

# PART III: EXHIBITS

State Timber Sale Contract  
No. 341-08-19  
Kennedy Gulch Thin

## EXHIBIT B

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

### OREGON DEPARTMENT OF FORESTRY

#### TIMBER SALE OPERATIONS PLAN

(See Page 2 for instructions)



Date Received by STATE: \_\_\_\_\_

(5) State Brand Information (complete): \_\_\_\_\_

(1) Contract No.: 341-08-19

(2) Sale Name: Kennedy Gulch Thin

(3) Contract Expiration Date: October 31, 2010

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: Paul Moreno

Phone: (541) 474-3152

Cell/Other

Phone: (541) 660-4709

Home: (541) 660-4709

Logging: Chris Rudd

Phone: (541) 474-3152

Cell/Other

Phone: (541) 660-0634

Home: (541) 660-0634

(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.

**Item No. (from Page 1)**

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

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

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



Cable landing, with numbers for sequence.



Tractor landing with alphabetical sequence.



Approximate setting boundary.



Spur truck roads.



Tractor yarding roads.



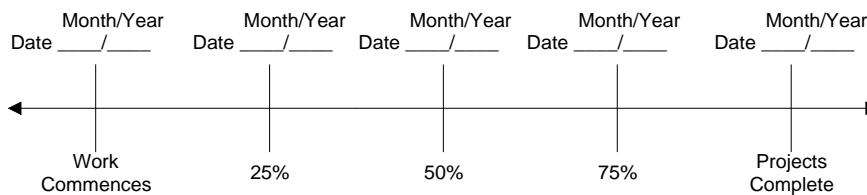
Temporary stream crossings.

EXHIBIT B  
OPERATIONS PLAN

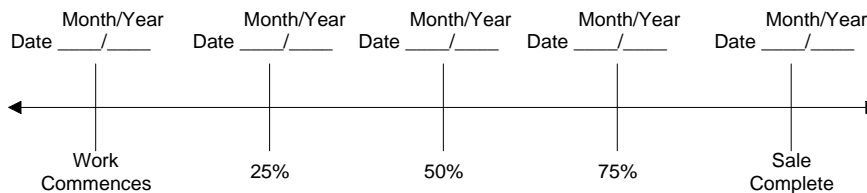
**Completion Timeline**

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

**Projects**



**Harvest & Other Requirements**



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

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

APPROVED: Date: \_\_\_\_\_

SUBMITTED BY:  
PURCHASER

STATE OF OREGON - DEPARTMENT OF FORESTRY

\_\_\_\_\_  
Title \_\_\_\_\_

\_\_\_\_\_  
Title \_\_\_\_\_

Original: Salem  
cc: District File  
Purchaser

EXHIBIT C

SCALING INSTRUCTIONS -- LOCATION APPROVAL -- BRAND INFORMATION

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

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

(3) FROM: Grants Pass (08) Phone 474-3152  
(State Forestry District)  
Address: 5375 Monument Drive, Grants Pass, OR  
97526

(4) PURCHASER: \_\_\_\_\_  
Address \_\_\_\_\_

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

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

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

(7) EASTSIDE SCALE: ☐ ☒  
\*Actual taper butt logs over 40' scaling length

(8) PENCIL BUCK ☐ ☒  
back to Minimum Scaling Diameter \_\_\_\_\_

(9) ADD-BACK VOLUME -- ☒ ☐  
Deductions due to delay

(10) APPROVED SCALING LOCATIONS	Species	Yard	Truck

(11) NOTICE OF CANCELLATION OF BRAND:  
Effective Date: \_\_\_\_\_

\_\_\_\_\_  
State Forester's Representative

(12) SALE NAME Kennedy Gulch Thin  
COUNTY Josephine

(13) STATE CONTRACT NUMBER 341-08-19

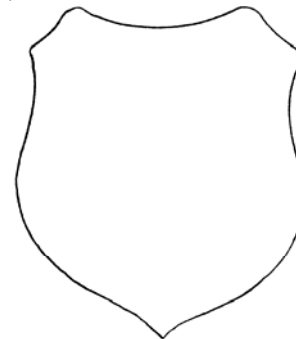
(14) SCALE: westside ☒ eastside ☐ cubic foot ☐

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

(16) BUREAU BRAND CODE NUMBER \_\_\_\_\_

(17) STATE BRAND INFORMATION:

(COMPLETE)



(18) PAINT REQUIRED: YES ☒  
COLOR Orange

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

(20) REMARKS: Hardwoods are sold by the load at 2.8 per MBF per Load. Scaler shall verify species. Log Load receipts are not required for hardwoods.

