

ROAD MAINTENANCE, CONSTRUCTION, RENOVATION, & DECOMMISSIONING

See Also Exhibit A (Sheets 1-3), Exhibit C, and Exhibit G

Unit #	Surface		Stations	Description	Status	Stations	Total Length (ft)	Distance (mi)
	Length (ft)	Width (ft)						
1-A	5,781.36		57.81	Pendry Rd	Haul Route			
1-A	3,743.25		37.43	Lilly Ck Rd	Haul Route			
1-A	440.06		4.40		Haul Route	132.02	13,201.54	2.50
1-A	654.24		6.54	Leland 700' Pri Rd Access	Haul Route			
1-A	2,582.62		25.83	Pendry Rd	Haul Route			
1-A	146.40	12	1.46		Road Construction			
1-A	1,372.79	12	13.73		Road Construction			
1-A	678.49	12	6.78		Road Construction	33.30	3,329.81	0.63
1-A	472.67	12	4.73		Road Construction			
1-A	659.46	12	6.59		Road Construction			
1-A	353.34		3.53		Road Decommissioning			
1-A	825.84		8.26		Road Decommissioning			
1-A	432.90		4.33		Road Decommissioning	17.40	1,740.02	0.33
1-A	127.95		1.28		Road Decommissioning			
1-A	695.46	12	6.95		Road Renovation			
1-A	177.52	12	1.78		Road Renovation	15.28	1,528.29	0.29
1-A	655.31	12	6.55		Road Renovation			
1-B	583.53	12	5.84	Hancock 583' Pri Rd Const	Private Road Construction			
1-B	1,200.92	12	12.01		Road Construction	19.55	1,954.72	0.37
1-B	170.28	12	1.70		Road Construction			
1-B	3,497.83	12	34.98		Road Renovation			
1-B	633.94	12	6.34	Hancock 634' Pri Rd Ren	Road Renovation	61.19	6,118.95	1.16
1-B	1,987.19	12	19.87	Hancock 1,987' Pri Rd Access	Road Renovation			
1-C	813.78		8.14		Haul Route			
1-C	2,769.84		27.70	Eagle Track Rd	Haul Route			
1-C	3,912.73		39.13	Eagle Track Rd	Haul Route	95.07	9,507.28	1.80
1-C	2,010.94		20.11	Eagle Track Rd	Haul Route			

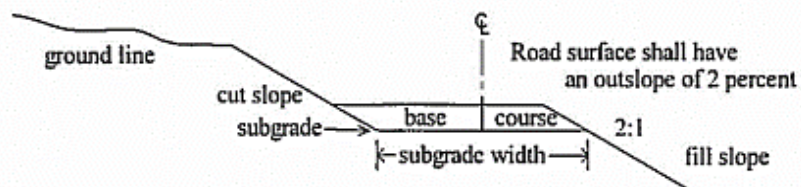
1-C	595.04	12	5.95	Vaagen 595' Pri Rd Const	Private Road Construction			
1-C	403.03	12	4.03		Road Construction			
1-C	1,091.93	12	10.92		Road Construction	31.69	3,168.65	0.60
1-C	115.38	12	1.15	Vaagen 115' Pri Rd Const	Road Construction			
1-C	963.28	12	9.63		Road Construction			
1-C	394.12		3.94		Road Decommissioning	3.94	394.12	0.07
1-C	2,023.01	12	20.23		Road Renovation			
1-C	284.59	12	2.85		Road Renovation			
1-C	1,154.54	12	11.55	Vaagen 1,155' Pri Rd Ren	Road Renovation	64.34	6,433.63	1.22
1-C	2,672.88	12	26.73	Hancock 2,672' Rd Ren	Road Renovation			
1-C	298.62	12	2.99		Road Renovation			
					Haul Route	227.09	22,708.82	4.30
					Private Road Construction	11.79	1,178.57	0.22
					Road Construction	72.75	7,274.61	1.38
					Road Decommissioning	21.34	2,134.14	0.40
					Road Renovation	140.81	14,080.87	2.67

Road Renovation: The contract will require the purchaser to renovate approximately 1.29 miles of existing roads and trails. However, most road renovation can be accomplished during normal logging operations. Most of the road renovation could be accomplished by simple brushing and removal of small trees that have grown into existing roads.

Road Construction: The location and length of temporary roads, including skid roads may be adjusted at the time of contract implementation. All temporary roads on BLM land must be decommissioned. See also Exhibit G and attached Spec Sheets.

