

ALBERTA TRANSPORTATION AND
ECONOMIC CORRIDORS
GEOHAZARD ASSESSMENT PROGRAM
PEACE REGION (PEACE RIVER DISTRICT)
2025 INSPECTION



Site Number	Location	Name	Hwy	km
PH007	Daishowa East Hill	Gabion Channel & Erosion Control Section	986:01	32.007
Legal Description		UTM Co-ordinates (NAD 83)		
NE7-85-20 W5M		11V E 490505	N	6246235

	Date	PF	CF	Total
Previous Inspection:	18-May-2023	9	4	36
Current Inspection:	14-May-2025	10	4	40
Road AADT:	1020		Year:	2024
Inspected By:	Rocky Wang, TEC Tyler Clay, Thurber Don Proudfoot, Thurber			
Report Attachments:	<input checked="" type="checkbox"/> Photographs <input checked="" type="checkbox"/> Plans <input type="checkbox"/> Maintenance Items			

Primary Site Issue:	<p>This area is located at a historic landslide site where erosion on both sides of the highway had been of ongoing concern. Primarily with respect to erosion along the creek on the north side of the road which was mitigated in 2003 with an armored gabion basket channel and drop structures.</p> <p>Erosion in the south ditch and at the culvert outlet (32+050) was mitigated in late 2007 that trialed 8 erosion protection products including, TRM, Filter Soxx, Coletanche, gravel filled Geoweb, gabion mattress, paving stones, cabled concrete and pillow concrete. Local mitigation repairs were completed in 2018/19 that included local erosion repairs of the riprap lined channel (i.e., North Channel), torn gabion baskets, side slope erosion rills, geomembrane damaged (Coletanche membrane), and removal of cable concrete tripping hazards.</p> <p>In July 2024, a high flow event caused extensive damage to the north armoured channel and the gabion drop structures.</p>		
Dimensions:	<p>South ditch: 800 m long</p> <p>North channel: 580 m long</p> <p>Slide at 32+300: 75 m long in North Channel</p>		
Date of Remediation:	2003		
Maintenance:	None		
Observations:	Description	Worsened?	
<input checked="" type="checkbox"/> Pavement Distress	Minor pavement heave over centreline culvert (32+050) may be a result of frost heave or swelling conditions in the subgrade (no change from 2023).	<input type="checkbox"/>	
<input checked="" type="checkbox"/> Slope Movement	Severe north channel downcutting and undercutting of the banks following the 2024 high flow event has resulted in active sliding with retrogression towards the north highway embankment toe between 32+275 to 32+350. (Photo 7-15)	<input checked="" type="checkbox"/>	