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

(21) SIGNATURES:

\_\_\_\_\_  
Purchaser or Authorized Representative Date

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

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

EXHIBIT C

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

- (1) Check appropriate box. REVISION NUMBER requires comments. CANCELLATION requires Item (21). Complete date.
- (2) Designate Third Party Scaling Organization (TPSO). Send 4 copies to TPSO, 1 to purchaser, 1 to Salem, and keep such copies as to district needs.
- (3) State District Office, address and phone.
- (4) Enter Purchaser's business name and address as it appears on the Contract.
- (5) Minimum Scaling Specifications. Review Section 45, "Log Removal," of the Contract. Species, or combined species can be separate entries. Information serves as a basis for scaling (see also Items (13) thru (17)), and is required to show existence on the sale. **PerM** (per MBF). **SUM** (lump sum material). **SUB** (submerchantable material. SUB, as used by the State, references that material containing at least 10 bf (net) but less than the lower merchantable net volume limit or grade requirements for other merchantable (PerM) entries. PerM, SUM, and Sub must be indicated by checking the appropriate column. Species with the same specifications and value are combined into one entry. PerM and Sub require scaling therefore complete specifications. SUM need not be scaled, hence no specifications. Loads containing only SUM are to be ticketed if so instructed in Item (19). Mixed loads of SUM, PERM and/or subspecies will always be scaled.
- (6) Westside -- actual taper segment scale. Check Yes or No. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Westside).
- (7) Eastside -- actual taper/taper table segment scale. Special Service Rules on file with TPSO. See: Segment Scaling and Grading of Long Logs -- All Species -- State Forestry Department Scaling Practices (Eastside). Items with \* follow U.S. Forest Service Eastside rules.
- (8) Pencil Buck. Check NO if a westside sale, optional for eastside sales.
- (9) Add-Back Volume. Add-Back is normally checked YES. Scaler records deductions (sap rot, weather checks, etc.) caused by an abnormal delay in removal. Enter separately on scale ticket. TPSO provides State with summaries that include this as a net volume by species. Salvage sales and certain other circumstances may require that "NO" be checked.
- (10) Show scaling locations only applicable to TPSO. Not necessary to list markets. If all species are scaled at same location, enter "ALL."
- (11) When logging is complete, recall branding hammers, date and sign where indicated, check CANCELLATION box at top of form, and send to TPSO.
- (12) Enter sale name and county.
- (13) Enter sale Contract number.
- (14) Check Westside or Eastside log scale. Cubic foot refers to Northwest Log Rules Cubic Foot Scale.
- (15) Oregon Forest Products Brand Registry Number (optional).
- (16) DO NOT USE -- TPSO will fill in when applicable.
- (17) Show one brand only. Complete drawing. If more than one brand is assigned to the sale, (1) make separate form for each brand, and (2) on each form, explain and show other brand(s) under REMARKS, Item 19.
- (18) Check YES and designate orange.
- (19) Special Scales. These are the Special Scales that will be applied. If "Other" is indicated, please describe. Give comments in Item (19).
- (20) Use this space to designate weight conversion factors, or any other explanations to clarify scaling requirements. If additional scaling locations are approved, prepare another form showing all (old and new) locations. Check REVISION box at top of form and explain under remarks. Route as indicated.
- (21) Require purchaser to sign and date completed form.

EXHIBIT D  
FOREST ROAD SPECIFICATIONS

SUBGRADE WIDTH	SURFACED WIDTH	POINT TO POINT	STATION TO STATION	DRAINAGE
14'	12' (Rocked)	I1-2	0+00 to 4+50	Outsloped
14'	12' (Natural)	A-B	0+00 to 11+92	Outsloped
14'	12' (Natural)	C-D	0+00 to 84+10	Outsloped

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 D 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 classifications are as follows:

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

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

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

## EXHIBIT D

### FOREST ROAD SPECIFICATIONS

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

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

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

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

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

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

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

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

#### DRAINAGE

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

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

Location: Intervisible but not greater than 750 feet.

#### GRADING

Rock

Common - side slopes 50% and over

Common - side slopes less than 50%

Common - turnpike (level) section

#### Back Slopes

Vertical to 1/4:1

1/2:1

3/4:1

2:1

#### Fill Slopes

Not steeper  
than 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. Surface is to be crowned for drainage, with general grade no more than 3 percent.

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

EXHIBIT D

ADDITIONAL ROAD IMPROVEMENT AND STREAM CROSSING INSTRUCTIONS.

**Project No. 1**

Point I-1 to I-2: Utilizing ¾"-0" rock, spread and grade driveway in accordance with Exhibit A and D.

Coyote Creek Stream Crossing: Install two 30"x 40' temporary culverts utilizing 24"-6" rip rap and 4"-0" rock in accordance with Exhibit D at the specified locations shown on Exhibit A. **Upon completion of the sale or at the end of the operation period remove temporary culverts, and then restore drainage to stream.**

Point I-2 to Point A. Brush road from Point I-2, (South of Coyote Creek) to Point A.

