

APPENDIX C

ROAD MAINTENANCE

ROAD MAINTENANCE REQUIREMENTS

Road	Termini		Miles	Applicable Prehaul Road Maintenance Specification								
	From	To		T838	T839	K-F.3.2#						
28	mp 6.25	mp 14.61	8.36			D						
2719	mp 16.655	mp 15.93	0.73									
2719-800	mp 0	mp 4.67	4.67	C								
2719-830	mp 0	mp 0.34	0.34		C							
2813-100	mp 5.5	mp 3.83	1.67		C							
2813-110	mp 0	mp 0.10	0.10		C							
2827	mp 0	mp 9.45	4.00									
2827-300	mp 0	mp 2.50	2.50	C								
2827-200	mp 0	mp 0.50	0.50		C							
2827-790	mp 0	mp 0.10	0.10		C							
Road	Termini		Miles	Applicable During Haul Road Maintenance Specifications								
	From	To		T838	T839	K-F.3.2#						
28	mp 6.25	mp 14.61	8.36									
2719	mp 16.655	mp 15.93	0.73	C								
2719-800	mp 0	mp 4.67	4.67	C								
2719-830	mp 0	mp 0.34	0.34		C							
2813-100	mp 5.5	mp 3.83	1.67		C							
2813-110	mp 0	mp 0.10	0.10		C							
2827	mp 0	mp 9.45	4.00	C								
2827-300	mp 0	mp 2.50	2.50	C								
2827-200	mp 0	mp 0.50	0.50		C							
2827-790	mp 0	mp 0.10	0.10		C							

Road	Termini		Miles	Applicable Post Haul Road Maintenance Specifications								
	From	To		T838	T839	K-F.3.2#						
28	mp 6.25	mp 14.61	8.36									
2719	mp 16.66	mp 15.93	0.73	C								
2719-800	mp 0	mp 4.67	4.67	C								
2719-830	mp 0	mp 0.34	0.34		C							
2813-100	mp 5.5	mp 3.83	1.67		C							
2813-110	mp 0	mp 0.10	0.10		C							
2827	mp 0	mp 9.45	4.00	C								
2827-300	mp 0	mp 2.50	2.50	C								
2827-200	mp 0	mp 0.50	0.50		C							
2827-790	mp 0	mp 0.10	0.10		C							

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

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE

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 sale related construction materials occurs.
2	Special Project Specification	Number	Entry indicates Special Project Specification which applies.
3	Travel Way	EX	Contractor shall maintain the traveled way to the width existing upon entry, or at the completion of Specified Road work.
		Numbers	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.
		IS, C, OS, F, or AI	Cross slopes are designated as: IS (Inslope), C (Crown), OS (Outslope), F (Flat), AI (As Is).
		A or B	If compaction is required.
4	Brush and Log Out	Numeric & R and or L	Contractor shall remove brush for specified width on either or both the right (R) side or left (L) side of road.
		As Staked	Limits of brushing are as staked or marked in the field.
		OPT	Contractor may use hand or mechanical means of brushing.
		H	Only hand brushing may be used.

ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT
TO
K-F.3.1# - ROAD MAINTENANCE REQUIREMENTS(9/04)

Column No.	Heading	Entry	<u>Explanation</u>
5	Surfacing	Aggregate Grading	Contractor shall place surfacing on roads listed according to the grading indicated.
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	CR	CR denotes that work is Contractor's Responsibility to perform.

Road Maintenance T-Specifications

Specification Description

(no specification)	801-1 Road Structure Details (drawing)
T838	Maintenance for High Clearance Vehicles T838-1 Cross Ditching (drawing) T838-3 Object on Roadbed (drawing) T838-5 Treatment of Slumps (drawing)
T839	Maintenance for Project Use

Specifications incorporated by reference:

T831	Ditch Maintenance
T834	Drainage Structure Maintenance T834-1 Clearing of Ditch Relief (drawing) T834-4 Treatment of Slides (drawing)
T835	Roadway Drainage Maintenance
T835-1	Road Closure – Earth Mound (drawing)

T-838 MAINTENANCE FOR HIGH CLEARANCE VEHICLE USE (2/02)

838.01 Description

This work consists of making limited use roads passable for project use by Contractor and providing drainage from the traveled way and roadbed.

