

## CENTRAL REGION GEOHAZARD RISK ASSESMENT SITE INSPECTION FORM



SITE NUMBER AND NAME C064 Vegreville Frost Heave	HIGHWAY & H16:24 km 29		PREVIOUS INSPECTION DATE March 2, 2017	Feb 28, 2018
LEGAL DESCRIPTION SW 14-52-14-W4	NAD 83 COORDINATES  Northing Easting 53°29.000' 111°57.548'		RISK ASSESSMENT PF: 1 CF: 1 TO	OTAL: 1
2017 Average Annual Daily Traffic (Ref. No.: 120507) (AADT): 7520 (westbound) 7480 (eastbound)			act Maintenance Area (CN	MA): 14

SUMMARY OF SITE INSTRUMENTATION:  None	INSPECTED BY: Chris Gräpel (KCB) Hanh Hong (KCB) Rocky Wang (AT)
LAST READING DATE: N/A	

PRIMARY SITE ISSUE: Frost heave of adjacent frost susceptible embankment fill creating a dip at the culvert inlet (north of highway) where the culvert was backfilled with non-frost susceptible material.

APPROXIMATE DIMENSIONS: Westbound lanes only: length of about 5 m over a culvert location that does not heave in the winter, highway embankment approximately 1.5 to 2.0 m high, sloped at 4H:1V.

DATE OF ANY REMEDIAL ACTION: Heaving conditions at the culvert location was repaired in fall 2016, including the construction of an asphalt overlay. The culvert was replaced and a flat (2H:1V or flatter) excavation slope was used to provide a transition between frost-susceptible embankment fill and non-frost-susceptible gravel backfill around the culvert

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress		Х	The 2016 asphalt pavement overlay filled and covered the cracking and depressions		Х
Slope Movement		Х			Х
Erosion		Х			Х
Seepage		Х			Х
Culvert Distress	Х		900 mm diameter CSP culvert buried under snow and ice		Х

## **COMMENTS**

The MCI reported that the heaving conditions at the site are much better since the repair in 2016.

Pavement heaving and lateral cracking were not observed during the last inspection in March 2, 2017.

Since heaving was not observed during this inspection, KCB recommends that the C064 site be removed from the GRMP.

1 Photo Location

→ Photo Direction

NOTES:
1. HORIZONTAL DATUM: NAD83
2. GRID ZONE: UTM Zone 12N
3. IMAGE SOURCE: Bing Maps 2018, Microsoft Corporation. Image dated August 2013
4. Site visit photo dated February 28, 2018



Transportation



CENTRAL REGION GEOHAZARD RISK MANAGEMENT PROGRAM

C064 Site Inspection Hwy 16:24, km 29.177

PROJECT No. <u>A05115A02</u>

Photo 1 Location of repaired lateral cracking along the highway above the culvert backfill. Photo taken on February 28, 2018 looking east.

