ROAD INVENTORY DATA FORM

GENERAL	Site #:	Watershed:	Type of vehicle(s) using road:			
	Road use **Year round, Seasonal, No recent use (>5 yrs)**		Surface **rocked, native, paved**		Drivability **Drive, Quad, Walk**	
PROBLEM (CIRCLE ONE)	Stream crossing	Landslide	Road surface	Ditch relief culvert (DRC)	Spring	Bank erosion

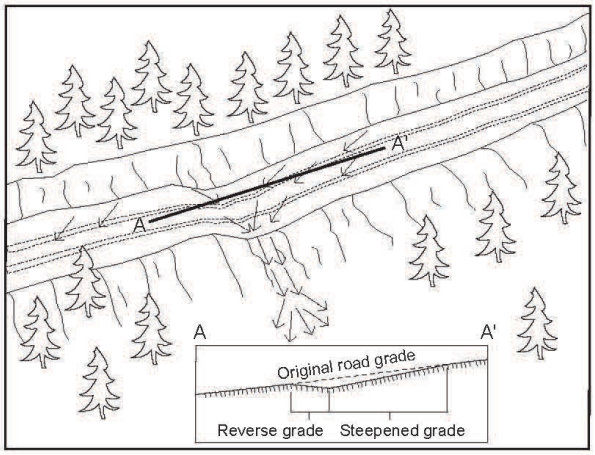
ROAD/ DITCH INFO EXISTING	Left road/ditch length (ft): **0-150, 151-600, 601+**	Left road/ditch lowering: **H, M, L**	Right road length (ft): **0-150, 151-600, 601+**	Right rd srfc lowering **H, M, L**
	Left cutbank ht (ft): **None, 0-5, 5+**	Left cutbank lowering: **H, M, L**	Right cutbank ht (ft): **None, 0-5, 5+**	Right cutbank lowering: **H, M, L**
	Left rd grade %: **Gentle, Moderate, Steep**		Right rd grade%: **Gentle, Moderate, Steep**	
	Left road shaping (circle any observed) **Outlope, Inslope, Crowned, Flat, Thru-cut**		Right road shaping (circle any observed) **Outlope, Inslope, Crowned, Flat, Thru-cut**	

STREAM EXISTING	Culvert	Bridge	Humboldt	Fill	Ford	Armored fill	Decommissioned
	Culvert present **Y or N**	Culvert type: **Plastic, Metal, Concrete**	Culvert at natural grade? **Y or N**	Rust line (%): **0-30, 31-50 , 51+**			
	Inlet **Open, Crushed, Plugged, Rusted**	Outlet **Open, Crushed, Plugged, Rusted**	Culvert Separated? **Y or N**	Plug potential **H, M, L**	Culvert appears undersized: **Y, M, N**		
	Stream class **1, 2, 3**	Sed transport **H, M, L**	Channel grade **gentle, moderate, steep**				
	Diversion Potential? **Y or N**	Currently diverted? **Y or N**	Past diversion? **Y or N**	Fish barrier? **Y or N or N/A**			

EROSION	Erosion Potential or Likelihood of Future Erosion: **H, M, L**

TREATMENT	Treat **Y or N**	ASAP **Y or N**	Treatment Immediacy **H, M, L**	Complexity **H, M, L**		
	<u>Stream crossing</u> treatment needs (circle site needs)	Replace culvert	Install bridge	Install ford	Install armored fill	Decommission crossing
		Trash Rack	Critical dip	Armor fillslope (in or out)	Clean culvert	
	<u>Right</u> road treatment needs (estimate # or length)	*Rolling dip (#):*	*Install/replace DRC (#):*	*Clean or cut ditch length (ft):*		
		Outslope road (ft):	*Inslope road (ft):*	*Crown road (ft):*		
	<u>Left</u> road treatment needs (estimate # or length)	*Rolling dip (#):*	*Install/replace DRC (#):*	*Clean or cut ditch length (ft):*		
		Outslope road (ft):	*Inslope road (ft):*	*Crown road (ft):*		

Typical Road Surface Drainage by Rolling Dips



Rolling dip installation:

1. Rolling dips will be installed in the roadbed as needed to drain the road surface.
2. Rolling dips will be sloped either into the ditch or to the outside of the road edge as required to properly drain the road.
3. Rolling dips are usually built at 30 to 45 degree angles to the road alignment with cross road grade of at least 1% greater than the grade of the road.
4. Excavation for the dips will be done with a medium-size bulldozer or similar equipment.
5. Excavation of the dips will begin 50 to 100 feet up road from where the axis of the dip is planned as per guidelines established in the rolling dip dimensions table.
6. Material will be progressively excavated from the roadbed, steepening the grade unitl the axis is reached.
7. The depth of the dip will be determined by the grade of the road (see table below).
8. On the down road side of the rolling dip axis, a grade change will be installed to prevent the runoff from continuing down the road (see figure above).
9. The rise in the reverse grade will be carried for about 10 to 20 feet and then return to the original slope.
10. The transition from axis to bottom, through rising grade to falling grade, will be in a road distance of at least 15 to 30 feet.

Table of rolling dip dimensions by road grade

Road grade %	**Upslope approach distance** (from up road start to trough) ft	**Reverse grade distance** (from trough to crest) ft	**Depth at trough outlet** (below average road grade) ft	**Depth at trough inlet** (below average road grade) ft
<6	55	15 - 20	0.9	0.3
8	65	15 - 20	1.0	0.2
10	75	15 - 20	1.1	0.01
12	85	20 - 25	1.2	0.01
>12	100	20 - 25	1.3	0.01

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Typical Drawing #11