<p>☒ Erosion</p>	<p>North Channel Summary:</p> <p>There was localized scour erosion (up to 1 m wide and 0.3 m deep) and minor gabion basket damage on the upstream side of the gabion inlet structure (32+850). The upstream side of baskets had a buildup of flood debris and previous high water flow was evident from laid over willows and grass. Water was ponded within the inlet structure. (Photo 7-02).</p> <p>Major scour and channel degradation began at a 2 m deep knickpoint near 32+800 and extended approximately 200 m to the east where there was extensive downcutting up to 1.5 m, riprap washout and damage to the non-woven geotextile fabric. (Photo 7-03)</p> <p>Scour and channel downcutting (up to 2 m depth) had resulted in near vertical bank exposures within the channel bottom resulting in undermining and collapse of the riprap along the top of bank between 32+615 to 32+675. (Photos 7-04 and 7-05)</p> <p>Downstream from the erosion damage there was a buildup of the washed out riprap and sediment that infilled the channel near km 32.575. The channel infilling diverted high water flow paths to overtop either side of the banks. Overflow paths were apparent from sediment buildup and grass disturbance. The overflow on the south side of the channel went outside the upper gabion drop structure at 32+525. (Photos 7-06 and 7-07)</p> <p>The upper gabion drop structure (32+525) had major basket deformation and wire damage, resulting in some broken baskets and rock loss primarily within the channel centreline. Scour within the bottom of the structure has caused sag of the sidewalls. There was sediment buildup and pooling in the dissipation pool. Riprap up to 40 m downstream of the drop structure was displaced within the channel centreline but there was no major scour observed up to the next drop structure. (Photos 7-08 and 7-09)</p> <p>The lower gabion drop structure (32+480) was in better condition relative to the upper drop structure. The high flow appeared to flow into and around the structure on both north and south sides based on debris and sediment buildup. There was minor basket deformation within the southeast corner of the upper inlet area. There was a buildup of silt in the base of the drop structure. (Photo 7-10)</p> <p>High water flow outflanked the north side of the lower drop structure forming an erosion gully approximately 6 m wide and 2 m deep. (Photo 7-11)</p> <p>There were multiple areas with localized scour and riprap displacement downstream of the lower drop structure for an approximately 100 m long segment of the channel (from approximately 32+375 to 32+475). The majority of riprap was intact and there was no major erosional downcutting or riprap washout. (Photo 7-12)</p> <p>The most significant segment of channel erosion was observed between 32+280 and 32+380. Upstream of the gabion retaining wall there was channel downcutting (up to 3 m in depth) and riprap washout, leaving near vertical bank exposures up to 5 m in height and undermined riprap within the upper channel banks. (Photos 7-13 to 7-15)</p>	<p>☒</p>
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	<p>There was riprap washout and exposure of the underlying geotextile below the gabion retaining wall near 32+275 due to channel downcutting. The west end of the gabion retaining wall was tilted into the channel likely due to undermining along the base (32+250). No open scouring was visible, and the area appeared to have been infilled with upstream washout material. (Photos 7-16 and 7-17)</p> <p>Downstream from the western limits of the channel armouring section near 32+250, there was significant accumulation of washed out riprap and granular material within the natural creek channel from the upstream erosion damage in the armoured channel section. (Photos 7-18 and 7-19)</p> <p>South Ditch Test Section Summary:</p> <p>TRM Section (32+100) – previous channelized erosion damage on the north side of the ditch has vegetated over the rolled erosion control product. There was erosion within tire ruts. (Photo 7-21).</p> <p>Channel Sock Section (32+150) - good vegetation growth within previous channelized erosion areas at the top of the section near the boundary of the geomembrane section. There was 0.5 m deep scour pool near the transition of the control sections near 32+250 (Photo 7-22).</p> <p>Coletanche Geomembrane Section (32+250) – Membrane was in a good condition with no new damage observed. (Photo 7-23).</p> <p>Geoweb Section (32+400) - Section had vegetation growth and some cells were only partially filled with sediment and broken along the ditch bottom. Some minor rill damage was noted on the north side of the ditch. No major changes from the previous inspection condition. (Photo 7-24).</p> <p>Gabion Mattress Section (32+500) - Section had vegetation growth and was performing well. Minor rill damage was noted on the ditch sideslope. No major changes from the previous inspection condition. (Photo 7-25).</p> <p>Paving Stones Section (32+600) - Blocks have deteriorated and broken up in numerous locations and have been undermined by erosion exposing geotextile fabric beneath. Deterioration was worse relative to other test sections but no significant change from 2023. (Photo 7-26).</p> <p>Cabled Concrete Section (32+700) – Minor rill erosion damage was noted on the ditch sideslope. Section performing well with no major change from the 2023 condition. (Photo 7-27).</p> <p>Pillow Concrete Section (32+750) - Minor concrete deterioration was noted in select areas, but erosion mitigation function was not impacted. Rebar pins protruding in some areas. (Photo 7-28).</p> <p>Ditch upslope of the test section lined with gabion mattress as part of the 2018/2019 mitigation work. was in good condition with no observable change apart from increased vegetation growth since 2023. (Photo 7-29).</p>	
<input type="checkbox"/> Seepage		<input type="checkbox"/>