Road Maintenance: See Exhibit C

Specification Sheet



1. <u>Road Standard</u>	<u>SN-14</u>	_____	_____
2. <u>Alignment</u>			
Max. degree of curve	<u>75°</u>	_____	_____
3. <u>Road Width</u>			
Subgrade	<u>14 ft.</u>	_____ ft.	_____ ft.
Subgrade at turnout	<u>24 ft.</u>	_____ ft.	_____ ft.
4. <u>Gradient</u>			
Max. favorable	<u>15%</u>	_____	_____
Max. adverse	<u>15%</u>	_____	_____
5. <u>Clearing Width</u>			
Beyond top of cut	<u>3 ft.</u>	_____ ft.	_____ ft.
Beyond toe of fill	<u>0 ft.</u>	_____ ft.	_____ ft.
6. <u>Surfacing</u>			
Min. width	<u>12 ft.</u>	_____ ft.	_____ ft.
Compacted depth	<u>4 in.</u>	_____ in.	_____ in.

7. Full Bench Construction
Slopes 60% and over shall be full bench construction.

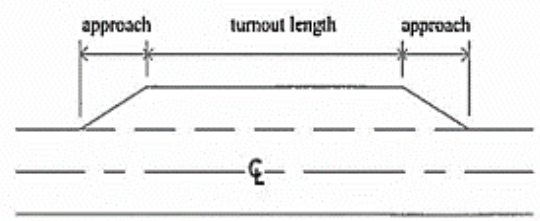
8. <u>Excavation Slopes</u>		<u>Cut Slopes</u>		<u>Fill Slopes</u>
Common		1:1		1½:1
Soft rock and shale	3/4:1			1½:1
Solid rock	½:1			Angle of repose

9. Extra Subgrade Widths
Add to each fill shoulder 1 ft. for fills 1-6 ft., 2 ft. for fills over 6 ft.
Widen inside shoulder of all curves as follows:

When degree of curve equals:

7° - 21° -- 1 ft.	49° - 64° -- 4 ft.
22° - 35° -- 2 ft.	65° - 115° -- 5 ft.
36° - 48° -- 3 ft.	

Typical Turnout

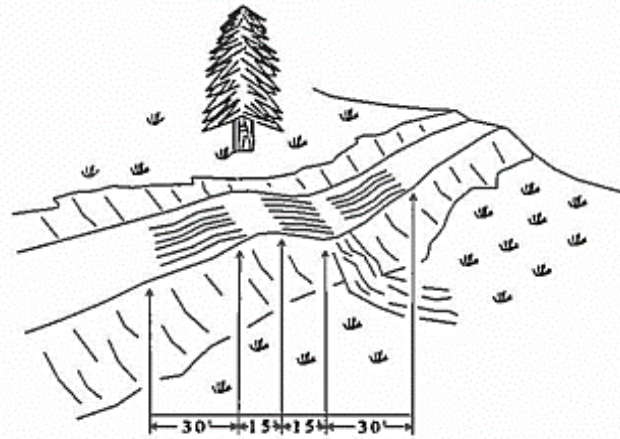


10. Turnouts
Standard length: 50 ft., approach length: 25 ft.
Width: 10 ft. in addition to subgrade width.
Location: intervisible or not over 700 ft. apart.
Surfacing width: 10 ft. in addition to min. surface widths.

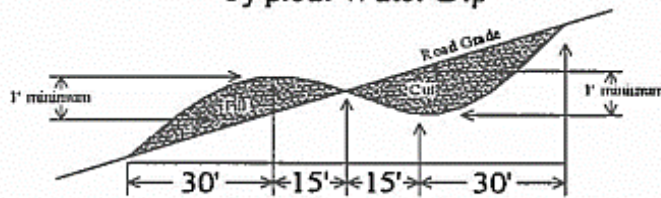
CL: Centerline

Water Dip Specifications

(For Roads with Grades Greater Than 8 Percent)



Typical Water Dip



Cross Section View

WATER DIP SPECIFICATIONS						
ROAD GRADE IN %	SOIL TYPE			ROAD GRADE IN %	SOIL TYPE	
	GRANITIC OR SANDY	SHALE OR GRAVEL			GRANITIC OR SANDY	SHALE OR GRAVEL
1	1000	1000		9	300	900
2	900	1000		10	300	800
3	600	1000		11	300	700

4	400	1000		12	300	700
5	400	1000		13	300	600
6	300	1000		14	300	600
7	300	1000		15	300	500
8	300	900				