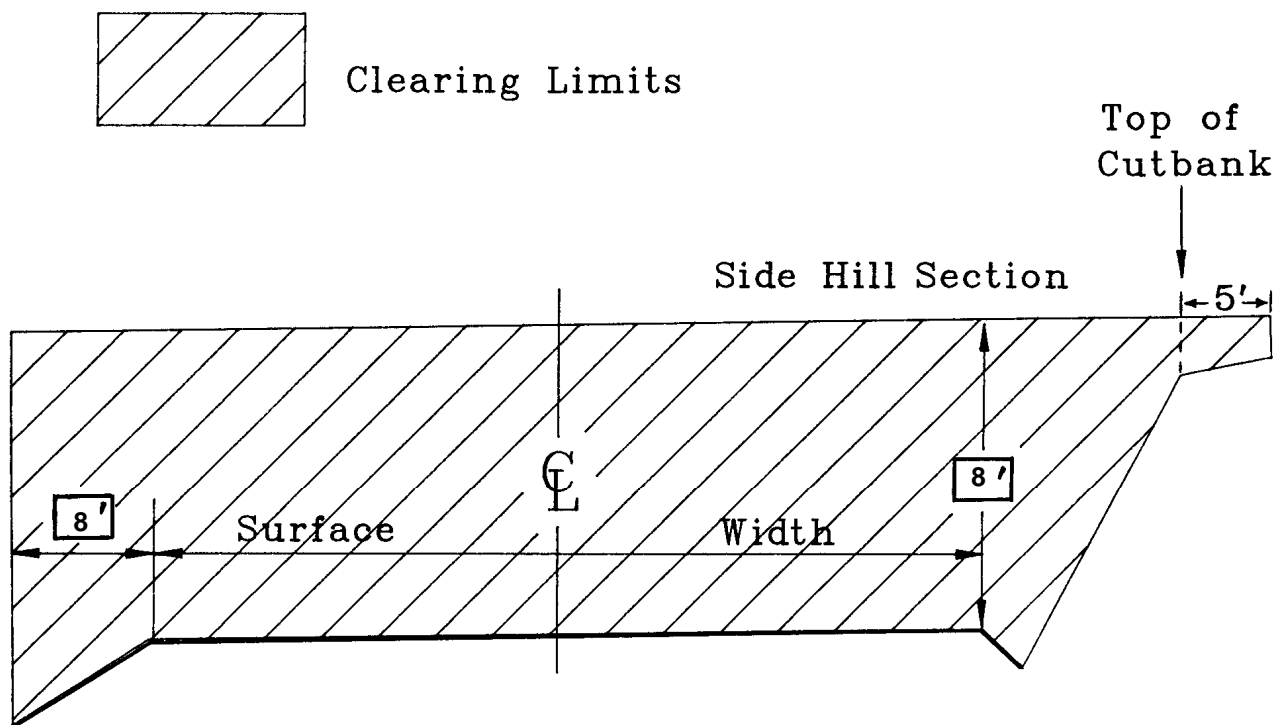
**Project No 2**

Points A to B: Construct road between the preceding road points. At Station 7+50, install an 84"x61"x40' squash pipe culvert utilizing 20 cy of 11/2"-0" culvert bedding and 20 cy of 24"-6" rip rap for fill armor at inlet and outlet. (8.37 Stations of this segment is improvement only). **Where haul route crosses Williams pipeline, a small amount of fill may be needed over the pipeline itself, as there are requirements which call for at least 4 feet of soil above the pipe. A representative from Williams Pipeline Co. will make that call as to where and how much fill will be needed if any. Fill may be obtained within close proximity to these areas.**

Point C to D: Construct road between preceding road points. At Station 22+00 obtain dirt from cut slope side of road for fill on fill slope. From Stations 23+00 to 36+00 pull back dirt berm from fill slope side of road onto roads running surface. At Station 0+76 and 46+60 install two 24"x40' temporary polyethylene culverts utilizing 20 cy of 11/2"-0" culvert bedding and 20 cy of 24"-6" rip rap for fill armor at inlet and outlet at each culvert. At Stations 7+85, 12+53, and 39+41 install temporary 24"x30' polyethylene culverts. At Station 19+38, install temporary 24"x40' culvert. **Upon completion of sale or end of operational period, restore drainage in all of the small draws and remove temporary culverts at Stations 7+85,12+53,19+38 and 39+41, and then restore drainage to stream.**



EXHIBIT D  
ROAD BRUSHING SPECIFICATIONS



REQUIREMENTS

Unless otherwise approved in writing by STATE, brush and trees (less than 6 inches DBH) shall be cut to a height of 6 inches or less above the ground surface or obstructions such as rocks or existing stumps. Trees shall not be felled unless a portion of the bole is within the clearing limits.

PURCHASER is required to **either** clear up to the designated clearing height as shown on the above diagram **or** clear the designated distance past the top of the cutbank as shown on the above diagram.

Debris resulting from the brushing operation shall be removed from the roadway, cutslope, ditches, and water courses within 72 hours and may be scattered downslope from the road or placed in other stable locations, unless otherwise approved by STATE.

