

SITE NUMBER AND NAME: S012 Spray Lakes Road		HIGHWAY & KM: 742:02, 4.319	PREVIOUS INSPECTION DATE: July 6, 2020	INSPECTION DATE: May 8, 2023
LEGAL DESCRIPTION 11-29-024-10 W5M	NAD 83 COORDINATES: UTM Northing Easting 11 5659724 614296		RISK ASSESMENT: PF: 3 CF: 5 TOTAL: 15	
AVERAGE ANNUAL DAILY TRAFFIC (AADT): 1063 (north); 1056 (south), (Ref. No. 67429980)			CONTRACTOR MAINTENANCE AREA (CMA): 28	

SUMMARY OF SITE INSTRUMENTATION: 6 Extensometers LAST READING DATE: June 2023	INSPECTED BY: Chris Grapel (KCB) Peter Roy (KCB) Renato Macciotta (U of A) Roger Skirrow (AT) Alex Frotten (AT) Maury Siddons (AT)
PRIMARY SITE ISSUE: Voids from old coal mines under road, 3.5 m to 6 m below highway.	
APPROXIMATE DIMENSIONS: Coal mine voids present below 80 m to 100 m of highway and below adjacent areas.	
DATE OF ANY REMEDIAL ACTION: Construction completed in 2022 to fill in voids below highway. Extensometers installed to monitor highway deflection.	

ITEM	CONDITION EXISTS		DESCRIPTION AND LOCATION	NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO
Pavement Distress		X	No signs of pavement distress since construction completion.		X
Slope Movement		X	Shallow bedrock present at site, bedrock exposed in backslope to the south of the highway.		X
Erosion		X			X
Seepage		X			X
Culvert Distress		X	Depression noted in ditch at outlet of culvert.		X

COMMENTS
No observable changes to the site when compared to 2020 inspection.
Pavement surface has some subtle depressions, indicating movement of subgrade. Bedrock is exposed to the south of the subject site. Subtle depression noted at outlet of culvert to east of site, may indicate infiltration of culvert discharge into an underlying void.

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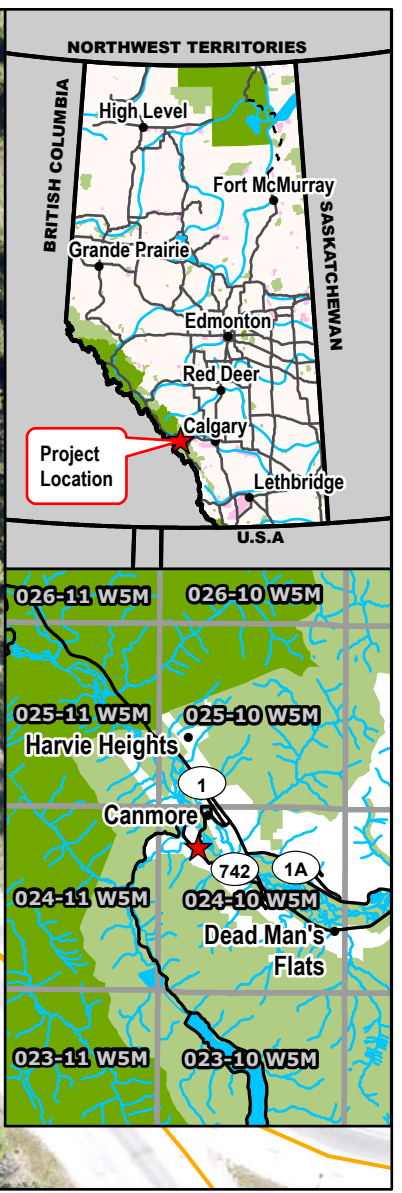
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Peter Roy, P.Eng.
Civil Engineer

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Legend

- Vibrating Wire Inline Extensometer
- Readout Location (Concrete Vault)
- GPS Track (May 8, 2023)
- Approximate Location of Coal Mine Shafts
- Approximate Extent of Voids

NOTES:
 1. HORIZONTAL DATUM: NAD83
 2. GRID ZONE: UTM ZONE 11N
 3. IMAGE SOURCE: ESRI, MAXAR, EARTHSTAR GEOGRAPHICS AND THE GIS USER COMMUNITY.

CLIENT

PROJECT SOUTHERN REGION GEOHAZARD RISK MANAGEMENT PROGRAM		
TITLE Site Plan S012 - Spray Lakes Road Hwy 742:02, km 4.319		
SCALE 1:1,000	PROJECT No. A05116A03	FIG No. 1



Photo 1 Highway surface above where coal mine voids were filled. Photo was taken facing west on May 8, 2023.



Photo 2 North ditch. Photo taken facing west on May 8, 2023.



Photo 3 **Headbox for Data Logger. Photo taken on north side of highway on May 8, 2023.**

