

PART III: EXHIBITS

State Timber Sale Contract
No. 341-12-07
Blackjack

EXHIBIT B

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

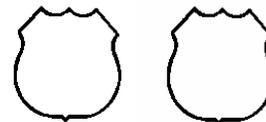
OREGON DEPARTMENT OF FORESTRY

TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)

Date Received by STATE: _____

(5) State Brand Information (complete):



(1) Contract No.: 341-12-07

(2) Sale Name: Blackjack

(3) Contract Expiration Date: October 31, 2014

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.

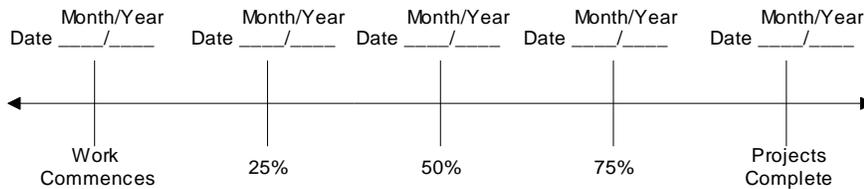
- | | |
|---|---|
|  | Cable Landing, with numbers for sequence. |
|  | Tractor Landing with alphabetical sequence. |
|  | Approximate setting boundary. |
|  | Spur truck roads. |
|  | Tractor yarding roads. |
|  | Temporary stream crossings. |

EXHIBIT B
OPERATIONS PLAN

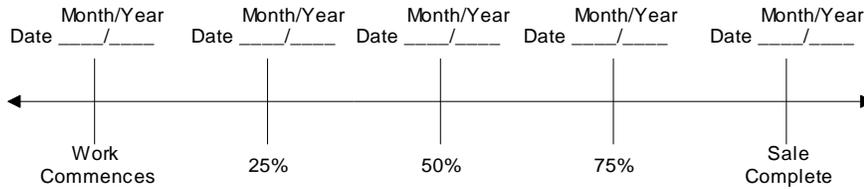
Completion Timeline

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 _____

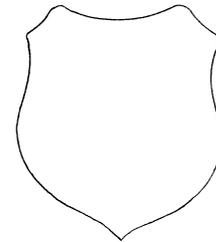
Original: Salem
cc: District File
Purchaser

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: Forest Grove (05) Phone 503-357-2191
 (State Forestry District)
 Address 801 Gales Creek Road
Forest Grove, OR 97116
- (4) PURCHASER: _____
 Mailing Address: _____
 Phone Number: _____

- (12) NOTICE OF CANCELLATION OF BRAND:
 Effective Date: _____
- (13) SALE NAME: Blackjack
 COUNTY: Tillamook
- (14) STATE CONTRACT NUMBER: 341-12-07
- (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)	<input checked="" type="checkbox"/>
NO DEDUCTIONS ALLOWED FOR MECHANICAL DAMAGE	<input checked="" type="checkbox"/>
PENCIL BUCK.....	<input type="checkbox"/>
ADD-BACK VOLUME - Deductions due to delay	<input checked="" type="checkbox"/>
OTHER: _____	

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

- (19) REMARKS _____

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

- (20) SIGNATURES:

 Purchaser or Authorized Representative Date

 State Forester Representative Date

State Forester Representative PRINT NAME

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 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.

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

EXHIBIT D
 FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
16 feet	12 feet	A to B	0+00 to 33+30	Ditch
16 feet	12 feet	B to C	33+30 to 45+70	Ditch
16 feet	12 feet	D to E	0+00 to 25+80	Ditch
14 feet	12 feet	D to E	25+80 to 31+50	Outslope
14 feet	12 feet	D to E	31+50 to 38+00	Ditch
16 feet	12 feet	F to G	0+00 to 2+90	Ditch
16 feet	12 feet	H to I	0+00 to 3+55	Ditch
14 feet	10 feet	J to K	0+00 to 28+34	Ditch
16 feet	12 feet	K to L	28+34 to 30+34	Ditch
16 feet	12 feet	Z to A	0+00 to 96+00	Ditch

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

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

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

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

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

GRUBBING 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.

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

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

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 crowned or 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.

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

¾ :1

¾ :1

Fill Slopes

1½ :1

1½ :1

Top of cutslope shall be rounded.

LANDINGS. Landings shall be constructed as posted in the field, no less than 50 feet wide and no more than 70 feet wide unless otherwise approved by STATE. Surface is to be crowned for drainage with general grade no more than 3 percent. Surface as shown 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 G, and blocked from vehicular traffic prior to October 31, 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. Excess excavated material not used for embankment on the following segment D to E, shall be end hauled or pushed to be used for fill at Station 25+25.
2. Fill Armor and Energy Dissipator Construction. Where rock is specified for fill armor, rock shall be machine placed and tamped at a 1½:1 slope, beginning at the toe of the fill.
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) Subgrade shall be crowned or outsloped at 4 to 6 percent.
 - (c) 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. Final road surface shall be crowned or outsloped at 4 to 6 percent.

