

SITE NUMBER AND NAME: S059 Siddons Slide		HIGHWAY & KM: 22:10, 27.5	PREVIOUS INSPECTION DATE: May 6, 2019	INSPECTION DATE: June 8, 2020
LEGAL DESCRIPTION: 01-20-017-02 W5M	NAD 83 COORDINATES: UTM Northing Easting 11 5591352 696456		RISK ASSESSMENT: PF: 9 CF: 4 TOTAL: 36	
AVERAGE ANNUAL DAILY TRAFFIC: 1470 (north), 1850 (south), (Ref. No. 71130)			CONTRACTOR MAINTENANCE AREA (CMA): 27	

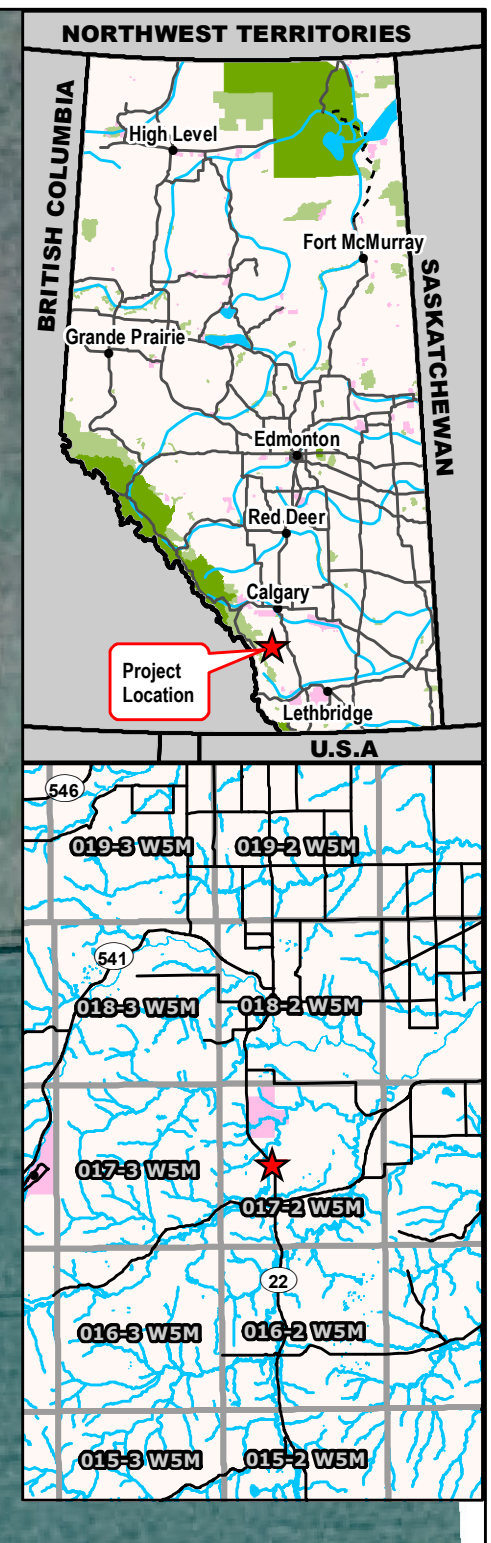
SUMMARY OF SITE INSTRUMENTATION: None	INSPECTED BY: Chris Morgan (KCB) Margot Lederman Roger Skirrow (AT) Alex Frotten (AT)
LAST READING DATE: N/A	
PRIMARY SITE ISSUE: Back slope failure of earth slope, with toe zone blocking the highway drainage ditch. Pavement cracking was noted on the east side of the highway. The failure has undermined a length of fence line approximately 36 m long (along the highway) and is retrogressing onto adjacent private property.	
APPROXIMATE DIMENSIONS: Slope failure zone approximately 170 m long. Embankment slope approximately 12 to 14 m high.	
DATE OF ANY REMEDIAL ACTION: N/A	

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress	X		Cracking observed on the east side of the highway, likely unrelated to the back slope slide.		X
Slope Movement	X		There is an active slope failure east of the highway. The failure has retrogressed to undermine the fence line and is impacting adjacent land.	X	
Erosion		X	None noted.		X
Seepage	X		Ponded water observed mid slope.	X	
Culvert Distress		X			X

COMMENTS
No obvious or significant changes to the back slope failure when compared to 2019 observations.
The failure has undermined the fence near the back scarp over a length of approximately 36 m. Back scarp is up to 1.3 m high. The failure extends approximately 6.7 m onto private land and the landowner has installed new fence around the failure zone since 2019.
Ground was saturated due to recent rainfall. Two areas of ponded water were visible midslope, consistent with 2019 locations.
Toe rolls appear to be more extensive than 2019. Three areas of toe rolls were noted, one of 21 m long and one of 19 m long (two adjacent toe rolls have coalesced together) with a gap of 19 m measured between them. The ditch was flowing at the time of the site visit and runoff was flowing around the toe rolls uninhibited.

Candidate repair options include:

- Backslope reprofiling to flatten the overall slope to approximately 10H:1V;
- Slope reconstruction in panels, replacing failed material with geogrid reinforced free draining gravel and with perforated pipe drains; and
- Installation of a culvert along the toe of the slope (beneath the toe roll) to reinstate highway drainage.



- Legend**
- GPS Track (June 8, 2020)
 - Scarp



NOTES: 1. HORIZONTAL DATUM: NAD83 2. GRID ZONE: UTM Zone 11N 3. IMAGE SOURCE: 2020 Google Earth, 2020 CNES/Airbus. Source date September 6, 2019.	CLIENT 	PROJECT SOUTHERN REGION GEOHAZARD RISK MANAGEMENT PROGRAM
		TITLE Site Plan Siddons Slide Hwy 22:10, km 27.5
SCALE 1:2,000	PROJECT No. A05115A03	FIG No. 1

Time: 17:40:43 PM
 Date: June 28, 2020
 File: Z:\AEDM\A05115A03 ABT Southern Region GRMP\A00 Drawings\2020\2. Section BIM\XDS059_200629.mxd

Photo 1 Slide zone and back scarp looking towards left flank. Photo taken facing south on June 8, 2020.



Photo 2 Approximately 36 m length of undermined fence line at crest of slope. Photo taken facing northeast on June 8, 2020.



Photo 3 Ponded water midway up the slide zone. Photo taken facing west on June 8, 2020.



Photo 4 Toe rolls partially blocking the ditch. Photo taken from east side of highway facing southeast on June 8, 2020.

