

TRAFFIC CONTROL PLAN AND SPECIFICATIONS PURSUANT TO GT.3.3 SAFETY

Unless otherwise agreed, the following measures are required to provide adequate warning of hazards for users of roads and trails adjacent to Contractor's Operations.

Part I. Signing and Other Warning Methods:

(a) Signs. The following signs are required when Contractor's Operations are in progress adjacent to or on Forest Service controlled roads and trails:

<u>MINIMUM LETTER SIZE AND LEGEND</u>	<u>MINIMUM SIZE AND SHAPE</u>	<u>WHEN AND WHERE REQUIRED</u>
1. LOGGING OPERATIONS NEXT <> MILES (4" letters)	24" (rectangle) 36"	Min. 100 ft. outside of any continuous work areas, on roads listed in KT-FT.3.1# and trails listed in Part II.
2. LOGGING OPERATIONS (3" letters)	24" (diamond) 24"	To be used in conjunction with "Logging Operations Next <> Miles" and where work area is not continuous.
3. FOR LOGGING USE ONLY (3" letters)	24" (diamond) 24"	Required where roads listed in KT-FT.3.1# and temporary roads intersect with KT-FT.3.1# roads. Install a cross ditch to discourage use when sign is covered or removed for extended periods.
4. TRUCKS (4" letters)	24" (diamond) 24"	At critical intersections on roads listed in KT-FT.3.1# when traffic is heavy or otherwise exceeds volumes stated in Part II below. Remove or cover when the sign is not applicable.
5. END LOGGING OPERATIONS (4" letters)	24" (rectangle) 36"	Use in conjunction with "Logging Operations Next <> Miles" and "Logging Operations."
6. TREE FELLING AHEAD (3" letters)	24" (diamond) 24"	Required 200 feet in advance of danger area where timber is being felled adjacent to all roads, including temporary roads, and trails.
7. ROAD MACHINERY AHEAD (3" letters)	24" (diamond) 24"	Required at least 200 feet in advance of Contractor road maintenance operations on roads listed in Schedule KT-FT.3.1#.

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - GT.3.3 Safety (continued)

All signs shall meet requirements as specified in Parts I and VI of the Manual of Uniform Traffic Control Devices (MUTCD).

Sign borders and lettering shall be black. Borders are 1/2 inch wide, inset 1/2 inch from outside edge of sign. All sign backgrounds shall be orange, except signs #1 and 5 which shall be reflectorized orange.

Signs shall be installed on posts, with a 5 foot minimum ground clearance, or on temporary supports complying with MUTCD standards.

All signs are to be removed or covered when operations are interrupted for seasonal nonuse or other extended periods.

Contractor shall furnish flag personnel and advance warning signs when cable or helicopter logging above roads or trails, felling adjacent to roads or trails, where logs being bucked may roll into roads or trails, and in areas where fallout from blasting may occur. On roads listed in KT-FT.3.1# and temporary roads, Contractor may temporarily block the road in lieu of furnishing flag personnel.

(b) Barricades. On roads listed in KT-FT.3.1#, if Contractor's Operations cause the traveled way or road shoulders to be constricted overnight, or longer, by such obstructions as decked logs, parked equipment, or piled slash, Contractor shall place barricades on both sides of the encroaching obstruction to safely channel traffic around such obstructions. Barricades shall remain in place until the obstruction is removed.

Barricades shall be Type II and meet specifications in MUTCD, Part VI. Barricades must be at least 3 feet high. Rails must be at least 2 feet long. Striping shall be alternating orange and white, sloping at a 45 degree angle, and reflectorized. For rails 2 feet to 3 feet long, striping shall be 4 inches wide. For rails longer than 3 feet, striping shall be 6 inches wide. Two rails, 8-12 inches in width, must face each direction.

Barricades shall be equipped with warning lights which shall be Type A low intensity flashing and shall be maintained so as to be capable of being visible on a clear night from a distance of 3,000 feet.

(c) Other Traffic Control Methods. The posting of CB channel signs may be authorized.