<input checked="" type="checkbox"/> Bridge/Culvert	Culvert was open and flowing at 32+050. Previous erosion around the headwall was filled in with riprap. There was partial flow beneath the base of the culvert. (Photo 7-20)	<input type="checkbox"/>
<input checked="" type="checkbox"/> Other	The beaver dam pond was drained with a large buildup of sediment. There was a breach location near the south side of the dam from the 2024 high flow event (no major change). (Photo 7-01)	<input type="checkbox"/>

Instrumentation:

None	No instrumentation installed in this area.
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Assessment:

The July 2024 high flow event resulted in extensive damage to the 2004 north channel erosion control structures. The performance of the erosion control mitigation since installation at the site has generally been observed to be effective with expected minor maintenance issues. The damage observed following the high flow event appears to be the result of an unprecedented flow event that exceeded the flow capacity of the channel armouring in some sections. Overall, the gabion basket drop structures appeared to be effective in reducing overall flow energy at the steeper gradient sections based on the reduced erosion downstream of both structures (approximately km 32.38 to km 32.525) relative to other portions of the armoured channel. However, significant damage was observed at the upper gabion drop structure likely as a result of concentrated flow volume within the channel and scour below the gabion baskets that resulted in bagging at the top of the baskets, wire damage (from debris impact) and subsequent rock loss.

The channel alignment and increased gradient within the armoured channel upstream of the gabion retaining wall directed high flow volume into the south bend resulting in severe downcutting, bank undermining and subsequent bank sliding with a high potential for retrogressive sliding towards the northern highway embankment toe if left unmitigated. Thurber has prepared a channel repair design for this interval to restore the original channel mitigation and reduce further degradation to the highway embankment toe.

In its current condition the erosion control structures have significant reduction in mitigating against gully erosion along the steeper gradients of the Unnamed Creek channel. A future high flow event and/or dam breach could result in further channel downcutting and bank undermining. To minimize the rate of future degradation and asset damage in the short term, repair work should involve channel regrading, installing new non-woven geotextile fabric and replacing existing riprap rock that has been washed out with preference to lining the channel bottom. At a minimum, downstream salvage redistribution of the existing channel riprap to the channel thalweg would be beneficial to limit the rate of ongoing soil loss and further channel downcutting.

There is currently no immediate risk to the public; however, ongoing degradation of the north channel is expected at an increased rate that could result in larger slide failures within the lower embankment that would retrogress towards the highway and potentially initiate deeper slip surfaces that could undermine the road surface. Ongoing degradation and damage to the north channel will also increase future repair costs.

Recommendations:

Short-Term:

- Salvage and redistribute washed-out riprap to upstream areas with significant scour/soil exposure placed over non-woven geotextile. Re-establish original channel geometry at infill areas to restore channel capacity.

Medium and Long-Term:

- Construct the north channel repair design completed by TEL for the interval between approximately km 32.2 to km 32.4.
- Long-term mitigation repair and/or improvements would benefit from updated hydraulic engineering assessment with consideration of climatic trend adjustments of the high flow return periods. Updated hydrotechnical assessment would be useful in determining the magnitude and return period of the July 2024 high-flow event and inform future cost-benefit analyses for ongoing maintenance at the site. It is expected that the erosion mitigation capacity of the channel would be improved from a combination of one or more design elements:
 - Wider channel with consistent bottom geometry;
 - Larger riprap rock, the use of angular riprap (granitic blast rock), or grouting the riprap;
 - Installation of check-dam / containment sections to reduce flow energy using select angular riprap rock or keyed-in gabion baskets.
 - Subsurface flow cut-off structures at regular intervals (especially near the upstream ends of each drop structure.) that could include steel sheet pile walls, keyed-in impermeable fabrics, and/or grout trenches.
- Repair of the upper gabion drop structure will be difficult without extensive excavation and disassembly of the existing gabion baskets. The repaired or new drop structure should have additional design elements to increase flow capacity that may include subsurface flow cutoff structures or buried impermeable liners. The length, width and gradient of the drop structure may need to be revised to reduce flow velocity and the potential for basket damage.