EXHIBIT E  
ROCK SPECIFICATIONS

ROAD SEGMENTS: I1-2, Coyote Creek Stream Xing, A-B and C-D					
Application	Rock Size and Type	Location	Station	Volume (CY) Per	TOTAL VOLUME (CY)
Surface Rock	3/4"-0"	I1 to 2	0+00 to 3+00	20	20 CY
Culvert Rock	4"-0"	Coyote Creek Stream Crossing	At Culvert	40	40 CY
Fill Armor	24"-6"	Coyote Creek Stream Crossing	At Culvert	40	40 CY
Culvert Bedding	11/2"-0"	A to B	7+50	20	20 CY
Fill Armor	24'-6"	A to B	7+50	20	20 CY
Culvert Bedding	11/2"-0"	C to D	0+76	20	20 CY
Fill Armor	24"-6"	C to D	0+76	20	20 CY
Culvert Bedding	11/2"-0"	C to D	46+60	20	20 CY
Fill Armor	24"-6"	C to D	46+60	20	20 CY

EXHIBIT E  
ROCK SPECIFICATIONS

Grading Requirements

<u>For 3/4"-0"</u>	Passing	1" sieve	100%
	Passing	3/4" sieve	90-100%
	Passing	3/8" sieve	55-75%
	Passing	1/4" sieve	40-60%

<u>For 1 1/2"-0"</u>	Passing	2" sieve	100%
	Passing	1 1/2" sieve	95-100%
	Passing	3/4" sieve	55-75%
	Passing	1/4" sieve	35-50%

<u>For 4"-0"</u>	Passing	4 1/2" sieve	100%
	Passing	4" sieve	95-100%
	Passing	2" sieve	55-75%
	Passing	1/4" sieve	30-45%

For 24"-6" Riprap      50 percent or more of the material shall measure at least 24 inches in one dimension. Material shall be clean, well graded, and free of 2"-0" fines.

Control of riprap and pit-run gradation shall be by visual inspection by STATE.

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

## EXHIBIT E

### COMPACTION AND PROCESSING REQUIREMENTS

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

Subgrade shall be outsloped at 4 percent unless otherwise specified.

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
A to B, and C to D	Vib Roller, Crawler Tractor

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

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

ROAD SEGMENT	COMPACTION EQUIPMENT OPTIONS
A to B (84" x 61" x 40' culvert)	Hand-Held Vibratory Tamper

### COMPACTION EQUIPMENT OPTIONS

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.

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.

Crawler Tractors. D-7 Caterpillar equivalent or larger.

EXHIBIT F  
CULVERT SPECIFICATIONS

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

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

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

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

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

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

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

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

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

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

## EXHIBIT F

### CULVERT SPECIFICATIONS

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

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

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

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

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

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

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

EXHIBIT F  
CULVERT LIST

CULVERT NO.	DIAMETER	CULVERT GAUGE	LENGTH (Feet)	MATERIAL TYPE	ROAD SEGMENT POINT TO POINT	STATION
1	(Two) 30" x 40'	16	(Two) 40'	Aluminized Steel	Coyote Creek Crossing	Coyote Creek
2	84"X 61" x 40'	14	40'	Aluminized Steel	A to B	7+50
3	(Two) 24" x 40'	Double Walled	(Two) 40'	Polyethylene	C to D	0+76
4	24" x 30'	Double Walled	30'	Polyethylene	C to D	7+85
5	24" x 30'	Double Walled	30'	Polyethylene	C to D	12+53
6	24" x 40'	Double Walled	40'	Polyethylene	C to D	19+38
7	24" x 30'	Double Walled	30'	Polyethylene	C to D	39+41
8	(Two) 24" x 40'	Double Walled	(Two) 40'	Polyethylene	C to D	46+60

Culverts 36 inches in diameter or larger shall have 1:1 beveled inlets.

Tamping is required on culverts No. 1 and 2.