On roads listed in KT-FT.3.1#, Contractor may be authorized to install temporary gates, barricades (except cables), or natural barriers. The devices must be installed with the necessary hazard markers, be reasonably passable by Forest Service, and be removed prior to acceptance of the subdivision being served by the road.

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - GT.3.3 SAFETY (continued)

Part II. Specific Requirements:

(a) For road closures to install culverts in deep fills (FSR 7010, MP 1.95; FSR 72, MP 0.31 and MP 0.95) which will delay public and Forest Service administrative traffic for more than 3 hours, the Contractor shall notify the Forest Service Engineering Representative 7 days in advance of the closure.

(b) The Contractor shall install signs at the beginning of these roads to warn other road users 5 days in advance of the closure at the following road junctions in a location staked by the Forest Service Engineering Representative:

- 1. FSR 7010, at junction of FSR 70
- 2. FSR 72, at junction of Highway 410
- 3. FSR 72, at junction of FSR 70.

The signs shall be on a 48" x 36" panel, orange reflectorized with 3" high black letters on a 4" x 4" x 10' post. Hand or spray painting letters shall not be allowed. The signs shall read:

ROAD TO BE CLOSED FOR CONSTRUCTION  
 \_\_\_\_\_ (TIME) TO \_\_\_\_\_ (TIME)  
 \_\_\_\_\_ (MILEPOST)  
 \_\_\_\_\_ (DATE)

(c) Flaggers shall be used at the intersection of FSR 70 and any temporary road accessing Unit 17, for public safety during operations when vehicles enter FSR 70.

Contractor and Forest Service agree to the above stated requirements of the Traffic Control Plan:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

PLANS AND/OR CRITERIA PURSUANT TO KT-FT.1.0.1# - TEMPORARY ROAD AND LANDING CONSTRUCTION (OPTION 1) (06/2008)

1. Live drainages shall be controlled by the use of culverts. Road surface drainage features may consist of ditch and relief culverts, insloped or outsloped surfaces, drainage dips, or a combination of methods.
2. Route road drainage away from streams and potentially unstable slopes. Install waterbars at a spacing and number determined by the Forest Service. Outslope road surfaces unless outsloping would increase sediment delivery to streams, or is not feasible.
3. Erosion control measures will be in place and drainage features cleared of debris prior to the end of the normal operating season.
4. No side cast construction will be allowed within 100 feet of streams and wetlands.
5. Culverts and waterbars in temporary roads to remain in place over the winter will be sized to accommodate at least the 100-year flood.
6. Temporary roads shall be single lane with a minimum surface width needed to accommodate logging equipment. Turnouts do not have to be intervisible, but should be of sufficient quantity on longer roads to provide safe use by the Forest Service.
7. Decommissioning of temporary roads and landings will include removal of culverts and pulling any side cast material back to conform to the pre-existing slope; installing water bars; and scarification, mulching, and seeding per KT-GT.6.0#. Fill material will be pulled back to an angle of natural repose when removing culverts. Recontour entrances to temporary roads to original grade.
8. Use existing landings to the extent practicable.
9. Crown landings and staging areas to prevent concentrated runoff.
10. A bridge is required for the temporary road crossing over Slide Creek, beyond the terminus of FSR 7020. The bridge will be provided by the Forest Service and will be returned to the location specified by the Forest Service upon decommissioning. See specifications in the attached Drawings for Proposed Elk Forage Stewardship Re-Offer 2. Place rock barriers to prevent vehicle access by the public on the bridge and temporary road when not in use for contract activities.
11. The guardrail removal and replacement for temporary road access to Unit 18 will meet specifications in the attached Drawings for Proposed Elk Forage Stewardship Re-Offer 2.

TABLE PURSUANT TO KT-FT.1.1# - LAND USE AGREEMENTS (05/2005)

<u>Type of Agreement</u>	<u>Grantor</u>	<u>Purpose</u>
Easement	Plum Creek Timber	Right to use of the road, including use for the purpose of operating and moving specialized logging vehicles and other equipment, subject to compliance with legal dimensions and weights of motor vehicles imposed by State law on comparable public roads or highways, provided that gross weights shall not exceed the capacity of bridges or other structures, and provided further that cleated equipment shall not be used on paved roads.