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
B to C	33+70	Point B. Begin construction from Beaver Jack Road.
B to C	45+70	Point C. End construction. Construct Landing.
D to E	0+00	Point D. Begin construction off Beaver Jack Road.
	4+50	Install Culvert No. 1 (18" x 36').
	10+70	Point F. Junction right. Install Culvert No. 2 (18" x 40').
	15+80	Point H. Junction right.
	20+45	Install Culvert No. 3 (18" x 36').
	21+60	Begin full bench construction. Excavate and end-haul material to Waste Area No. 1.
	23+50	Continue excavation. Begin drifting material ahead to Station 25+25 for use in embankment and fill construction.
	24+00	Install Culvert No. 4 (18" x 30').
	24+30	End full bench construction. Begin fill construction.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD CONSTRUCTION INSTRUCTIONS

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
	25+25	Live stream. Install Culvert No. 5 (36" x 72'). Final fill height should be approximately 23 feet at centerline of road over the stream crossing.
	25+80	Begin full bench construction on existing trail. Excavate and end-haul material back for use in fill at Station 25+25. Begin outslope construction.
	31+50	End full bench construction. Begin ditch construction.
	33+05	Install Culvert No. 6 (18" x 40').
	33+08	OHV trail junction left. Maintain access from road grade to OHV trail.
	35+70	Leave existing trail. Continue road construction right.
D to E	38+00	Point E. End construction. Construct Landing.
F to G	0+00	Point F. Begin construction. Junction with D to E at 10+70.
F to G	2+90	Point G. End construction. Construct Landing.
H to I	0+00	Point H. Junction with D to E at 15+80. Begin construction.
H to I	3+55	Point I. End construction. Construct Landing.
K to L	28+34	Point K. Begin construction. Excavate slope and use material to construct fill.
K to L	30+34	Point L. End construction. Construct Landing.

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

1. 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. Install a culvert marker at each newly installed culvert and at each existing culvert that is missing a marker that could be reached by a grader blade.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

GENERAL ROAD IMPROVEMENT INSTRUCTIONS:

2. 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. Provide for a crown of 4 to 6 percent, and 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.

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
A to B	0+00	Point A. Begin road improvement. Clear and grub all brush within road prism. Remove water bars and spot rock with 3"-0" crushed rock as needed.
	2+00	Install a gate according to the specifications in Exhibit J. Gate may be picked up at the Forest Grove District Office.
A to B	33+30	Point B. End road improvement.
Z to A	0+00	Point Z. Begin road improvement on BD 5 road. Grade, ditch, and roll between Point Z and Station 6+00. Improve turnouts and surface as described in this Exhibit. Place spot rock for a distance of 100 feet on either side of all live stream crossings.
	30+00	Live stream. Existing culvert.
	37+30	Live stream. Existing culvert.
Z to A	96+00	Point A. End road improvement.
J to K	0+00	Point J. Begin road improvement on existing access road. Widen road, construct ditches and ditchouts, remove rolling dips, and surface as described in this exhibit.
	2+75	Begin widening and ditch construction.
	4+20	Construct ditch out left.
	6+22	Junction left.
	7+82	Construct ditch out right.

EXHIBIT D

FOREST ROAD SPECIFICATIONS

SPECIFIC ROAD IMPROVEMENT INSTRUCTIONS

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
J to K	9+45	Construct ditch out left and widen road.
	9+60	Construct ditch out left.
	12+83	Construct ditch out right.
	17+56	Install Culvert No. 7 (18" x 30').
	18+42	Begin corner construction. Begin fill construction right of existing road.
	19+21	Edge of fill shall be a distance of 17 feet from centerline of existing road.
	19+65	End fill construction. Maintain existing grade and elevation at trail junction.
	19+70	Junction with trail right. Install Culvert No. 8 (18" x 30') across the trail.
	19+74	Begin excavation of existing cut slope. Use material to construct fill between stations 18+42 and 19+65.
	21+13	End corner construction.
	23+50	End widening and ditch construction of existing road.
J to K	28+34	Point K. End road improvement.

EXHIBIT D

FULL BENCH AND END-HAUL REQUIREMENTS

POINT TO POINT	STA. TO STA.	CONTAINMENT - SIDECAST	WASTE AREA LOCATION	WASTE AREA TREATMENT
D to E	21+60 to 24+30	1	1, 2	1, 2, 3
D to E	25+90 to 31+50	2	2	1, 2, 3
J to K	19+74 to 23+50	2	1	1, 2, 3

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.

Clearing and grubbing debris shall be end-hauled.

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.

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) As shown on Exhibit A and as marked in the field.
- (2) Use for fill at D to E at 25+25.

Waste Area Treatment

- (1) Deposit at waste area, spread evenly, compact, and provide adequate drainage.
- (2) Pile woody debris separate from other waste material.
- (3) Mulch and seed all waste areas in accordance with Exhibit I.

EXHIBIT D

ROAD SURFACING

ROAD SEGMENT: A to B				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	A to B		0+00 to 33+30		
				Volume (CY) Per		Number of		
Spot Rock	Crushed 3"-0"	0+00 to 33+30	N/A	Station	N/A	Stations	N/A	500
Total Rock for Road Segment:				A to B				500
ROAD SEGMENT: B to C				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	B to C		0+00 to 12+40		
				Volume (CY) Per		Number Of		
Base Rock	Crushed 3"-0"	33+30 to 45+70	8"	Station	42	Stations	12.4	521
Turnouts	Crushed 3"-0"		8"	Turnout	14	Turnouts	1	14
Turnarounds	Crushed 3"-0"	44+70	8"	TA	14	TAs	1	14
Curve Widening	Crushed 3"-0"		8"	CW	10	Curves	1	10
Landings	Crushed 3"-0"	Pt. C	8"	Landing	120	Landings	1	120
Total Rock for Road Segment:				B to C				679
ROAD SEGMENT: D to E				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size and Type	Location	Depth of Rock (inches)	D to E		0+00 to 38+00		
				Volume (CY) Per		Number of		
Base Rock	Crushed 3"-0"	0+00 to 25+00	8"	Station	42	Stations	25.0	1,050
Base Rock	Crushed 3"-0"	25+00 to 38+00	6"	Station	31	Stations	13.0	403
Turnouts	Crushed 3"-0"	0+00 to 25+00	8"	Turnout	14	Turnouts	3	42
Turnouts	Crushed 3"-0"	25+00 to 38+00	6"	Turnout	10	Turnouts	2	20
Curve Widening	Crushed 3"-0"			CW	10	Curves	4	40
Culvert Bedding	Crushed 3"-0"	25+25	N/A	Culvert	40	Culverts	1	40
Turnarounds	Crushed 3"-0"	37+00	8"	TA	14	TAs	1	14
Landings	Crushed 3"-0"	Pt. E	8"	Landing	120	Landings	1	120
Fill Widening	Crushed 3"-0"	25+25	8"	Station	20	Stations	1	20
Fill Armoring	Riprap 36"-24"	25+25	N/A	Fill	100	Fills	1	100
Total Rock for Road Segment:				D to E				1,849
ROAD SEGMENT: F to G				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	F to G		0+00 to 2+90		
				Volume (CY) Per		Number Of		
Base Rock	Crushed 3"-0"	0+00 to 2+90	8"	Station	42	Stations	2.9	122
Junctions	Crushed 3"-0"	Pt. F	8"	Junction	30	Junctions	1	30
Landing	Crushed 3"-0"	Pt. G	8"	Landing	120	Landings	1	120
Total Rock for Road Segment:				F to G				272