EXHIBIT F

FREE DRAIN FILL SPECIFICATIONS

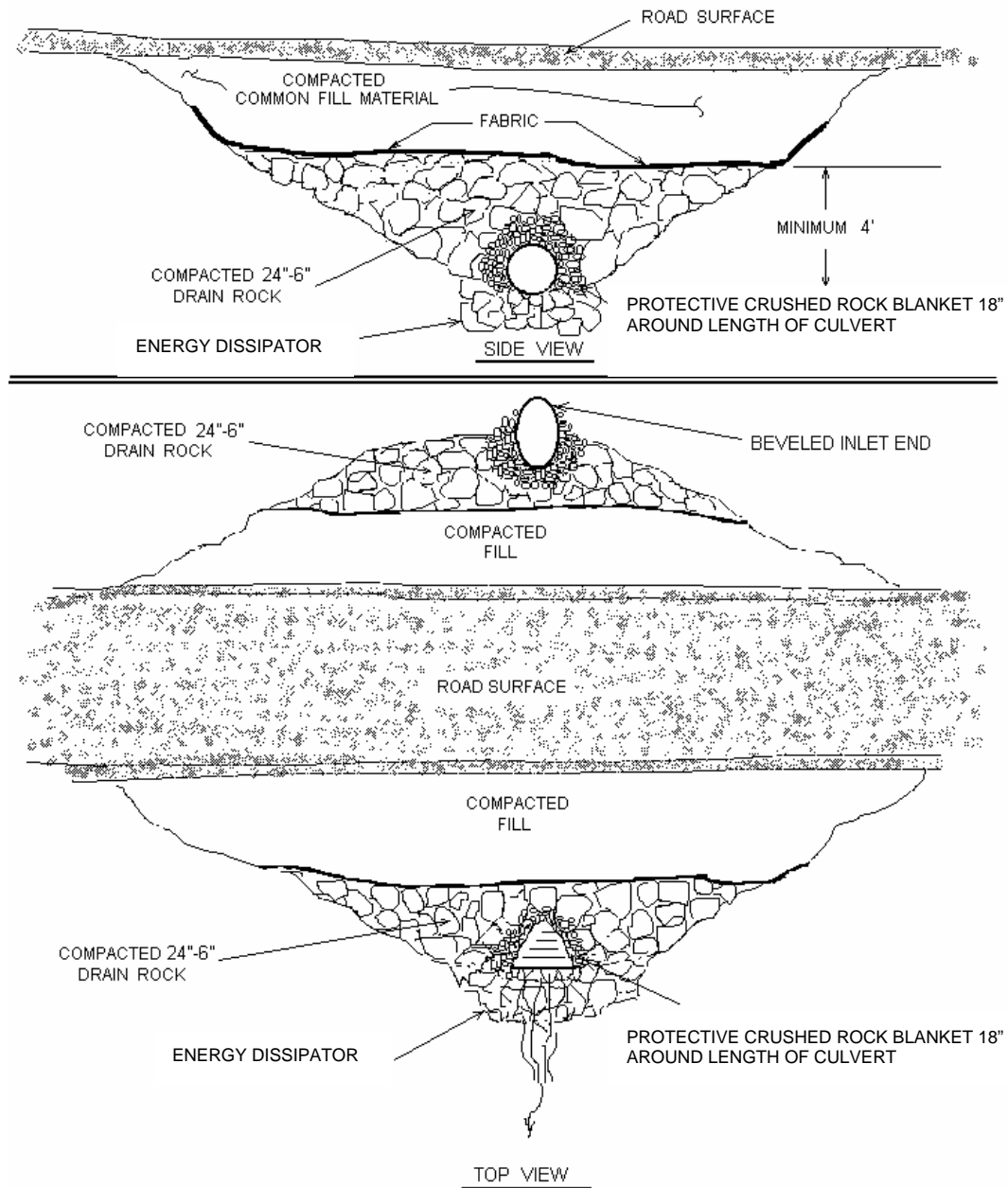
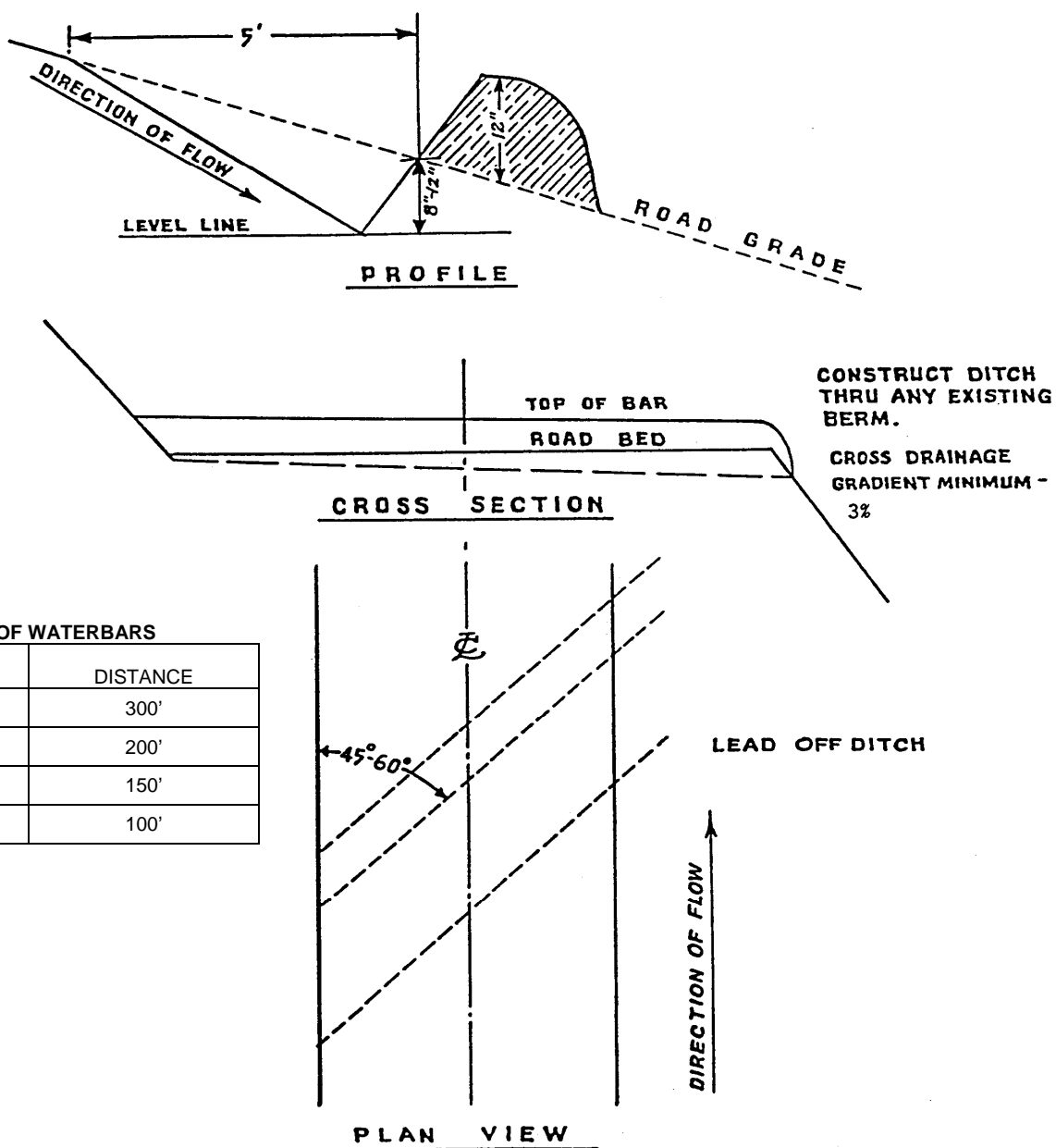