TABLE PURSUANT TO KT-FT.1.2# - USE OF ROADS BY CONTRACTOR (09/2004)

**Restricted Road List**

Road Number	Road Name	Termini		Map Legend	Description of Restrictions
		From	To		
70	Greenwater	MP 0.00	MP 5.65 (FSR 72)	R	Snow plowing permits will only be issued for rubber tired vehicles with shoes on blades.
7010	Midnight Creek	MP 0.00	MP 2.49	R	Snow plowing permits will only be issued for rubber tired vehicles with shoes on blades.
7010	Midnight Creek	MP 0.00	MP 2.49	P	Use of motorized vehicles prohibited from December 15 through May 1, for wildlife winter range protection.
7013	Foss Creek	MP 0.00	MP 1.08	P	Use of motorized vehicles prohibited from December 15 through May 1, for wildlife winter range protection.
72	Twenty-eight Mile Creek	MP 0.00	MP 0.62	P	Use of motorized vehicles prohibited from December 15 through May 1, for wildlife winter range protection.

**Title and Date of Governing Road Rules Document:**

**Commercial Road Rules Listing for  
the Mt. Baker-Snoqualmie N.F.**  
Commercial Road Rules

**04/15/1989**  
Effective Date

MATERIAL SOURCE TABLE PURSUANT TO KT-FT.2.2.1# - MATERIAL SOURCES (09/2004)

<b>Material</b>	<b>Type of Purchase</b>	<b>Owner(s)</b>	<b>Unit of Measure</b>	<b>Unit Price</b>	<b>Estimated Quantity</b>	<b>Total</b>
N/A	N/A	Forest Service	N/A	N/A	N/A	N/A

TABLE PURSUANT TO KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS (09/2004)  
**Contract Road Maintenance Requirements Summary**

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specifications								
	From	To		T-811	T-831	T-834	T-836	T-842	T-851			
7200-223	0.00	0.25	0.25				P					
7200-224	0.00	0.23	0.23				P					

P = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable During Haul Road Maintenance Specifications								
	From	To		T-811	T-831	T-834	T-836	T-842	T-851			
7000	0.00	7.21	7.21		P	P			P			
7010	0.00	2.49	2.49	P	P	P			P			
7012	0.00	0.88	0.88	P	P	P			P			
7012-240	0.00	0.88	0.88	P	P	P			P			
7020	0.00	0.90	0.90	P	P	P			P			
7013	0.00	0.78	0.78	P	P	P			P			
7140	0.00	1.24	1.24	P	P	P			P			
7200	0.00	0.62	0.62	P	P	P			P			
7270	0.00	1.15	1.15	P	P	P			P			

P = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Road	Termini		Miles	Applicable Post Haul Road Maintenance Specifications								
	From	To		T-811	T-831	T-834	T-836	T-842	T-851			
7000	0.00	7.21	7.21		P	P		P	P			
7010	0.00	2.49	2.49	P	P	P		P	P			
7012	0.00	0.88	0.88	P	P	P		P	P			
7012-240	0.00	0.88	0.88	P	P	P		P	P			
7020	0.00	0.90	0.90	P	P	P		P	P			
7020-050	0.00	0.22	0.22	P	P	P		P	P			
7020-110	0.00	0.25	.025	P	P	P		P	P			
7013	0.00	1.08	1.08	P	P	P		P	P			
7140	0.00	1.24	1.24	P	P	P		P	P			
7200	0.00	0.62	0.62	P	P	P		P	P			

P = Contractor Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION TABLE PURSUANT TO  
KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS (09/2004)

