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ALBERTA INFRASTRUCTURE LANDSLIDE RISK ASSESSMENT

SECTION A: GEOTECHNICAL FILE REVIEW

NORTH CENTRAL REGION

SITE NC7: SOUTH OF BERRYMOORE BRIDGE

LEGAL LOCATION:

NE11-50-6-W5M

NEAREST LANDMARK:

1 km South of Berrymoore Bridge

Highway Control Section:

SH759:02

Date of Initial Observation:

1997

Date of Last Inspection:

1999

Last Observed By:

County of Leduc

Instruments Installed:

None

Instruments Operational:

None

NORTH CENTRAL REGION

NOV 1 7 2000

Alberta Infrastructure

-1-

October 31, 2000

1. LOCATION

The area of roadway distress is located approximately 1 km south of the Berrymoore Bridge over the North Saskatchewan River and 11.5 km north of the junction of SH759 and Highway 39.

2. GENERAL DESCRIPTION OF SLOPE INSTABILITY

Significant rainfall occurred in July 1986 with considerable erosion and backslope slumping occurring at various locations within SH759:02. No specific mention was made of the area of distress in the geotechnical files.

3. REGIONAL GEOLOGICAL CONDITIONS

Physiographic Region: Eastern Alberta Plains

Bedrock Geology: Paskapoo Formation of Tertiary Age

Surficial Geology: North Saskatchewan River Valley with fine fluvial deposits and stream and slopewash along valley walls. On the uplands fine lacustrine deposits are found.

Hydrogeology: River valley fluvial deposits with reported yields of up to 11.5 L/s. The Paskapoo Formation has potential yields of up to 2.3 L/s. Groundwater flow directions are toward the river.

The above descriptions are based on published information.

4. CHRONOLOGY

No chronology is available in the geotechnical files for this site.