838.02 Maintenance Requirements

A. Traveled Way

Contractor may smooth or fill existing cross ditches and waterbars and by agreement modify existing road junction to enable vehicle access. Prior to beginning haul and resumption of haul after an extended stoppage:

1. Remove brush, fallen trees, rocks, and other debris from traveled way, including turnouts, turnarounds, and other locations that interfere with needed maintenance as follows:
 - a. No object extending over 100 mm (4 inches) above the road surface shall remain within the 3.6 m (12 feet) usable traveled way. Center the usable width on the roadbed or position away from the fill slope.
 - b. Cut and remove standing or down trees, logs, brush, and limbs from within the area described in 1(a). Remove encroaching limbs to a height of 4.2 m (14 feet) above the traveled way surface. Scatter material not meeting utilization standards outside and below the roadbed on the fill side. Limb and remove timber which, meets utilization standards or deck at agreed locations.
 - c. Place all removed materials away from drainages.
 - d. During use, maintain drainage structures including dips, ditches and culverts in a usable condition.
2. Clean and recondition drainage facilities in accordance with Section T-831 and T-834.

B. Slough and Slides

1. Slough and slides may be left in place, provided surface drainage is provided and at least 3.6 m (12 feet) of width is available for vehicle passage.

2. Contractor may reposition or ramp over slides and slough when the traveled way is less than 3.6 m (12 feet) providing the material is capable of supporting vehicles. Limit outslope to no more than six percent.
3. Reposition slough or slide materials, which are not capable of supporting a vehicle, on the roadbed to provide the 3.6 m (12 feet) width. When directed by Forest Service, slough or slide material will be removed under Section T-832.

C. Slumps and Washouts

1. Drain the roadbed immediately upgrade of slumps and longitudinal cracks to prevent water from entering slump area.
2. Slumps and longitudinal cracks at the edge of the roadbed shall not be considered a part of the usable width. Usable width may be reduced to 3 m (10 feet) in the area of the slump.
3. Unless Forest Service agrees to material being placed on slumps, ramp the slumps on both ends into undisturbed roadbed to provide at least 3 m (10 feet) usable width. Use removed materials to guide vehicles to the ramp location or to aid in draining the area.
4. Washouts may be filled with suitable material.

D. Posthaul

At the end of hauling or prior to entering into seasonal shutdowns or a period of extended inactivity:

1. Shape the traveled way and disturbed roadbed to provide functional drainage.
2. Reinstall removed cross ditches and waterbars and provide any additional drainage structures necessary to offset changes caused through use and maintenance.
3. Leave roads useable for high clearance vehicles. Remove or reshape Contractor modifications at road junctions to leave the entrance as it was before use, or as agreed at the time of improvement.

T-839 MAINTENANCE FOR PROJECT USE (05/07)

839.01 Description

Work consists of providing minimum access required for Contractor's Operations and associated Forest Service contract administration and preventing unacceptable resource or road damage.

839.02 Maintenance Requirements

- A. Contractor is authorized to perform the following maintenance to provide vehicle passage and drainage:
1. Removing log, earth, and rock barriers and/or improving existing road junctions to enable vehicle access as mutually agreed.
 2. Smoothing or filling existing cross ditches and water bars.
 3. Installing Contractor-furnished culverts or other temporary drainage structures for shallow stream crossings as approved by the Contracting Officer.
 4. Removing brush, fallen trees, rocks, and other materials from the traveled way and other locations that interfere with needed maintenance:
 - a. Place all removed materials away from drainages.
 - b. Limb and remove timber which meets utilization standards or deck at locations approved by the Contracting Officer. Scatter other woody materials, including limbs, off of and below the roadbed without creating concentrations.
 5. Clean and recondition drainage structures in accordance with Section T-831 and Section T-834.
 6. Reposition or ramp over slough and slides to provide adequate width of traveled way material.
 7. Provide traveled way drainage above slumps and seal cracks in slump area. Ramp the slumps on both ends into undisturbed roadbed to provide usable width unless otherwise ordered by the Contracting Officer.

Deleted:

- B. During use, the traveled way shall not channel water along the road. Prior to seasonal periods of anticipated rains and runoff, perform the following work:
1. Shape the traveled way and roadbed to drain.
 2. Reinstall removed cross ditches and water bars and provide any additional drainage structures necessary to offset changes through use and maintenance.
 3. Perform work outlined in 839.02 A (5), (6), and (7).
 4. During periods of non use, replace original barrier or provide and maintain standard MUTCD, Type 3, barricades unless alternate type barriers are approved by the Contracting Officer.

839.03 Post Haul Requirements

- A. Upon completion of project use perform such work as needed to reasonably conform to the character of the existing road prior to Contractor's maintenance for project use, unless otherwise provided in the SUPPLEMENTAL SPECIFICATIONS or the Road Listing. Work shall be in addition to requirements of 839.02 B and in accordance with 839.03 B and C.
- B. Roads designated in the Road Listing to be blocked shall conform to the requirements of Section T-835. Unless otherwise approved by the Contracting Officer, remove Contractor-installed temporary structures from National Forest System land. Associated commercially-obtained materials shall remain the property of the Contractor.
- C. Remove or reshape Contractor improvements at road junctions, as approved by the Contracting Officer at the time of improvement.