



**ALBERTA TRANSPORTATION
NORTH CENTRAL REGION – ATHABASCA AREA
INSTRUMENTATION MONITORING RESULTS**

SPRING 2011

SECTION C

SITE NC43: HWY 2:48, WEST OF WIDEWATER

1. OBSERVATIONS

1.1 Field Program and Instrumentation Status

Two slope inclinometers (SI1 and SI2) were read at the Hwy 2:48 site on May 31, 2011, by Mr. Justin Sousa, C.E.T. and Mr. Chad Gray, C.E.T., of Thurber Engineering Ltd. (Thurber).

The SI's were read using a RST Digital Inclinometer probe with 2 ft wheelbase and a RST Pocket PC readout. Inclinometer reading depths were defined as per cable markings with respect to the top of the inclinometer casing.

2. INTERPRETATION

2.1 General

SI plots for the A and B directions are presented in Section D and are summarized below. Where movement has been recorded the resultant plot (X direction) and rate of movement have also been provided.

2.2 Zones of Movement

Zones of new movement were not observed in the SI since the last set of readings in the spring 2010.

Zones of old movements are summarized in Table NC42-1 at the end of this report. This table also provides a historical account of the total movement, the depth of movement, and the maximum rate of movement that has occurred at this site since the initialization of the slope inclinometer.



2.3 Interpretation of Monitoring Results

Since the initial September 2006 readings, there has been no discernable movement trend observed in the slope inclinometers installed at this site.

3. RECOMMENDATIONS

3.1 Future Work

The SI's should be read again in the spring of 2012.

3.2 Instrumentation Repairs

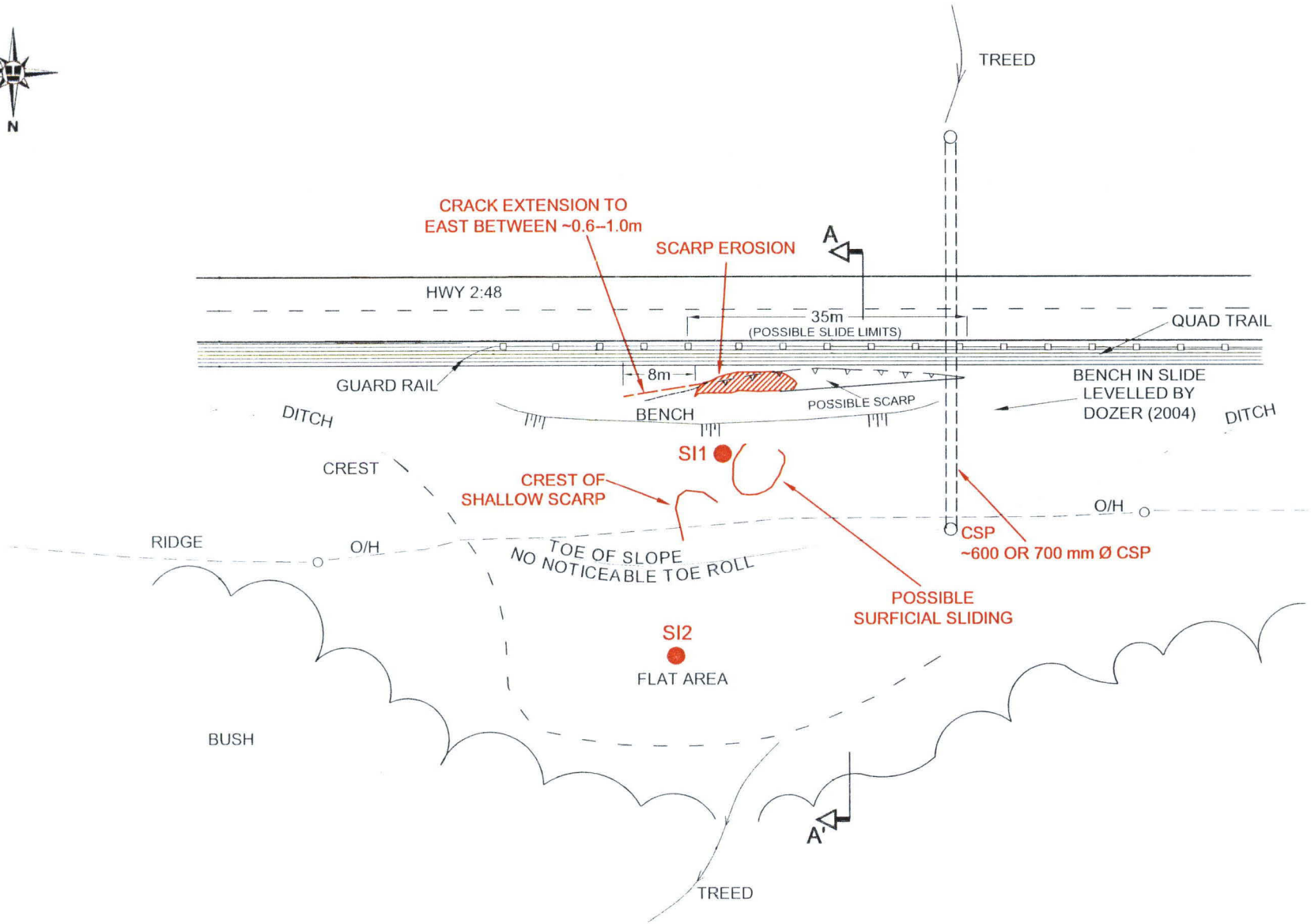
No instrument repairs are needed at this time.

**TABLE NC42-1
SPRING 2011 – HWY2:48, WEST OF WIDEWATER
Instrumentation Summary**

Date Monitored: May 31, 2011

INSTRUMENT #	DATE INITIALIZED	TOTAL CUMULATIVE RESULTANT MOVEMENT AND DEPTH OF MOVEMENT TO DATE (mm)	MAXIMUM RATE OF MOVEMENT (mm/yr)	CURRENT STATUS OF SI	DATE OF PREVIOUS READING	INCREMENTAL MOVEMENT SINCE PREVIOUS READING (mm)	CURRENT RATE OF MOVEMENT (mm/yr)	CHANGE IN RATE OF MOVEMENT SINCE PREVIOUS READING (mm/yr)
SI1	Sept. 6, 2006	No discernible movement	No discernible Movement	Operational	May 12, 2010	No discernable movement	N/A	N/A
SI2	Sept. 6, 2006	No discernible movement	No discernible movement	Operational	May 12, 2010	No discernable movement	N/A	N/A

Figure NC43-1 in section D provides a sketch of the approximate location of the monitoring instrumentation for this site.



LEGEND

● SI# SLOPE INDICATOR INSTALLED BY JACQUES WHITFORD 2006.

2006 OBSERVATIONS IN RED

**FIGURE NC43 SKETCH SITE PLAN
NC43- HWY 2:48 Km 21**

N.T.S.

JUNE, 2009

THURBER PROJECT #15-16-223



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