EXHIBIT D
 ROAD SURFACING

ROAD SEGMENT: H to I				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	H to I		0+00 to 3+55		
				Volume (CY) Per		Number Of		
Base Rock	Crushed 3"-0"	0+00 to 3+55	8"	Station	42	Stations	3.55	149
Junctions	Crushed 3"-0"	Pt. H	8"	Junction	20	Junctions	1	20
Turnaround	Crushed 3"-0"	2+90	8"	TA	14	TAs	1	14
Landing	Crushed 3"-0"	Pt. I	8"	Landing	120	Landings	1	120
Total Rock for Road Segment:				H to I				303
ROAD SEGMENT: J to K				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	J to K		0+00 to 28+34		
				Volume (CY) Per		Number Of		
Base Rock	Crushed 3"-0"	2+00 to 22+00	6"	Station	31	Stations	21.0	651
Curve Widening	Crushed 3"-0"	J to K	6"	CW	10	Curves	4	40
Junctions	Crushed 3"-0"	19+65	6"	Junction	20	Junctions	1	20
Total Rock for Road Segment:				J to K				711
ROAD SEGMENT: K to L				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	K to L		28+34 to 30+34		
				Volume (CY) Per		Number Of		
Base Rock	Crushed 3"-0"		8"	Station	42	Stations	2.0	84
Turnarounds	Crushed 3"-0"		8"	TA	14	TAs	1	14
Curve Widening	Crushed 3"-0"		8"	CW	10	Curves	1	10
Landings	Crushed 3"-0"	Pt. L	8"	Landing	120	Landings	1	120
Total Rock for Road Segment:				K to L				228
ROAD SEGMENT: Z to A				POINT TO POINT		Sta. to Sta.		TOTAL VOLUME (CY)
Application	Rock Size And Type	Location	Depth of Rock (inches)	Z to A		0+00 to 96+00		
				Volume (CY) Per		Number Of		
Base Rock	Crushed 3"-0"	0+00 to 6+00	6"	Station	31	Stations	6.0	216
Turnouts	Crushed 1½"-0"	Z to A	N/A	Turnout	11	Turnouts	6	66
Spot Rock	Crushed 1½"-0"	Z to A	N/A					300
Total Rock for Road Segment:				Z to A				582

ROCK TOTALS (CY)	36"-24"		3"-0"	1½"-0"
	100		4,658	366

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

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. Additional surfacing needed because of construction season or construction practice is not included in the preceding ROAD SURFACING table, and shall be furnished at PURCHASER expense.

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

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.

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 the surface is smooth and hard and 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:

Subgrade shall be crowned or outsloped at 4 to 6 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
All road segments that require rock surfacing	1, 3

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
All road segments	1, 2, 3

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 until the surface is smooth and hard and visible deformation ceases. 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.

Rock shall be crowned or outsloped at 4 to 6 percent as specified in the "Forest Roads Specifications" table in Exhibit D.

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 mile to 1.8 miles per hour, as directed by STATE.
2. Tampingfoot Compactors. Tampingfoot compactors shall exert a minimum pressure of 250 pounds per square inch on the ground area in contact with the tamping feet. The compactor shall cover a minimum width of 60 inches per pass and weigh a minimum of 16,000 pounds.
3. Vibratory Hand-Operated or Backhoe-Mounted Tamper. Vibratory hand-held or hydraulic tampers shall be used for compaction of backfill materials around culverts (and/or bridge approach embankment materials around abutments). The tamper shoe dimensions shall be a minimum of 10" X 13" and capable of a centrifugal force of 2,250 pounds.

EXHIBIT E
CULVERT SPECIFICATIONS

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 or corrugated aluminized (Type 2) steel.

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

Aluminized (Type 2) steel culverts shall meet the requirements of AASHTO M-36-03¹.

Polyethylene culverts shall not be used where required culvert diameter is over 24 inches.

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 drains shall be skewed to fit the required culvert length to the road prism.

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.

A bedding of crushed rock as specified shall be placed to provide a wide band of support and to transmit the load from above evenly over the entire length of the culvert for stream crossing culverts.

Backfill shall consist of, crushed rock, or 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.

EXHIBIT E

CULVERT SPECIFICATIONS

Minimum height of cover over top of culvert to subgrade when road is to be rocked shall be as follows: 12" for culverts 18" to 36" and 18" for culverts 42" to 96". 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 dissipator, 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.

Compaction by tamping utilizing a Vibratory Hand-Operated or Backhoe-Mounted Tamper is required for all culverts.

The intake ends of culverts in fills less than 3 feet to the top of the culvert shall be marked by driving steel posts within 6 inches of the downgrade side. Posts shall be painted with a rust-resistant paint and be a minimum of 5 feet long, with the spade driven 2 feet into the ground.