Ongoing Investigation/Monitoring:

- The inspection frequency should be adjusted to annual inspections.

Closure

It is a condition of this letter report that Thurber's performance of its professional services will be subject to the attached Statement for Use and Interpretation of Report.

Don Proudfoot, M.Eng., P.Eng.
Partner | Senior Geotechnical Engineer

Tyler Clay, P.Eng.
Geological Engineer

STATEMENT FOR USE AND INTERPRETATION OF REPORT

1. STANDARD OF CARE

This Report has been prepared in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances at the same time and in the same or similar locality and in compliance with all applicable laws.

2. COMPLETE REPORT

All documents, records, data and files, whether electronic or otherwise, generated as part of this assignment, including this Statement For Use and Interpretation of Report, are a part of the Report, which is of a summary nature and is not intended to stand alone without reference to the instructions given to Thurber by the Client, communications between Thurber and the Client, and any other reports, proposals or documents prepared by Thurber for the Client relative to the specific site described herein, all of which together constitute the Report.

IN ORDER TO PROPERLY UNDERSTAND THE SUGGESTIONS, RECOMMENDATIONS AND OPINIONS EXPRESSED HEREIN, REFERENCE MUST BE MADE TO THE WHOLE OF THE REPORT, AS DESCRIBED ABOVE. THURBER IS NOT RESPONSIBLE FOR USE BY ANY PARTY OF PORTIONS OF THE REPORT WITHOUT REFERENCE TO THE WHOLE OF THE REPORT.

3. BASIS OF REPORT

The Report has been prepared for the specific site, development, design objectives, and purposes that were described to Thurber by the Client. The applicability and reliability of any of the findings, recommendations, suggestions, or opinions expressed in the Report, subject to the limitations provided herein, are only valid to the extent that the Report expressly addresses proposed development, design objectives and purposes, and then only to the extent that there has been no material alteration to or variation from any of the said descriptions provided to Thurber, unless Thurber is specifically requested by the Client to review and revise the Report in light of such alteration or variation.

4. USE OF THE REPORT

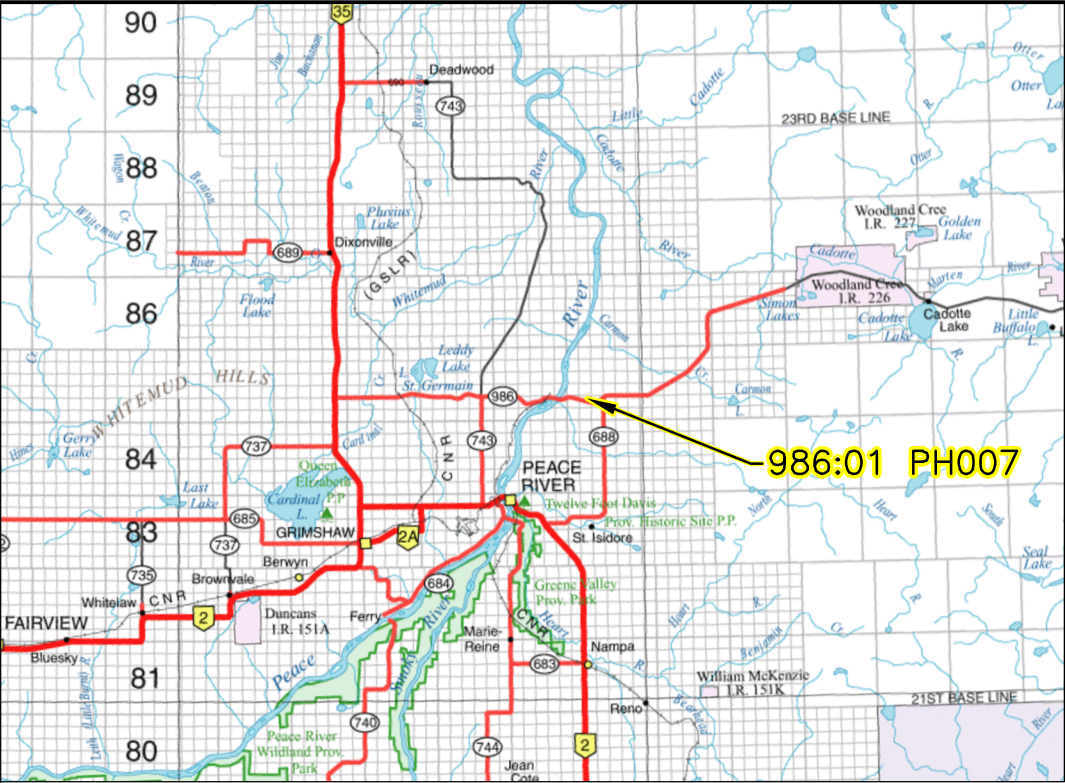
The information and opinions expressed in the Report, or any document forming part of the Report, are for the sole benefit of the Client for the development, design objectives, and/or purposes described to Thurber by the Client. **NO OTHER PARTY MAY USE OR RELY ON THE REPORT OR ANY PORTION THEREOF FOR OTHER THAN THE CLIENT'S BENEFIT IN CONNECTION WITH THE PURPOSES DESCRIBED IN THE REPORT.** Any use which a third party makes of the Report is the sole responsibility of such third party and is always subject to this Statement for Use and Interpretation of Report. Thurber accepts no liability or responsibility for damages suffered by any third party resulting from use of the Report for purposes outside the reasonable contemplation of Thurber at the time it was prepared or in any manner unintended by Thurber.

5. INTERPRETATION OF THE REPORT

- a) **Nature and Exactness of Soil and Contaminant Description:** Classification and identification of soils, rocks, geological units, contaminant materials and quantities have been based on investigations performed in accordance with the standards set out in Paragraph 1. Classification and identification of these factors is inherently judgement-based. Comprehensive sampling and testing programs implemented with the appropriate equipment by experienced personnel may fail to locate some conditions. All investigations utilizing the standards of Paragraph 1 will involve an inherent risk that some conditions will not be detected and all documents or records summarizing such investigations will be based on assumptions of what exists between the actual points sampled. Actual conditions may vary significantly between the points investigated and the Client and all other parties making use of such documents or records with or without our express written consent need to be aware of this risk and the Report is delivered subject to the express condition that such risk is accepted by the Client and such other parties. Some conditions are subject to change over time and those making use of the Report need to be aware of this possibility and understand that the Report only presents the interpreted conditions at the sampled points at the time of sampling. If special concerns exist, or the Client has special considerations or requirements, the Client must disclose them so that additional or special investigations may be undertaken which would not otherwise be within the scope of investigations made for the purposes of the Report.
- b) **Reliance on Provided Information:** The evaluation and conclusions contained in the Report have been prepared based on conditions in evidence at the time of site inspections and based on information provided to Thurber. Thurber has relied in good faith upon representations, information and instructions provided by the Client and others concerning the site. Accordingly, Thurber does not accept responsibility for any deficiency, misstatement or inaccuracy contained in the Report resulting from misstatements, omissions, misrepresentations, or fraudulent acts of the Client or other parties providing information relied on by Thurber. Thurber is entitled to rely on such representations, information and instructions and is not required to carry out investigations to determine the truth or accuracy of such representations, information and instructions.
- c) **Design Services:** The Report may form part of design and construction documents for information purposes even though it may have been issued prior to final design being completed. Thurber is recommended to be retained to review final design, project plans and related documents prior to construction to confirm that they are consistent with the intent of the Report. Any differences that may exist between the Report's recommendations and the final design need to be reported to Thurber immediately so that Thurber can address potential conflicts.
- d) **Construction Services:** During construction Thurber should be retained to provide field reviews. Field reviews consist of performing sufficient and timely observations of encountered conditions to confirm and document that the site conditions do not materially differ from those conditions considered in the preparation of the report. Adequate field reviews are necessary for Thurber to provide letters of assurance, in accordance with the requirements of many regulatory authorities.