1	2	3			4	5	6			7	8	9	
Road No. and Termini	Special Project Specifi- cation	Travel Way			Brush And Log Out	Surfacing	Dust Abatement			Seasonal Mainte- nance	Snow Removal	Post Haul	
		Width	X Slope	Comp			Product	Applic Rate	Width			Block	Treat
70 MP 0.00 - MP 7.21		EX	EX		5' R and L, OPT								P
7010 MP 0.00 - MP 2.49		EX	EX		5' R and L, OPT								P
7012 MP 0.00 - MP 0.88		EX	EX		5' R and L, OPT								P
7012-240 MP 0.00 - MP 0.88		EX	EX		5' R and L, OPT								P
7020 MP 0.00 - MP 0.90		EX	EX		5' R and L, OPT								P
7010-110 MP 0.00 - MP 0.30		EX	EX		5' R and L, OPT								P
7010-050 MP 0.00 - MP 0.22		EX	EX		5' R and L, OPT								P
7013 MP 0.00 - MP 1.08		EX	EX		5' R and L, OPT								P
7040 MP 0.00 - MP 1.24		EX	EX		5' R and L, OPT								P
72 MP 0.00 - MP 0.62		EX	EX		5' R and L, OPT								P

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO  
KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS (09/2004)

Column No.	Heading	Entry	Explanation
	Any	Blank	Except as otherwise described, no entry indicates Contractor is not authorized or required to perform the work item(s).
	Any	RC	This work requirement applies only when haul of project related construction materials occurs.
2	Special Project Specification	Number	Entry indicates Special Project Specification which applies.
3	Travel Way	EX  Numbers  IS, C, OS, F, or AI  A or B	Contractor shall maintain the traveled way to the width existing upon entry, or at the completion of Specified Road work.  Contractor shall maintain the traveled way to the standard width indicated by the entry, plus curve widening, in accordance with Section T-811. If required, the road template shall be shaped to this width and to the designated cross slope before haul and during recurring maintenance.  Cross slopes are designated as: IS (Inslope), C (Crown), OS (Outslope), F (Flat), AI (As Is).  If compaction is required.
4	Brush and Log Out	Numeric & R and or L  As Staked  OPT  H	Contractor shall remove brush for specified width on either or both the right (R) side or left (L) side of road.  Limits of brushing are as staked or marked in the field.  Contractor may use hand or mechanical means of brushing.  Only hand brushing may be used.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO  
KT-FT.3.1# - ROAD MAINTENANCE REQUIREMENTS (09/2004)

<b>Column No.</b>	<b>Heading</b>	<b>Entry</b>	<b>Explanation</b>
5	Surfacing	Aggregate Grading	Contractor shall place surfacing on roads listed according to the grading indicated.
		D	Contractor is to make deposits for listed road maintenance, including surface rock replacement.
6	Dust Abatement	OPT	Product selection is Contractor's choice from those listed in Section T-812.
		Product Abbr.	Unless otherwise agreed, Contractor is restricted to product listed corresponding to the abbreviation shown in Section T-812; (i.e., LigS = Lignon Sulfonate) Application rates are estimated amounts.
		EX	Contractor shall abate dust on the existing width
		Numbers	Contractor shall abate dust to the width indicated by entry.
7	Seasonal Maintenance	W	Waterbars and/or crossditching shall be required prior to expected seasonal precipitation.
		B	Entrance barriers shall be installed by Contractor prior to nonuse periods.
8	Snow Removal	TS	Snowplowing authorized for Contractor's Operations without recreation access being provided per Section T-803 requirements.
		JU	Snowplowing authorized, but must provide for recreation joint use per Section T-803 requirements.
		Blank	Snowplowing is not authorized. Forest Service may authorize plowing by permit when not in conflict with other uses.
9	Post Haul	P	P denotes that work is Contractor's Responsibility to perform.

SCHEDULE PURSUANT TO KT-GT.3.1.5# - PROJECT OPERATION SCHEDULE  
(05/2005)

<u>Payment Unit</u>	<u>Operation Conditions</u>	<u>Purpose</u>
All	Construction activities in or adjacent to perennial streams only between July 16 and August 15.	Fisheries habitat protection.
All	No haul of road materials, equipment, or logs from 5:00 PM Friday through Sunday or on holidays.	Public safety.