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

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

<u>Dia.</u>	<u>Steel Culvert</u>	<u>Thickness</u>		<u>Band Gauges</u>	<u>Band Widths (")</u>	
	<u>Gauge</u>	<u>Uncoated</u>	<u>Coated</u>		<u>Annular</u>	<u>Helical</u>
30-36	16	(0.0598")	(0.064")	16	12	12

EXHIBIT E
CULVERT LIST

CULVERT NO.	DIAMETER (Inches)	LENGTH (Feet)	MATERIAL TYPE	ROAD SEGMENT POINT TO POINT	STATION
1	18	36	CPP	D to E	4+50
2	18	40	CPP	D to E	10+70
3	18	36	CPP	D to E	20+45
4	18	30	CPP	D to E	24+00
5	36	86	ACSP	D to E	25+25
6	18	40	CPP	D to E	33+05
7	18	30	CPP	J to K	17+56
8	18	30	CPP	J to K	19+74

ACSP = Aluminized, CPP = Polyethylene

State Timber Sale Contract
No. 341-12-07
Blackjack

EXHIBIT F

DURABLE CRUSHED ROCK SPECIFICATIONS

Grading Requirements

<u>For 1½"-0"</u>	Passing	2" sieve	100%
	Passing	1½" sieve	90-100%
	Passing	¾" sieve	60-90%
	Passing	¼" sieve	30-50%
	Passing	No. 10 sieve	15-30%
	Passing	No. 40 sieve	7-15%
<u>For 3"-0"</u>	Passing	4" sieve	100%
	Passing	3" sieve	90-100%
	Passing	1½" sieve	60-90%
	Passing	¾" sieve	40-60%
	Passing	¼" sieve	20-40%
	Passing	No. 10 sieve	5-20%

RIPRAP ROCK SPECIFICATIONS

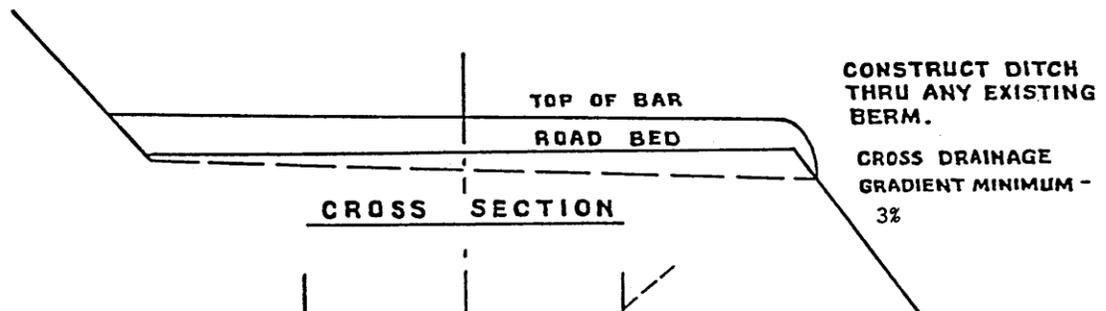
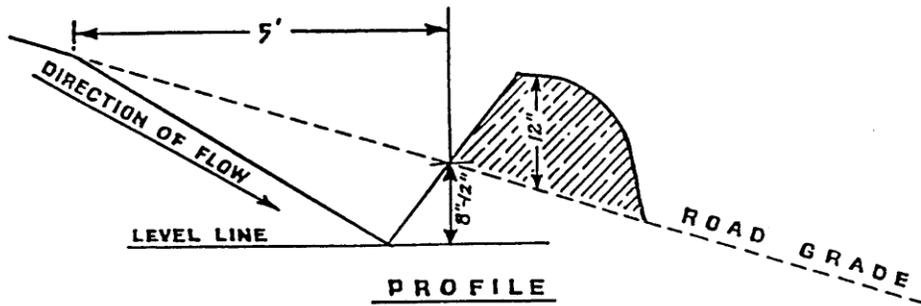
Material shall be well graded, free of organic material and shall not have excessive fine materials.

For 36"-24" Boulders. A minimum of 1 side shall measure 36 inches, in any direction. Material shall be clean and free of 6"-0" fines.

Control of gradation shall be by visual inspection by STATE.

