequate suspension in the sale area and to minimize impacts during the felling process.

PREPARED BY: Nick Morris  
State Lands Forester  
September 23, 2010

\_\_\_\_\_  
PURCHASER REPRESENTATIVE

DATE:

\_\_\_\_\_  
OPERATOR REPRESENTATIVE (if listed on notification)

DATE: