

## PEACE REGION (GRANDE PRAIRIE DISTRICT – SOUTH) GRMP SITE INSPECTION FORM



SITE NUMBER AND NAME: GP009 Lone Teepee Creek		HIGHWAY & KM: 40:32, 47.476		PREVIOUS INSPECTION DATE:		INSPECTION DATE: June 13, 2022		
Erosion				May 22, 2018		04110 10, 202	_	
LEGAL DESCRIPTION:	NAD 83 COORDINATES:			RISK ASSESSMENT:				
	UTM	Northing	Easting					
SE 15-57-05-W6M	11	5976167	391261	PF: 7	CF: 2	TO	ΓAL: 14	
AVERAGE ANNUAL DAILY TRAFFIC (AADT):				CONTRACT MAINTENANCE AREA (CMA):				
1090 (west) & 990 (east) (Reference No. 27580, 2021)				504				

SUMMARY OF SITE INSTRUMENTATION:	INSPECTED BY:
	Chris Gräpel (KCB)
There is no instrumentation at the GP009 site.	Courtney Mulhall (KCB)
	Ed Szmata (AT)
	Kristen Tappenden (AT)
	Max Shannon (AT)
LAST READING DATE: N/A	Dwayne Lowen (AT MCI)

PRIMARY SITE ISSUE: Erosion on north bank of Lone Teepee Creek along south toe of Hwy 40:32 embankment.

APPROXIMATE DIMENSIONS: Highway embankment approximately 3 m high with an approximate 3H:1V slope. Bank erosion occurring along an approximate 120-m length of highway.

DATE OF ANY REMEDIAL ACTION: Winter 2003 – highway embankment widened from 9 m to 20 m, a modified Class 3 riprap spur constructed, creek channel widened, riverbank trimmed, and some riprap clusters and root wads placed.

ITEM	COND		DESCRIPTION AND LOCATION		NOTICABLE CHANGE FROM LAST INSPECTION	
	YES	NO		YES	NO	
Pavement Distress	X		Some longitudinal cracking along pavement surface.		Х	
Slope Movement		Χ	None observed at time of 2022 inspection.		Х	
Erosion	X		Erosion along north bank of Lone Teepee Creek along south toe of Hwy 40:32 embankment. At narrowest point erosion approximately 10 m downslope of guardrail. Upper portion of highway embankment poorly vegetated with rill erosion beginning approximately 1.5 m to 3.0 m downslope/south of guardrail.		x	
Seepage		Х	None observed at time of 2022 inspection.		Х	
Culvert Distress		Х	No culverts observed by KCB.		Х	

## **COMMENTS**

Spur at south/eastern site limit consists of Class 3 limestone riprap and appears to be in good condition. Construction of spur resulted in bank erosion shifting west to current location along highway embankment.

Riprap along highway embankment covered in gravel. Some geotextile and conglomerate riprap exposed at toe of highway embankment, which is deteriorating. Toe of highway embankment well vegetated with minimal to no erosion.

Some woody debris in creek channel and along west creek bank at toe of highway embankment.



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Maintenance/Repair/Monitoring Recommendations:

- Silt fencing between guardrail and creek is falling down and should be removed/disposed of.
- Grade gravel and infill rills and gully along south side of highway embankment above riprap. Previous gravel lasted about 15 years before getting eroded. Estimated cost: \$10,000 to \$20,000.

