

SITE C28: H53:06 FROST HEAVE AND DITCH EROSION

LEGAL LOCATION: NW 4-43-26-W4

REFERENCE LOCATION
ALONG HIGHWAY: 4 km west of Highway 2

UTM COORDINATES (NAD83): **N5839575 E317020** (Ditch Erosion)
N5839650 E317215 (Frost Heave)

AT FILE: H53:06
AT PLAN & PROFILE:

Date of Initial Observation: 1980's

Date of Previous Inspection: May 23, 2003 (KCCL)
(Inspected by) May 12, 2004 (KCCL)

Instruments Installed: None

Instruments Operational:

Reading Dates:
(Read by)

Risk Assessment: PF(9) * CF(1) = **9**

Last Updated by: Klohn Crippen Consultants Ltd. (KCCL)
Date: May 2004

Location

4 km west of Highway 2.

General Description of Site Conditions

Very narrow frost heave area on pavement (<2 m wide). Road patch about 20 m wide.

Erosion on-going in ditches on both sides of the highway. The area about 80 m long to the southwest of the frost heave was considered a site for remediation.

Geotechnical Conditions

Chronology (Refer to Section G for Further Information)

Frost Heave

In the 1980's, the slopes adjacent to the highway were re-graded and 150 mm dia. drains were installed under both ditches.

The lateral drains were not effective in controlling the frost heave and in 1999 about 1 m depth of road embankment was excavated in a slot across the full width of the highway and replaced with compacted pitrun gravel. This has reduced the amount of frost heave, but not eliminated it completely. It is considered that a deeper excavation is required, possibly tied in to the existing lateral drain.

Ditch Erosion

In the winter of 2002/03, a car slid off the highway and became entrapped in the ditch erosion to the southwest of the frost heave area. The total length of the erosion is about 80 m.

Reports and Documents

May 2003 (KCCL) Inspection Form
May 2004 (KCCL) Inspection Form
Historic file photos