6. INDEPENDENT JUDGEMENTS OF CLIENT

The information, interpretations and conclusions in the Report are based on Thurber's interpretation of conditions revealed through limited investigation conducted within a defined scope of services. Thurber does not accept responsibility for independent conclusions, interpretations, interpolations and/or decisions of the Client, or other parties who may come into possession of the Report, or any part thereof, which may be based on information contained in the Report. This restriction of liability includes, but is not limited to, decisions made to develop, purchase, or sell land, unless such decisions expressly form part of the stated purpose of the Report as described in Paragraph 3.



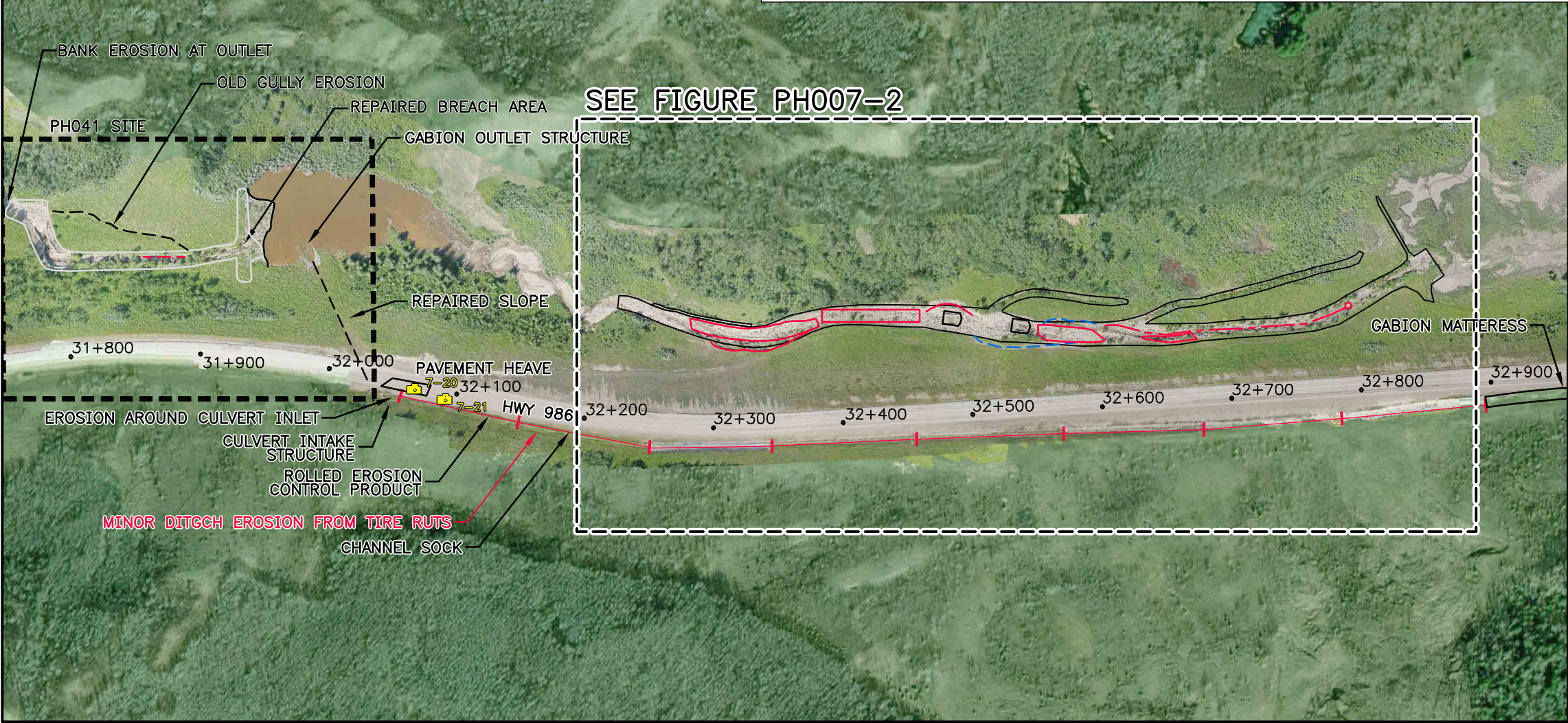