EXHIBIT G  
 WATERBAR SPECIFICATIONS

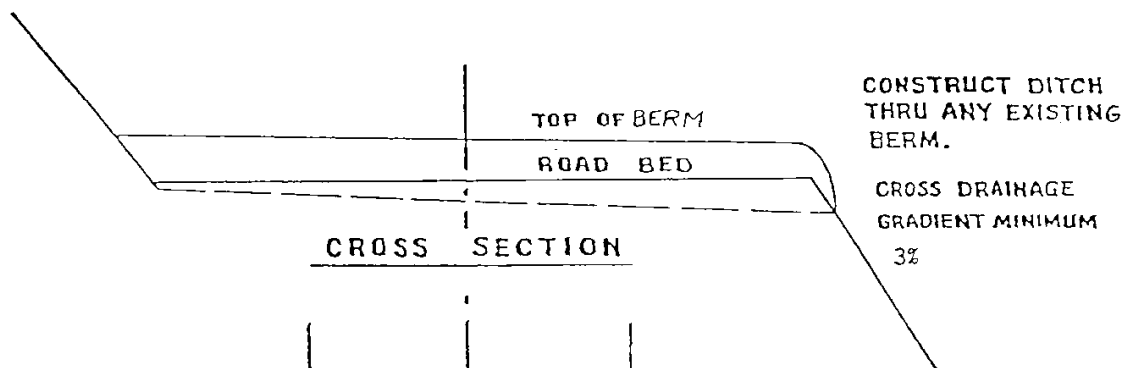
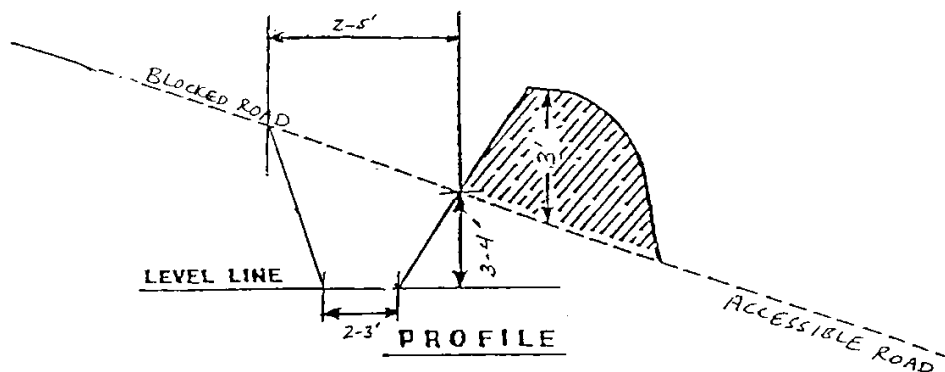


SPACING OF WATERBARS

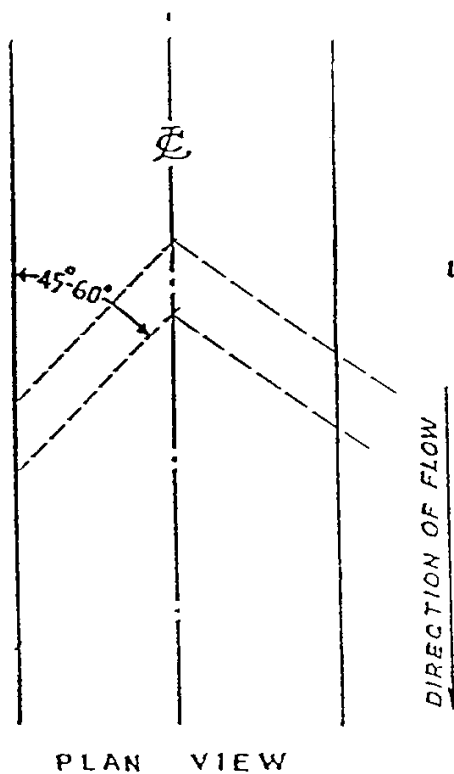
ROAD GRADE	DISTANCE
≤ 5%	300'
6-10%	200'
11-15%	150'
16-20% or greater	100'