TABLE PURSUANT TO KT-GT.4.1# - SPECIFIC REQUIREMENTS (05/2005)

FELLING METHODS

PAYMENT UNITS

Ground based equipment will travel on operationally generated slash.

All

Directional felling away from roads will be used.

All

FELLING EQUIPMENT

PAYMENT UNITS

TABLE PURSUANT TO KT-GT.4.2# - YARDING/SKIDDING REQUIREMENTS (05/2005)

<u>YARDING/SKIDDING REQUIREMENTS</u>	<u>PAYMENT UNITS</u>
Ground based equipment will travel on operationally generated slash.	All
Except during lateral yarding, one end of the log must be suspended free of the ground during inhaul or skidding.	All
Leave pre-treatment large woody debris with small end diameter 20 inches or larger undisturbed when possible.	All

APPLICATION SCHEDULE PURSUANT TO KT-GT.6.0# - EROSION CONTROL AND SOIL TREATMENT BY CONTRACTOR (05/2005)

PAYMENT UNIT OR UNIT NUMBER	AREAS A) SKID TRAILS B) FIRELINES C) TEMP. ROADS D) LANDINGS E) OTHER	SEED		FERTILIZER		MULCH	
		APPLICATION		APPLICATION		APPLICATION	
		SPECIES MIXTURE <sup>1/</sup>	LBS/AC	TYPE <sup>2/</sup>	LBS/AC	TYPE <sup>3/</sup>	LBS/AC
All	C, D	soft white winter wheat	50			Weed-free straw	4,000
		slender wheatgrass	20				
		annual ryegrass	20				
		Austrian winter peas	5				

<sup>1/</sup> For projects in Oregon, the seed shall meet the State certification specifications. Seed must be packaged in containers carrying official certification labels sewn in, glued to, or printed upon the container, with the following information:

1. Variety (if certified as to variety) and kind.
2. Quantity of seed (pounds or bushels).
3. Class of certified seed (blue tags for certified seed).
4. Inspection or lot number traceable to the certifying agency's records.

For projects in Washington, the seed shall be labeled as "Prohibited and Restricted Noxious Weed Free for the State of Washington." The Contractor shall furnish a copy of the seed analysis.

For state of California lands in Region 6, seed must be certified by the state of California, or by an independent agency or company that is approved by the state of California for "prohibited and restricted noxious weed free for the state of California."

For mixtures of seed, each ingredient in excess of 5 percent must be listed with its percentage by weight and its germination percentage.

Legumes must be inoculated with nitrogen fixing bacteria before planting. The label must show the expiration date of the inoculant.

All seed treated with a fungicide or pesticide must be labeled that it is "treated" giving the name of the chemical used, and an appropriate warning or a caution statement.

<sup>2/</sup> Fertilizer shall be a standard commercial fertilizer with guaranteed analysis of contents clearly marked on containers.

<sup>3/</sup> Mulch shall meet the appropriate State's certification specifications, with evidence of its certification traceable to the certifying agency's records.

SPECIFICATIONS PURSUANT TO KT-GT.7.4.2#-SLASH TREATMENT REQUIREMENTS  
(OPTION 2) (06/2008)

Slash in areas that are yarded with ground based equipment will be piled or removed within 15 days of completion of unit cutting.

Slash piles shall be 25 feet in diameter or less.

Slash is defined as any material 1.0 to 9.0 inches in diameter at the large end and at least 3 feet in length.

LIST OF STEWARDSHIP PROJECTS PURSUANT TO KT-GT.9# - STEWARDSHIP PROJECTS  
(09/2004)

Project Number 001 - Create elk forage openings. See attached requirements and specifications.

Project Number 002 - Place FSR 7200-223, 7200-224, and 7270 in storage. See attached requirements and specifications.

Project Number 003 - Treat non-merchantable trees in clearcutting units. See attached requirements and specifications.