

FEDERAL HIGHWAY ADMINISTRATION, Federal Lands Highway				Sheet No: <u>14</u> of <u>15</u>	
DAMAGE SURVEY REPORT				DSR No: MORA-Rte. 102-6	
(Title 23, Federal-Aid System/Federal Domain)				Disaster No: WA2007-1NPS	
Applicant: Mount Rainier National Park		County: Pierce	State: WA	Inspection Date: 01/23/2007	
Route 102 - Carbon River road MP 4.7 (Ipsut Campground)				ADT:	
Bridge Data:	Road Data:	Classification:		Photograph #:	
Type:	Traveled Way Width: 18 ft	Surface Type: gravel	Thickness: 4"-6"		
ID#:	Shoulder Width:	Surface Type:			
Description and Cause of Damage: Flood flows of November 6 and 7, 2006 eroded river banks, resulting in flood flows overtopping riverbanks and flowing down the Carbon River road. Significant portions of the road were severely eroded and damaged.		Scope/Description of Repair: MP 4.7 Remove sediments and woody debris from Creek channel and restore Ipsut Creek to its channel under Ipsut bridge.			
COST ESTIMATE for EMERGENCY REPAIRS*					
Quantity	Unit	Item Description		Unit Price	Cost
Proposed:		Force Account	Contract	Total Emergency Repairs	\$0
COST ESTIMATE for PERMANENT REPAIRS*					
Quantity	Unit	Item Description		Unit Price	Cost
1	LS	Mobilization		\$3,000.00	\$3,000
1	LS	restore Ipsut creek to its channel under Ipsut bridge		\$27,000.00	\$27,000
1	LS	Revegetation (5%)		\$1,500.00	\$1,500
		Ipsut creek diverted into an old channel, washing out the Carbon River road just prior to MP 4.7. Remove log jams against and under Ipsut bridge. Remove sediments under and upstream of Ipsut bridge. Divert Ipsut creek back into its channel under the Ipsut bridge at a point approx 300 feet upstream of the bridge. Alternate to diverting Ipsut creek is to build a new bridge about 100 feet down the Carbon River road to cross Ipsut creek at its current location.			
		Flows in Ipsut creek under the bridge are unpredictable due to the effect of at least 3 flood channels from the Carbon river flowing into the Ipsut creek reach upstream of the Ipsut bridge.			
Subtotal Permanent Repairs (continuation sheet)					
Proposed:		Force Account	Contract	Total Permanent Repairs	\$31,500
Identify Betterment, if any, and provide justification*				Preliminary Engineering 15%	\$4,725
				Construction Engineering 10%	\$3,150
				Right-of-Way	
				Other: Compliance (5%)	\$1,575
				TOTAL ESTIMATED COST (Emergency and Permanent Repairs)	\$40,950
Submitted By: (Name and Title) Eric Walkinshaw, Park Engineer			Signature: /s/ Eric Walkinshaw		2/13/2007
Reviewed By: (Name and Title) David F. Kruse, PWR ERFO Coordinator		Eligible <input checked="" type="checkbox"/>	Ineligible <input type="checkbox"/>	Signature: /s/ David F. Kruse	
				Date: 2/16/07	
Recommended By: (Name and Title)		Eligible <input type="checkbox"/>	Ineligible <input type="checkbox"/>	Signature:	
				Date:	

*Attach Supplemental Sheets if necessary