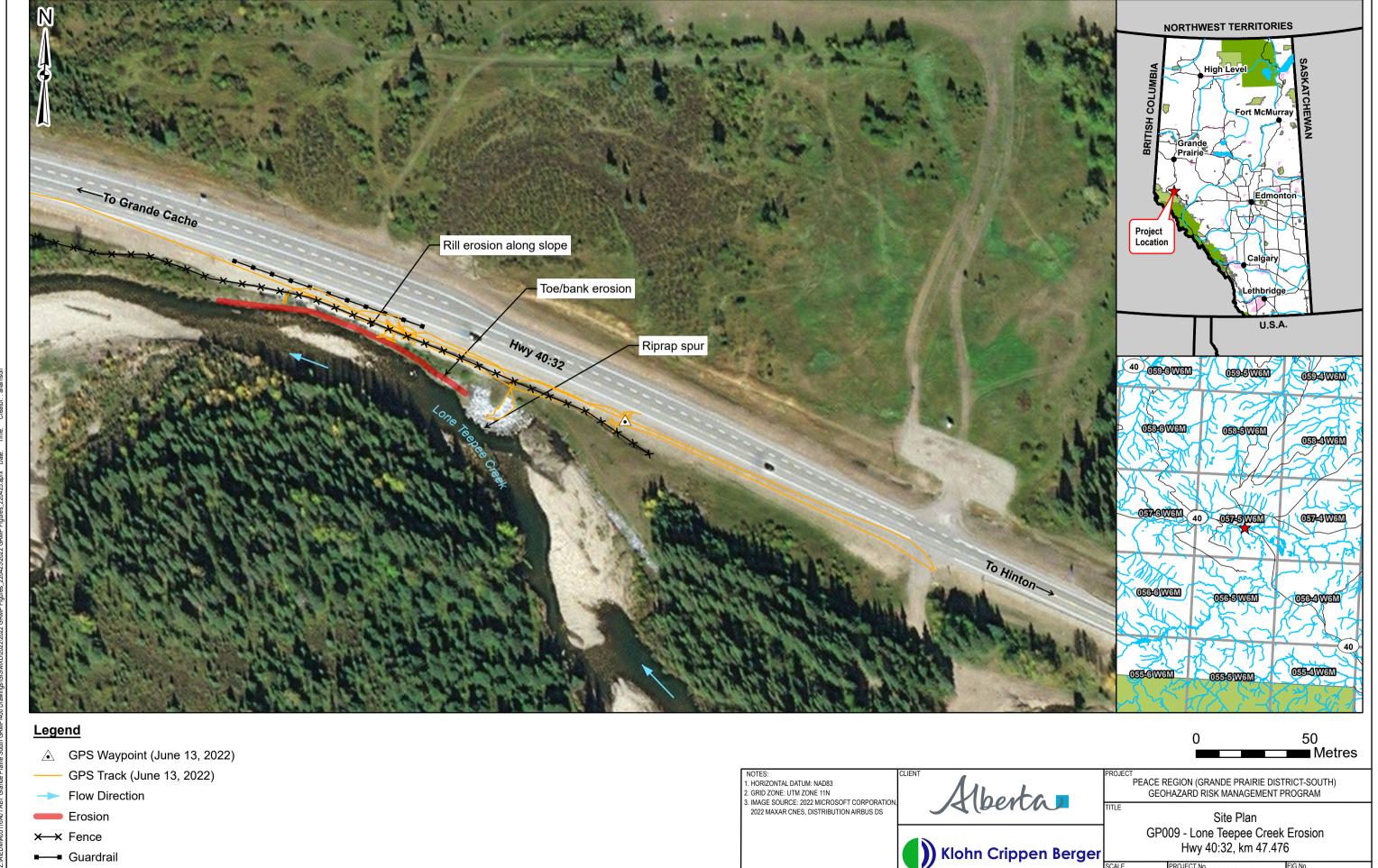
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- (ii) The observations, findings and conclusions in this report are based on observed factual data and conditions that existed at the time of the work and should not be relied upon to precisely represent conditions at any other time.
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Chris Gräpel, M.Eng., P.Eng.		
Chris Gräpel, M.Eng., P.Eng. Senior Civil Engineer, Associate		
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PROJECT No. A05<u>116A01</u>

■ Guardrail

2022 GP009 Inspection Photos

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## **Inspection Photographs**

Photo 1 Overview of GP009 site on Hwy 40:32. Photo taken June 13, 2022, with unmanned aerial vehicle (UAV) facing northwest.



Hwy 40:32, km 47.476

GP009 Lone Teepee Creek Erosion

Photo 2 Overview of GP009 site along Hwy 40:32. Photo taken June 13, 2022, with UAV facing northeast.

Alberta Transportation



Photo 3 Rill and gully erosion along south side of Hwy 40:38 embankment. Photo taken June 13, 2022, facing east.



Photo 4 Erosion along north bank of Lone Teepee Creek along south toe of Hwy 40:32 embankment. Note conglomerate riprap particles and exposed geotextile. Photo taken June 13, 2022, facing west.