WATERBAR SPECIFICATIONS  
 FOR CROSS DITCHING #298

EXHIBIT G  
TANK TRAP SPECIFICATIONS



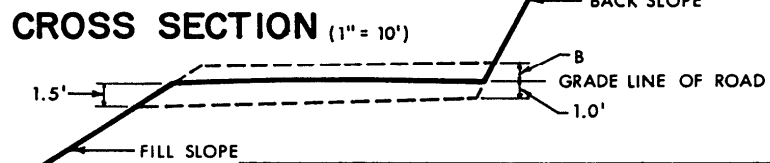
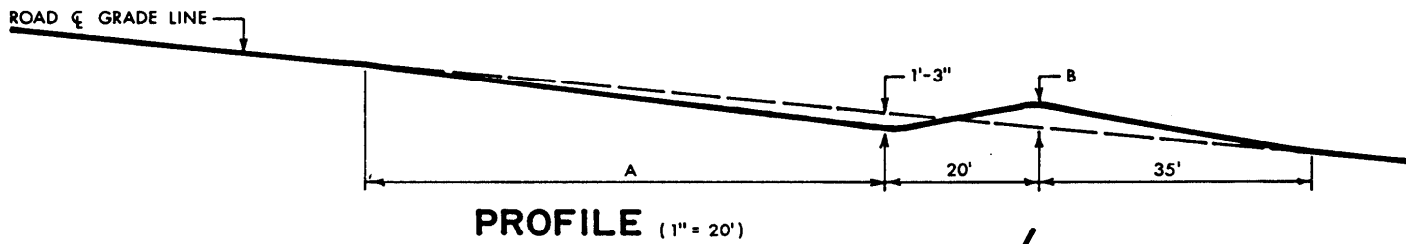
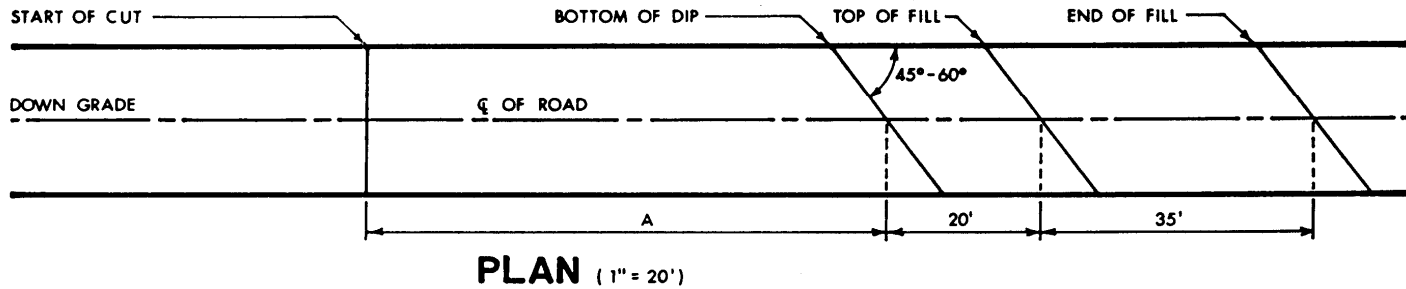
Tank trap shall be installed in a "V" shape. It should be sloped to drain with a relief ditch through the down slope edge of the road. The trench shall be behind the berm for approaching traffic.



TANK TRAP  
SPECIFICATIONS

EXHIBIT G

ROAD DIP CONSTRUCTION SPECIFICATIONS



**DIMENSIONS**

ROAD GRADE %	A	B
0 % - 5 %	50'	1.0'
5 % - 10 %	60'	1.5'
10 % - 15 %	70'	2.0'
MORE THAN 15 %	USE WATERBARS	

**ROAD DIP CONSTRUCTION SPECIFICATIONS**

SCALE: NOTED	APPROVED BY:	DRAWN BY FB
DATE: 10/14/80		REVISED
STATE OF OREGON DEPARTMENT OF FORESTRY 2600 STATE STREET SALEM OREGON 97310		
		DRAWING NUMBER 669

EXHIBIT H

WATERSHED REGULATIONS

PURCHASER shall take precautions necessary to protect the watershed from damage and to prevent pollution to the water supply. Precautions shall include, but not be limited to, the following regulations.

Laws, Rules, and Regulations. Comply with Oregon laws and with the rules and regulations of the Oregon State Board of Health relative to protection of watersheds and sanitation of public water supply.

