Appendix F
Table F-1. Northern Region forest road standards

	Level of Use	Curve Radius	Grade	Drivable Surface	Turnouts
Primary all-season road[1]	Moderate to heavy. Long-term. Year-round.	300' normal design. 100' minimum[2]. Curve widening on minimum-radius curves.	8% normal. 10% maximum.	16'-20' width and rock surfacing may be required.	Not required if at least 18' width drivable surface. Otherwise: 1000' maximum interval, intervisible. 25' ingress, 25' egress, 50' full. 12' width.
Secondary all-season road	Light to moderate. Medium to long-term. Year-round.	100' normal design. 60' minimum[2].	15% maximum favorable. 10% maximum adverse.	12'-16' width.	Same as above.
Spur road	Light. Short-term.	Same as secondary all-season road.	20% maximum.	10' to 16' width.	Not required.
Primary winter road	Moderate to heavy. Long-term.	Same as primary all-season road.	Same as primary all-season road.	16' to 20' width.	Same as primary all-season road.
Secondary winter road	Light to moderate. Medium to long-term.	Same as secondary all-season road.	Same as secondary all-season road.	Same as secondary all-season road.	Same as primary winter road.

[1]Higher construction standards may be needed for site-specific projects and conditions.
[2]To be applied only under topographically limiting conditions.

	Cut and Fill	Clearing[3]	Grubbing	Debris Disposal	Permafrost
Primary all-season road[1]	Fill slope castings 1½:1 angle maximum. Cut slopes at 1:1 angle maximum, except that loess soils may be cut vertically. See also 11 AAC 95.290(c).	5' beyond cuts or fills, or minimum of 35' width. Merchantable timber cut and decked ahead of construction.	Removal of stumps, roots, and organics from the road bed to outside of ditches unless top of stumps under 2' of fill.	If at least 2' beyond ditches, may be windrowed or placed in push-outs. If closer, buried under at least 1' of fill.	Avoid exposing thaw-unstable permafrost through routing or using raised fill construction. If exposed, minimize sedimentation with effective erosion control measures. See also 11 AAC 95.290 (c).
Secondary all-season road	Same as above.	5' beyond cuts or fills, or minimum of 30' width. Merchantable timber cut and decked ahead of construction.	Same as above.	Same as above.	Same as above.
Spur road	Avoid where feasible and prudent.	Minimum 12'. Merchantable timber cut and decked ahead of construction.	Under drivable surface.	Use windrowing or push-out techniques as appropriate.	Avoid exposure of thaw-unstable permafrost. If exposed, stabilize by treating with effective and appropriate measures such as recovering exposed soils, seeding, drainage structures, and settling basins. (See also 11 AAC 95.290(c), (g); .295(g).)
Primary winter road	Minimize cuts and fills in thaw-unstable permafrost. Avoid where feasible and prudent, cuts in thaw-unstable permafrost; exceptions will be identified in the FLUP.	Minimum 16'.	Partial removal of surface organics only as needed to provide a level running surface.	Same as spur road.	Same as spur road.
Secondary winter road	Avoid where feasible and prudent. Exceptions will be identified in the FLUP.	Minimum 12'.	Same as Primary winter road.	Same as spur road.	Same as spur road.

[3] Minimum is used for safety and snow storage reasons.
[1]Higher construction standards may be needed for site-specific projects and conditions.

	Ditches	Culverts	Maintenance
Primary all-season road[1]	1.0' minimum depth. 2.0' minimum width. Block ditch on downhill side of culvert inlet, where needed.	Minimum diameter 12" except as stated in 11 AAC 95.295. Installed at or below natural ground line. Installed at natural stream gradient.	Grading and ditching as necessary.
Secondary all-season road	Block ditch on downhill side of culvert inlet where needed.	Same as above.	Grading and ditching as necessary. Maintained or closed after logging use.
Spur road	As needed.	Same as above.	Closed or treated as per 11 AAC 95.315(c) after logging use.
Primary winter road	None.	Same as above.	Open drainages before breakup.
Secondary winter road	None.	Same as above.	Closed or treated as per 11 AAC 95.315(c) after logging use. Open drainages before breakup.

[1] Higher construction standards may be needed for site-specific projects and conditions.