

PART B: 2001 SITE VISIT
LANDSLIDE RISK ASSESSMENT
PEACE REGION (PEACE RIVER VALLEY/HIGH LEVEL)

SITE PH12: JUDAH HILL

LEGAL LOCATION: 83-21-W5M

Location along Highway: Station 57+050 to 57+250: Debris Slides #1 through #4
Station 57+550: Debris Slide #6
Station 57+700: Slide #1 in Zone D2
Station 57+800 to 58+000: slide in Zone D1
Station 58+200: Debris Slide #5
Station 59+000: settlement of uphill lane of road, Zone B1
Station 59+500: slump of backslope
Station 59+600: slide at CNR crossing

AI FILE: H744:04

Date of Site Visit: 25 May 2001

Station 57+050 to 57+250: Debris Slides #1 through #4

No movement observed. Water appears to collect in the roadside ditch. It is recommended that the grade of the ditch be improved.

Station 57+550: Debris Slide #6

No movement observed at the stabilized slope, good vegetation cover.

Station 57+700: Slide #1 in Zone D2

Significant Observations

Last year, a crack was observed in the road along the scarp of the slide, which had been stabilized in 1999. The crack was approximately 25 mm wide, and there was very little settlement. This year there may have been minor additional movement (Photo 1).

Changes from Previous Visits

The crack in the road may have widened slightly. No significant movement was observed.

Discussion

The crack may be a consequence of the settlement of the fill (clay fill and tire shreds), surficial slope movement of the steep slope leading up to the road or more extensive slide movement. It appears most likely that it is a consequence of settlement of the fill.

Assessment

PF(9) * CF(3) = **27**. There is active, steady or decreasing movement. The road could probably be detoured around the slide, if movement were to occur.

Recommendations

It is recommended that the crack be monitored, it should be infilled as required. At present the nature of the movement is not known (settlement, shallow slope movement or more extensive slide movement), more time is required to clarify this. A slope inclinometer could be installed in the slope a short distance downhill of the crack to clarify the nature of the movement.

Station 59+600: slide at CNR crossing

The pile wall appears to be performing well. Slope inclinometers have been covered when the road was overlayed in 1999. It may be possible to uncover them. The catch basin for the elephant trunk that conveys water from the uphill ditch is silted up and needs to be cleared out. It appears that the pumps are not in working order.

Recommendations

Considerable repairs were undertaken at this site in the past. There is some uncertainty regarding the performance of the wells and the impact this may have on the stability of the wall and the slide. It is recommended that some monitoring be implemented to monitor the performance of the wall. Apparently, slope inclinometers were present uphill of the wall, but they have been covered with asphalt. It is recommended that the existing slope inclinometers be read or that new slope inclinometers be installed.