Debris in Streams. Prevent, insofar as possible, logs, chunks, and other debris, resulting from logging and road building Operations, from being deposited in streams. If such material should become deposited in streams, immediately remove the material to restore normal stream flow, using necessary care to prevent unnecessary damage to the stream channel and banks.

General Sanitary Conditions. Do not create any conditions which may permit breeding of flies or mosquitoes. Machinery, equipment, soil, and fuel storage shall not be located near streams. Waste oil shall be removed from the watershed. Camping shall not be permitted.

Personnel. Persons with a history of typhoid fever, amoebic dysentery, or infectious hepatitis shall not be employed on the watershed. PURCHASER shall verbally instruct all personnel employed on the watershed in the required sanitary precautions to be observed and shall give each such person a copy of these regulations.

Overnight Camping Prohibited. No person shall remain on the watershed overnight, unless authorized in writing by STATE. Watchmen may use a camper with enclosed toilet system with written permission from State.

EXHIBIT I

SPECIFICATIONS FOR LANDING SLASH PILING

Piling Slash/ Piles: All piles shall be as compact as possible. The diameter of the pile shall be a minimum of 12 feet, but no greater than 25 feet.

Placement of Piles: Piles shall be placed in a location to minimize damage from burning to standing green trees and Snags. Piles shall be placed as follows:

- (a) No less than 30 feet from any Snags or green trees, unless otherwise approved by STATE.
- (b) Away from stumps or logs, stream channels, drainage structures, or ditches.

State Timber Sale Contract  
No. 341-08-19  
Kennedy Gulch Thin

## EXHIBIT J

### SPECIFICATIONS FOR SKID ROAD CLOSURE

All skid/forwarder roads shall be closed by PURCHASER prior to the timber sale completion.

Skid roads shall be closed by constructing a barrier which makes the road impassable to vehicular traffic. Where skid roads meet permanent forest roads, PURCHASER shall block access to vehicular traffic by placing several root wads across the road.

All berms or holes caused by logging Operations shall be flattened out to as close to the natural slope as possible. Water bar the sub grade and running surface at a spacing of no more than 100 feet and as specified in Exhibit H, "Water bar Specifications."

## ***PART IV: OTHER INFORMATION***

State Timber Sale Contract  
No. 341-08-19  
Kennedy Gulch Thin

**Written Plan  
Kennedy Gulch Thin  
341-08-19**

**LEGAL DESCRIPTION:** The Kennedy Gulch Thin Timber Sale is located in Portions of Sections 25 and 26, T33S, R6W, WM, Josephine County, Oregon.

**PROTECTED RESOURCE:** Coyote Creek and Kennedy Gulch Creek.

**DESCRIPTION OF THE AREA:** Coyote Creek is a medium type F stream that must be crossed to access the timber sale area. Kennedy Gulch Creek is a small seasonal type F stream that flows through the timber sale.

**PROTECTION MEASURES:**

**Roads-** The existing stream crossing through Coyote Creek will be enhanced by improving drainage and placing rock on the naturally surfaced approach and exit. Temporary culverts will be used to keep the silt and log trucks out of the stream. The culverts will be removed and the extra rock will be pushed back to the road upon completion of the sale. For Kennedy Gulch Creek, there will be no new road construction in the riparian zone along the existing gas line right-of-way from Point A to B. The existing right-of-way will be utilized for a haul route and grass seeded upon completion. From Point C to D, the road will be reconstructed from an old haul route. The road is in the outer reaches of the RMA approximately 100 to 150 feet from the stream. Where the road crosses the stream, there will be temporary culverts that protect the stream bed. During logging operations, it is likely that Kennedy Gulch Creek will be dry. Where road C-D crosses dry tributaries, the channels will be returned to their natural state upon completion of hauling.

**Timber Sale-** The prescription for the Kennedy Gulch Thinning sale is to remove approximately 1/3 of the trees outside of buffer areas. For the entire length of the Kennedy Gulch Creek within the timber sale area, there are 25 to 50 foot wide no-harvest buffers on each side. After harvesting a portion of trees outside the buffer, there will be a surplus of trees above and beyond the requirements listed in Appendix C of the Southwest Oregon Forest Management Plan. Thinned trees shall be directionally felled so that they do not fall or slide into the no cut strip. Cables will not be strung through the riparian areas of this sale. Section 2415 Protection of Watershed outlines measures to protect the RMA, prevent debris from entering the streams, and the steps to be taken when debris enters the streams.

**Stream Enhancement-** ODF personnel will do a fish log placement project in Kennedy Gulch Creek that will enhance fish habitat by building gravel spawning beds. ODFW has provided technical assistance with the stream crossing and the location and design of the structures.

**Seasonal Restrictions-** Stream enhancement projects, stream crossings, and culvert work will be accomplished during the in-stream work period from June 15 through September 1. Road-building and logging will be accomplished during the dry season from April 1 through October 31.

\_\_\_\_\_  
Company Representative

Date: \_\_\_\_\_