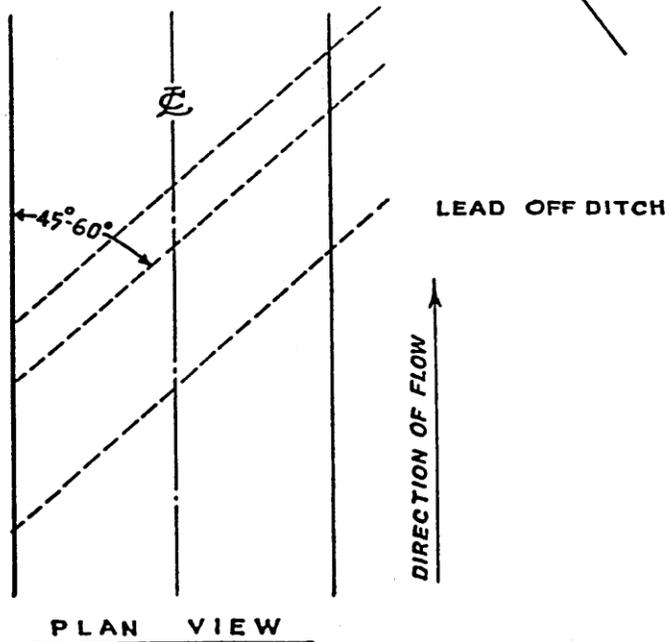
EXHIBIT G

WATERBAR SPECIFICATIONS



SPACING OF WATERBARS

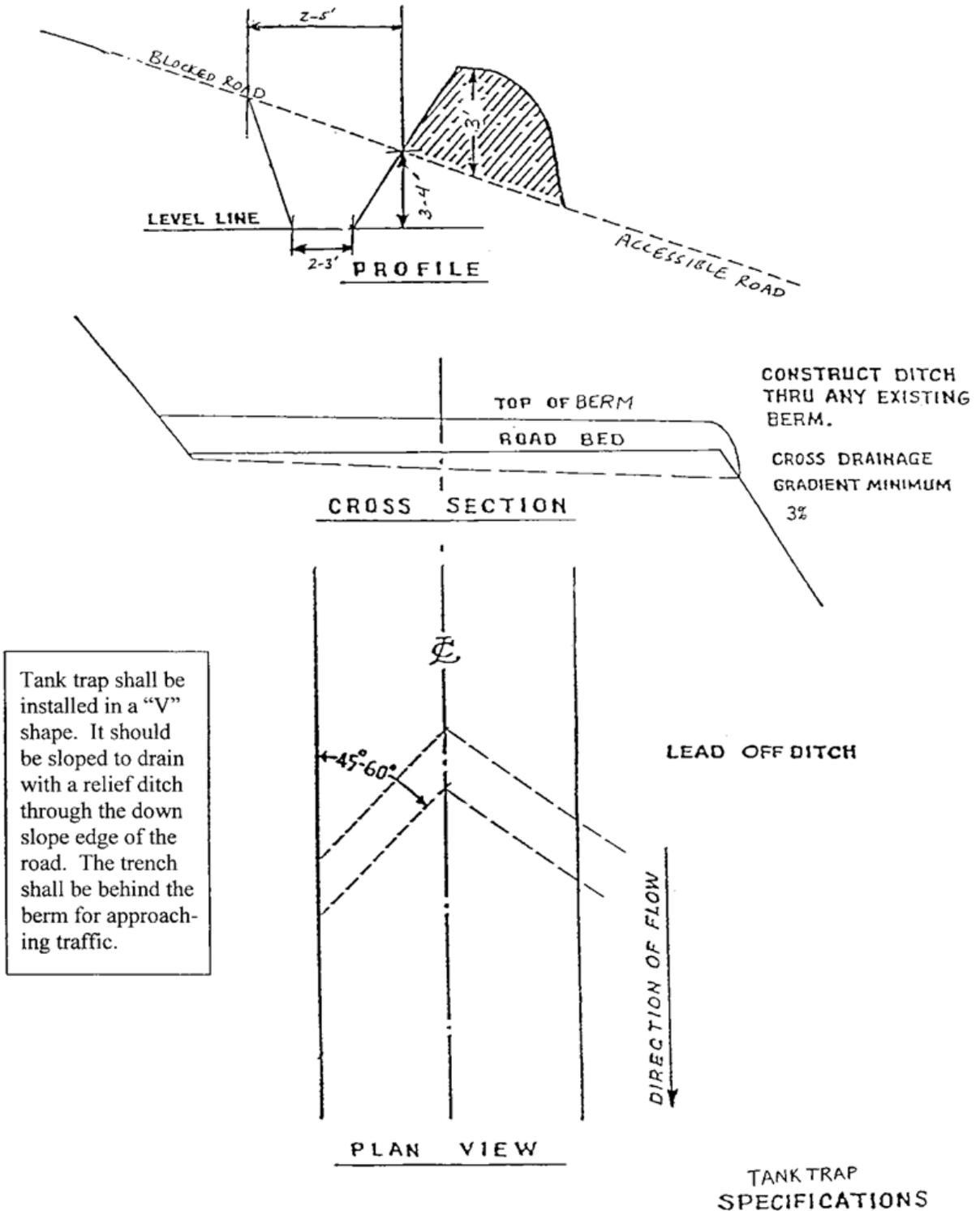
ROAD GRADE	DISTANCE
≤ 5%	400'
6-10%	200'
11-15%	150'
16-20% or greater	100'



WATERBAR SPECIFICATIONS
 FOR CROSS DITCHING #298

EXHIBIT G

TANK TRAP SPECIFICATIONS



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

EXHIBIT H

ROAD VACATING SPECIFICATIONS

PURCHASER shall vacate at the following points: V_1 to V_2 , and Point X. Specific objectives for this project include:

- (a) Fill removal and stream channel development.
- (b) Culvert removal.
- (c) Restoration of natural contours by outsloping of the road prism.
- (d) Minimize disturbance of existing vegetation.
 - (1) Fill Removal and Stream Channel Development. Remove fills to the natural stream course level(s). Stream channel(s) shall be excavated/developed to specified widths. Developed stream banks shall be sloped at natural contours or no steeper than 1½:1, as directed by STATE.
 - (2) Culvert Removal. Remove drainage structures and culverts. Undamaged and reusable culverts shall be hauled to the Forest Grove District office as directed by STATE.
 - (3) Outslope Road. Outslope road to restore natural contours or establish a minimum of 10 percent slope for drainage at designated locations. If the road grade exceeds 10 percent, outslope of the road shall be 2 percent greater than the road grade.
 - (4) Use of Excavated Materials.
 - A. Fill Excavation and Sidecast Pullback. Excavated materials shall be placed on the interior (cut) side of the road, and utilized to restore the cutslope to natural contours, or to a minimum 10 percent outsloped surface for drainage. Any excess material will be hauled to a designated waste area, as directed by STATE.
 - B. Woody Debris. Shall be placed on the surface of pullback/fill material.
 - C. Block Roads. Use excavated material from fill removals to block roads from vehicle access, as directed by STATE.
 - (5) Erosion Control. Erosion control shall be completed in a progressive manner. Grass seed and straw mulch shall be applied for every 500 feet of road vacated, prior to continuing work.

