

FEDERAL HIGHWAY ADMINISTRATION, Federal Lands Highway

DAMAGE SURVEY REPORT (Supplemental Sheet)

(Title 23, Federal-Aid System/Federal Domain)

Sheet No: 2 of 15

DSR No: MORA-Rte. 102

Disaster No: WA2007-1NPS

Applicant: Mount Rainier National Park

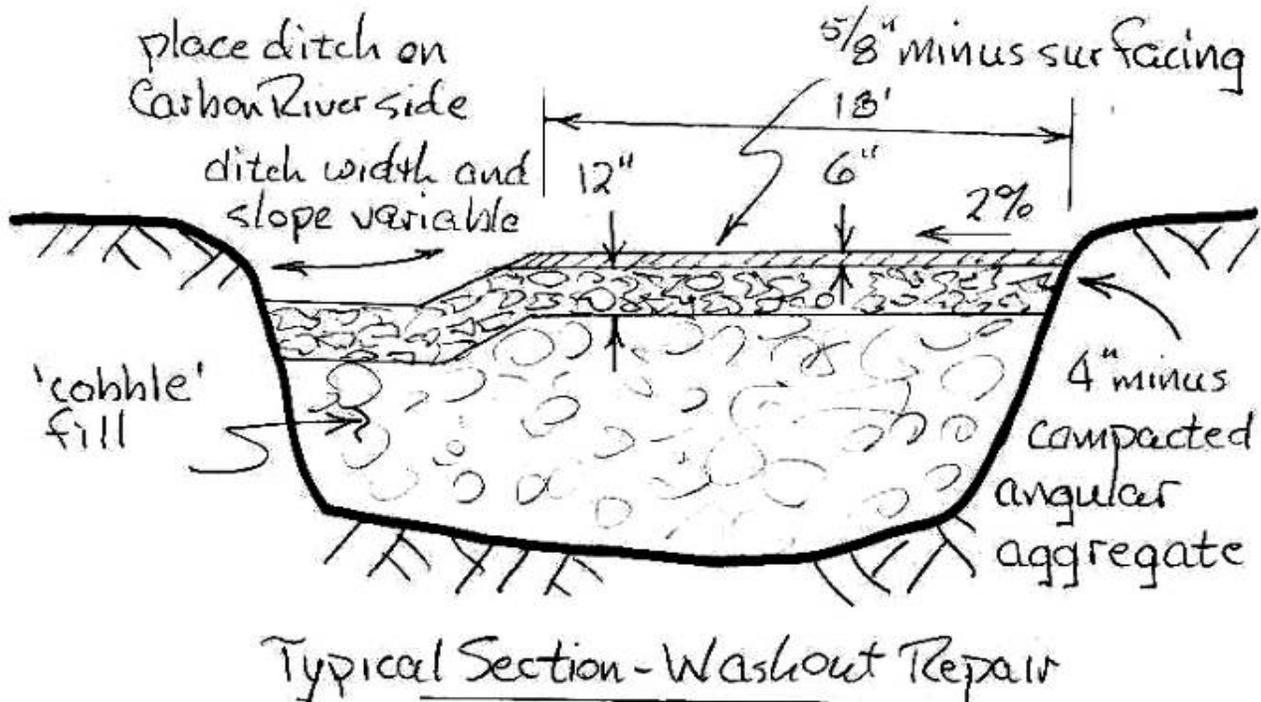
County: Pierce

State: WA

Inspection Date: 01/23/2007

Route 102 - Carbon River road MP 0.8 to MP 4.7

ADT:



Notes on Typical Section for the washout repairs:

1. Typical section applies for MP 1.6 to MP 2.0 and MP 4.4 to MP 4.7
2. Select borrow for general fill to be similar to river gravel bar material, with plenty of cobbles.
3. Topping aggregate (proposed betterment) over select borrow to be compacted, angular 4-inch minus material forming a future more flood erosion-resistant surface.
4. Surfacing aggregate is 3/4-inch or 5/8-inch minus aggregate for a 18-foot driving surface.
5. Establish a ditch along the Carbon River side of the roadway for local and floodplain drainage; topping aggregate to continue across the ditchline tying into native material; ditch width and slope variable, to match existing conditions.
6. Slope roadway toward the ditchline at about a 2% cross-slope.
7. Culvert installation limited to that necessary to adequately handle cross drainages. Re-use savalagable culverts.
8. The Carbon River road is directly connected to the Carbon River floodplain from about MP 1.9 to MP 2.1. The road is lower than the floodplain in this area, thus unpredictable flows may impact the Carbon River road from MP 2.1 and below. Surface scour can be expected, however the topping aggregate layer should protect against moderate, short-duration flood flows. The intent is to place a economical protective cap across the roadway fill, from bank to bank.
9. The ditchline will tie into existing drainage return channels in the vicinity of the Falls Creek culvert.