KEY MAP
SCALE 1:1 000 000

LEGEND:

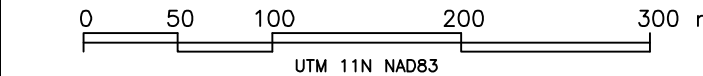
- HORIZONTAL CHAINAGE
- PHOTOGRAPH LOCATION
- ARMOURED CHANNEL

LEGEND:

- HORIZONTAL CHAINAGE
- PHOTOGRAPH LOCATION
- ARMOURED CHANNEL (CONSTRUCTED IN 2003/2004)



- NOTES:
- FIGURE MUST BE USED IN CONJUNCTION WITH THE ATTACHED REPORT REFERENCE 32121 DATED OCTOBER 2025 AND IS SUBJECT TO ANY LIMITATIONS DESCRIBED THEREIN.
 - AIR PHOTO BASE FROM DRONE IMAGERY COLLECTED JULY 18, 2024 AND ESRI (DIGITAL GLOBE, 2016).
 - FEATURES/PHOTOGRAPH LOCATIONS SHOWN APPROXIMATE ONLY.
 - FIELD OBSERVATIONS FROM MAY 14, 2025 SHOWN IN RED.



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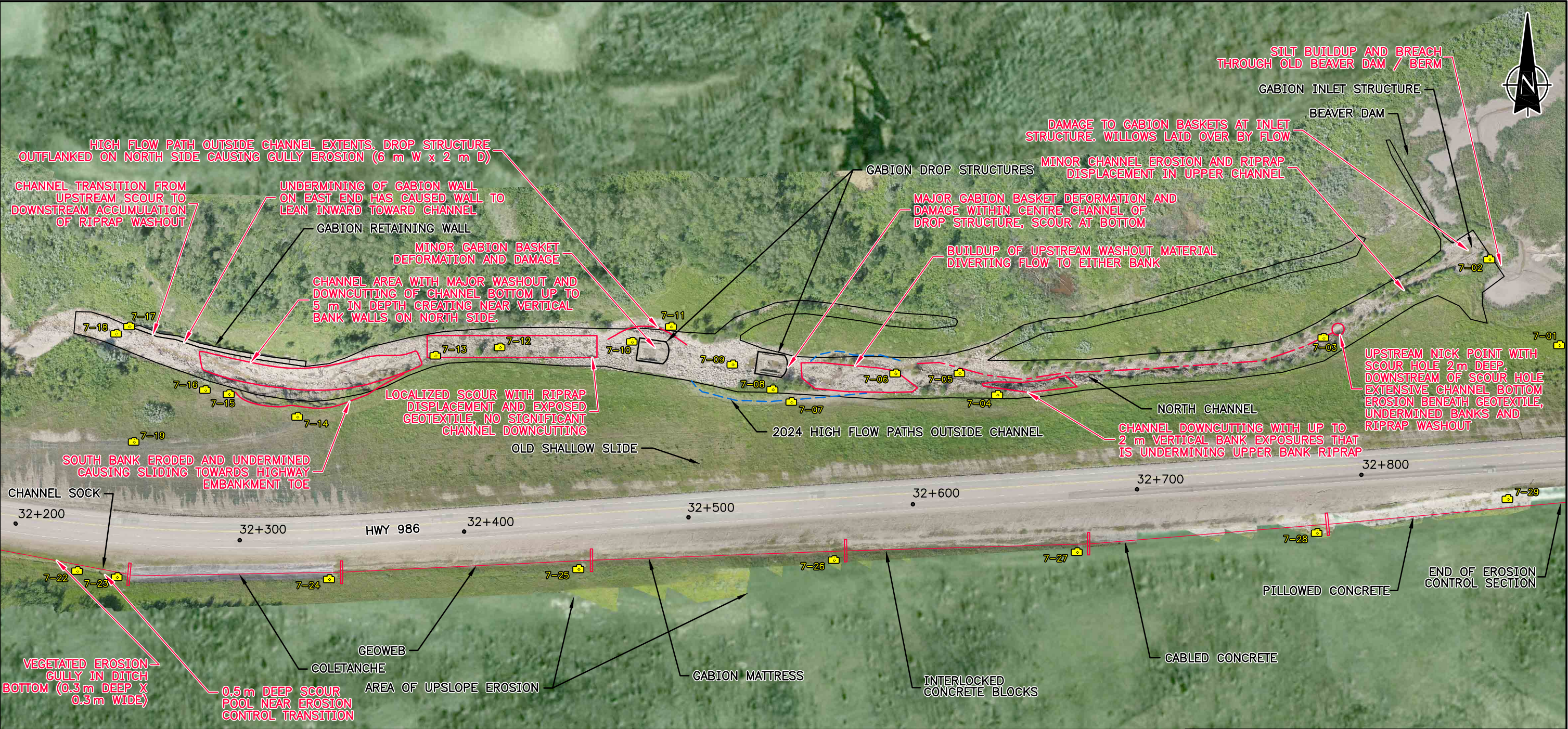
PEACE REGION (PEACE RIVER DISTRICT)