All excavated material and bare soil shall utilize grass seed and straw mulch approved by STATE and in accordance with the specifications in Exhibit I. Applied mulch shall be a minimum of 2 inches deep and provide a uniform cover.
 - (6) Construct Waterbars and Tank Traps as directed by STATE. Construct waterbars and tank traps according to the specifications in Exhibit G. Waterbars shall be keyed into ditchline.

EXHIBIT H

ROAD VACATING SPECIFICATIONS

- (7) Equipment. A minimum 1½ cubic-yard, track mounted excavator shall be used for all excavation, culvert removal, streambed preparation, road blocking, and waterbarring, unless otherwise approved in writing by STATE.
- (8) Dry Conditions. All work shall be performed during dry conditions acceptable to STATE.
- (9) Support, including transport, other equipment, replacements, supplies, maintenance, and repairs, shall be furnished as required to complete the project and shall be furnished without cost to STATE, other than as agreed under the contract terms.

SPECIFIC INSTRUCTIONS/SPECIFICATIONS:

<u>Segment</u>	<u>Station</u>	<u>Work Description</u>
V1 to V2	0+00	Point V1 (Pt. H). Begin road vacating. Construct waterbars as specified in Exhibit G. Remove specified culverts. Construct tank trap at V1 to block road to vehicle access.
	4+65	Remove Culvert (No. 3).
	5+80	Begin filling in ditch and outslope road as specified.
	8+20	Remove Culvert (No. 4).
	8+50	Begin fill narrowing. Excavated material shall be used in trail restoration between Stations 10+10 to 19+90. Final trail width shall be 8 feet.
	10+10	End fill narrowing. Begin OHV trail restoration. Restore OHV trail by narrowing the road to a width of 55 inches. Narrowing shall be completed by placing woody material and excavated material from fill narrowing against the cut slope. Trail shall be located on the outer edge of the road grade. Existing drainage shall remain.
	17+28	Trail junction.
	19+90	End trail restoration. Continue road vacating. Construct waterbars as specified in Exhibit G. Construct tank trap to block vehicle access to road. Place stumps and other woody material to block vehicle access from trail.
V1 to V2	22+20	V2 (Pt. E.) End road vacating.
Point X		Fill removal on Chute Trail. Excavate fill down to stream level. Developed stream channel shall be 10 feet wide. Clearing and grubbing material shall be end-hauled to Waste Area No. 1 as directed by STATE. Excavated material shall be end-hauled to the through cut on Chute Trail (Waste Area No. 2). Material shall be placed in the Waste Area in a manner that will allow the OHV trail to be reconstructed up and over the waste area. The waste material shall not be placed higher than the top of the outside cutslope. Usable material may be used for fill construction on D to E at 25+25. Seed and mulch all disturbed soil as specified in Exhibit I.

EXHIBIT I
 SEEDING AND MULCHING

This work shall consist of preparing seedbeds and furnishing and placing required seed, fertilizer, and straw mulch. Straw mulch shall consist of straw that is free of noxious weeds. Apply seed, fertilizer, and straw mulch to all waste areas, and bare soils resulting from Project Nos. 1, 3, and 5. Fertilizer shall not be applied within 100 feet of streams.

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

APPLICATION METHODS FOR SEED AND FERTILIZER

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

APPLICATION RATES FOR SEED AND FERTILIZER

The seed mixture listed below shall be applied at 100 lbs. per acre. The seed mixture shall be comprised of the following:

SPECIES	MIXTURE	PURE LIVE SEED	GERMINATION
Annual Rye	33%	95%	>90%
Orchard Grass	33%	95%	>90%
Perennial Rye	34%	95%	>90%

Fertilizer: Chemical analysis shall be 16-20-0 and shall be applied at the rate of 200 pounds per acre.

