

**NORTH CENTRAL - ATHABASCA**  
**GEOHAZARD RISK ASSESSMENT**  
**SITE INSPECTION FORM**



SITE NUMBER AND NAME: <b>NC17C: Hwy 63 Backslope Slumps</b>		HIGHWAY & KM Hwy 63:12 Km 11.3 to 11.6	PREVIOUS INSPECTION DATE: July 17, 2007	INSPECTION DATE: July 8, 2008
LEGAL DESCRIPTION: SW7-91-09-W4M	UTM COORDINATES (NAD83): 12 472593 E 6303916 N		RISK ASSESSMENT PF: 1 CF: 10 TOTAL: 10	

SUMMARY OF SITE INSTRUMENTATION:	N/A	INSPECTED BY: Don Proudfoot(Thurber) Roger Skirrow (TRANS) Arthur Kavulok (TRANS) Ron Behr (TRANS)
LAST READING DATE:	N/A	
PRIMARY SITE ISSUE:	Backslope slumps resulting from highway twinning were threatening the integrity of a major oil pipeline.	
APPROXIMATE DIMENSIONS:	The South Slump was 100 m long and the North Slump was 75 m long.	
DATE/TYPE OF ANY REMEDIAL ACTION:	The slumps were sub-excavated, gravel shear keys and subdrains were installed and the back slopes were reconstructed with gravel fill. A gabion retaining wall was constructed at the south slump to increase the toe load. The remedial measures were carried out in Jan. to March of 2007.	

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICEABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress		X			X
Slope Movement		X			X
Erosion	X		Minor erosion along quad trails.	X	
Seepage		X			X
Culvert Distress		x			X

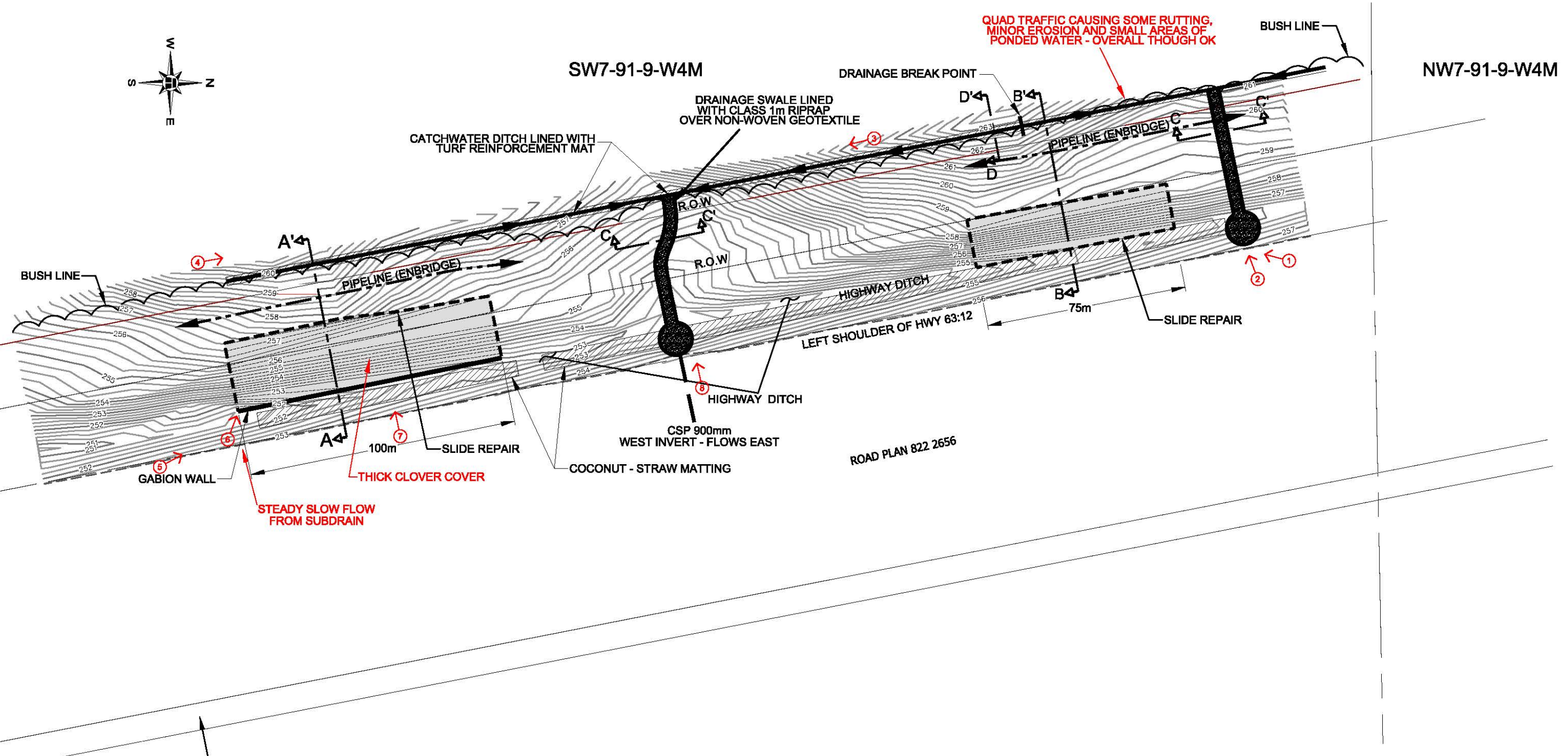
**COMMENTS** (Refer to Dwg. 15-16-216-17C)