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

APPLICATION RATES FOR MULCH

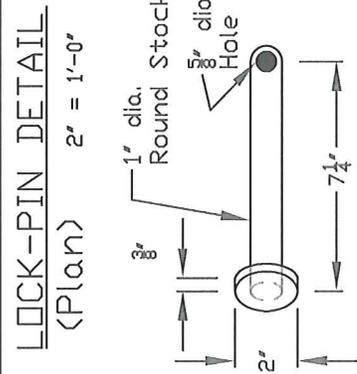
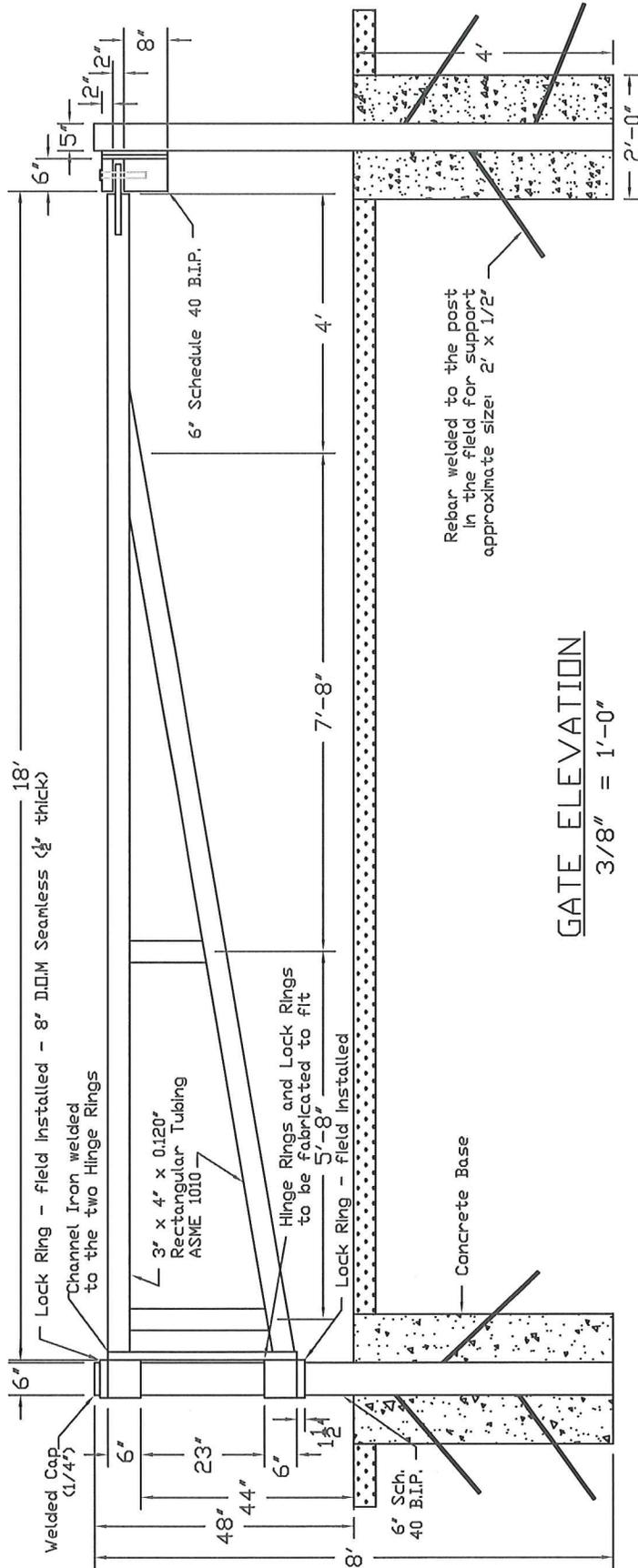
Place straw mulch to a reasonably uniform thickness of 1½ to 2½ inches. This rate requires between 2 and 3 tons of dry mulch per acre.

Application Locations:

Road Segment	Location	Road Segment	Location
Point X V1 to V2	All All	Waste Area No. 1, 2, & 3 D to E	All 24+00 to 26+00

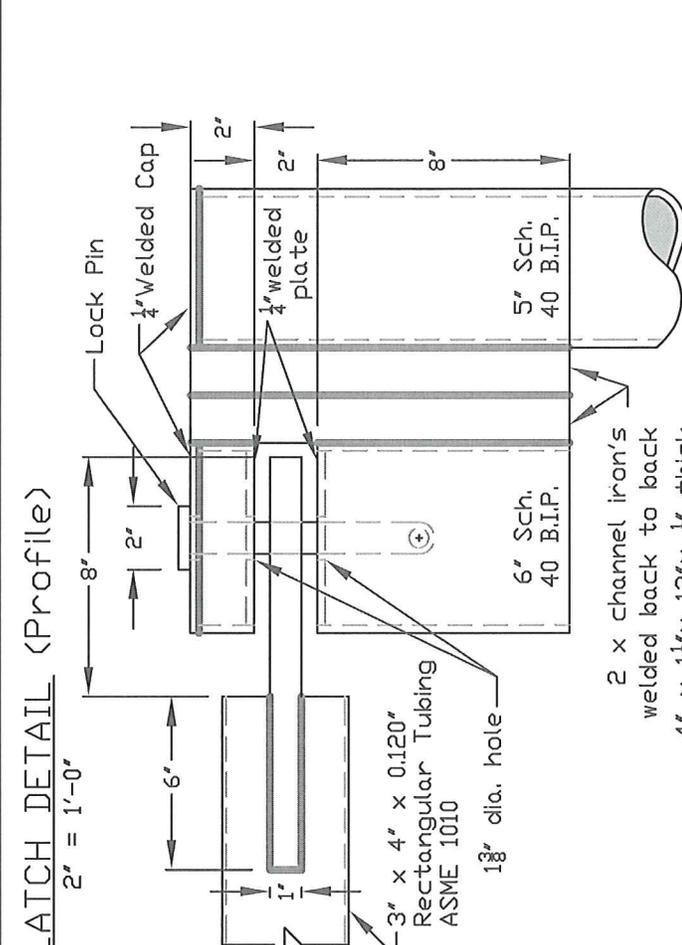
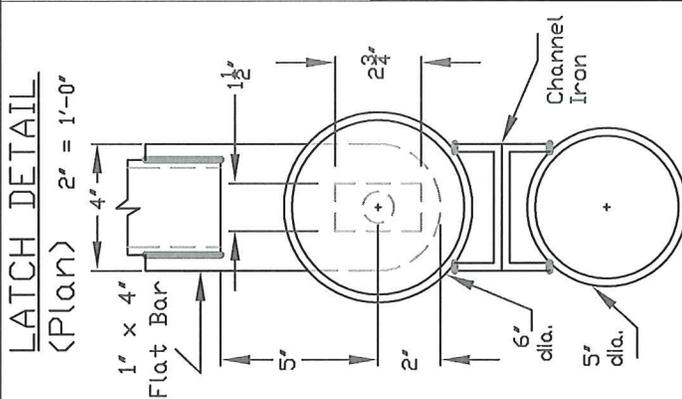
EXHIBIT J

METAL GATE INSTALLATION AND SPECIFICATIONS



RECTANGULAR TUBING
 IRON GATE

Scale: Noted
 Date: 2/2008



State Timber Sale Contract
No. 341-12-07
Blackjack

EXHIBIT K

SPECIFICATIONS FOR BRUSH AND SLASH TREATMENT

Operation Area: The Timber Sale Area shown on Exhibit A

Equipment Type, Equipment Operation, and Conduct of Work

Equipment- shall be a track-mounted machine with a ground-pressure rating of not more than 6.8 PSI and a net horsepower of 85 or more. The machine shall be capable of a minimum horizontal reach of 26 feet and a minimum vertical reach of 16 feet

The bucket shall be of a hydraulically controlled "clamshell" style equipped with rake teeth and capable of 360-degree continuous rotation. The tooth length on the rake teeth shall be at least 14 inches unless otherwise approved in writing by STATE.