The slide repairs appear to be working very well. There were no signs of instability at the slide repair locations. Quad traffic has created some ruts along which some shallow erosion has occurred but the degree of erosion does not currently warrant additional remedial measures to be carried out.

**RECOMMENDATIONS**

This site may be removed from the yearly geohazard assessment program. The MCI should periodically inspect the quad trails to determine whether any erosion repair or prevention measures are required.

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10.00 NORTHWESTERN UTILITIES LTD. PLAN 872 0984

**NOTE**  
 PIPELINE LOCATION SHOWN ON DRAWING IS THE SURVEYED LOCATION OF THE ALIGNMENT FLAGGED AS PART OF ALBERTA ONE CALL. PIPELINE WAS ONLY SURVEYED ADJACENT TO THE TWO SLIDE AREAS, BUT EXTENDS FURTHER SOUTH AND NORTH OF THE SURVEYED LOCATIONS.

**LEGEND**  
 JULY 8, 2008 OBSERVATIONS SHOWN IN RED  
 (1) → DIRECTION AND NUMBER OF PHOTO



BASE PLAN PROVIDED BY EXH ENGINEERING SERVICES LTD. THURBER PROJECT #15-16-216

<b>JULY 8, 2008 SITE VISIT OBSERVATIONS</b>				
NC17C BACKSLOPE SLUMPS REPAIR HWY 63:12, km 11.3 - 11.8 FORT McMURRAY, AB				
DWG. NO.	SHEET	DISTRICT	CONTRACT NO.	SCALE
15-16-216-17C	1 OF 1	NORTH CENTRAL		1:1,500
				DATE: JULY 8, 2008
<b>THURBER ENGINEERING LTD.</b> GEOTECHNICAL • ENVIRONMENTAL • MATERIALS				



Photo 1 - North Slump, looking south (July 8, 2008).



Photo 2 - North swale (July 8, 2008).



Photo 3 - Catch water ditch, looking south (July 8, 2008).



Photo 4 - South end of the catch water ditch, looking north (June 8, 2008).



Photo 5 - Looking northwest at the South Slump repair (July 8, 2008).



Photo 6 - Seepage from the subdrain of the South Slump repair (July 8, 2008).



Photo 7 - Looking west at the South Slump repair (July 8, 2008).



Photo 8 - South swale (July 8, 2008).