Operator - must be experienced in operating similar equipment on land clearing operations, be able to operate the equipment proficiently, and pile the debris on the area as directed by STATE.

Support - including transport, other equipment, replacements, supplies, maintenance, and repairs shall be furnished as required to complete work; and shall be furnished without cost to STATE, other than as agreed under the contract terms.

Work Scheduling

Work shall not begin until PURCHASER has arranged to have the equipment operators meet with STATE to review the requirements specified in Section 2365, "Progressive Operations", Section 2560, "Slash Disposal", and this Exhibit. Once begun, operations shall be continuous until contract work is completed, unless interrupted by poor weather, fire closures, or other uncontrollable circumstances. Equipment breakdowns shall be repaired without undue delay, and provision shall be made for replacement of equipment to prevent prolonged delays. Brush and slash treatment operation shall be accomplished only during dry weather conditions and shall not be allowed when operations might damage sites or affect stream flows. Any exception to these instructions must be authorized in writing by STATE.

Description of Work to be Done

Move brush and/or woody slash to create openings as planting spots in the slash and brush. Planting spots shall be a minimum of 1 foot by 1 foot in size and shall be on a 10-foot spacing. Care shall be taken to avoid creating a depression in the soil of the planting spot. Spacing may be varied to accommodate stumps, large woody material, rocky areas, etc., but 435 planting spots per acre are still required.

Piling should be avoided but may be done only as needed to create the required planting spots. If piling is necessary, piles should not exceed 10 feet in width or length or 4 feet in height. Each pile larger than that shall be covered with 100 square feet of polyethylene plastic sheeting. The plastic sheeting shall be no more than 4 mil gauge. Additional woody debris shall be piled on top of the plastic sheeting to complete the piling, as directed by STATE. PURCHASER shall supply the materials used for covering the piles. Work specifications may be modified or waived only upon written notice from STATE.

PART IV: OTHER INFORMATION

State Timber Sale Contract
No. 341-12-07
Blackjack

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; and
- (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
341-12-07
Blackjack

Written Plan
Blackjack
Contract # 341-12-07

LEGAL DESCRIPTION: The Blackjack Timber Sale is located in portions of Sections 3, 4, 9, and 10, T1N, R6W, W.M., Tillamook County, Oregon.

PROTECTED RESOURCE: The South Fork of the Wilson River, and a portion of an un-named tributary, flow along the north and west sides of the Timber Sale Area. The vegetation along the stream is a conifer and alder mix. The slopes adjacent to the streams range from 50%-70%.

PROTECTION MEASURES: A minimum 100 foot buffer was posted upslope of the aquatic zone. All buffer components will be protected. Harvested trees shall be felled in a manner to prevent them from entering the buffer. Cable corridors extending over the buffer area will be a minimum of 100 feet apart and cables will be pulled out of the reserved timber prior to rigging the next yarding road.

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

Reviewed by: _____ Date: _____
Erik Marcy
Unit Forester

Prepared by Eric Foucht
December 7, 2011

State Timber Sale Contract
341-12-07
Blackjack

Written Plan
FOR FILL CONSTRUCTION – BLACKJACK TIMBER SALE

SALE NO. 341-12-07

FILL CONSTRUCTION

PROJECT DESCRIPTION:

A fill over 15 feet deep will be constructed at the following location in association with the Project Work for the Blackjack Timber Sale, No. 341-12-07.

Road Segment D to E, Station 25+25,
NW¼, NW¼, Section 10, T1N, R6W, W.M., Tillamook County, Oregon

The Oregon Forest Practices Act requires a Written Plan for construction of fills over 15 feet in height. This Written Plan addresses the construction of a fill that will minimize surface erosion, embankment failure, and downstream movement of fill.

PROTECTED RESOURCES:

There are no protected resources within the fill construction area. The fill to be constructed crosses a small Type N stream.

DESCRIPTION OF THE AREA:

The fill will be constructed over a tributary to the South Fork Wilson River. The stream's drainage area is 27 acres, or 0.04 square mile, with a mean elevation of 1,675 feet. The predicted 100-year peak flow, based on Campbell's equations, is 17 cubic feet per second. This predicted flow requires of culvert with a minimum diameter of 30 inches.

FILL DESIGN STRATEGY AND CONSTRUCTION REQUIREMENTS:

To minimize any future potential risks the fill will be constructed with the following requirements:

- The fill will be constructed in layers of not more than 8 inches. Each layer will be separately compacted with equipment that will provide for maximum compaction for that material.
- The final fill slope shall not exceed a steepness of 1¼H:1V (80%).
- The slopes of the fill will be armored with riprap rock material to prevent erosion and scour from the stream. The riprap rock will be placed to a height of 10 feet above the bottom of the fill.
- The diameter of the pipe is larger than required to pass the predicted 100 year flow event. The larger pipe diameter will allow any debris to flow through the pipe without restricting the flow of water.
- During construction, all bare soil will be mulched with straw to a minimum thickness of 2 inches in order to prevent surface erosion. Once fill construction is complete the final fill slopes shall be grass seeded during the seeding season of March 1 to July 15 and August 15 to October 31.
- All in stream work associated with this plan will be accomplished from July 1 to September 15, annually. In water work will be limited to the minimum necessary to adequately prepare the site for pipe installation and construction of the fill.

Prepared by: _____ Date: _____
Thomas Whittington
Road Specialist, Forest Grove District