DAISHOWA
HWY 986:01 (PH007)
LOCATION PLAN

FIGURE PH007-1

DRAWN BY	ICB
DESIGNED BY	TTC
APPROVED BY	DWP
SCALE	1:4 000
DATE	OCTOBER 14, 2025
FILE No.	32121-A3G





LEGEND:

HORIZONTAL CHAINAGE

PHOTOGRAPH LOCATION

ARMoured CHANNEL (CONSTRUCTED IN 2003/2004)

● 32+100

🏠 7-01

- NOTES:
- 1 FIGURE MUST BE USED IN CONJUNCTION WITH THE ATTACHED REPORT REFERENCE 32121 DATED OCTOBER 2025 AND IS SUBJECT TO ANY LIMITATIONS DESCRIBED THEREIN.
 - 2 AIR PHOTO BASE FROM DRONE IMAGERY COLLECTED JULY 18, 2024 AND ESRI (DIGITAL GLOBE, 2016).
 - 3 FEATURES/PHOTOGRAPH LOCATIONS SHOWN APPROXIMATE ONLY.
 - 4 FIELD OBSERVATIONS FROM MAY 14, 2025 SHOWN IN RED.

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PEACE REGION (PEACE RIVER DISTRICT)

DAISHOWA
HWY 986:01 (PH007)
SITE PLAN

FIGURE PH007-2

DRAWN BY	ICB
DESIGNED BY	TTC
APPROVED BY	DWP
SCALE	1:1750
DATE	OCTOBER 14, 2025
FILE No.	32121-A3G

THURBER

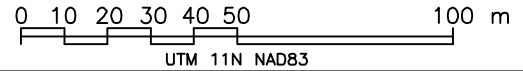




Photo 7-01.: Wetland area near km 31+950 with silt buildup and breach through beaver dam following 2024 high flow event.



Photo 7-02.: View upstream at the gabion inlet structure near 32+850. Debris buildup and vegetation displacement (willows laid over) from the 2024 high flow event. Minor deformation of the gabion baskets at the inlet.



Photo 7-03.: Looking west (downstream) at the eastern end of the primary scour (up to 1.5 m deep) and initiation of severe channel degradation and bank washout within the north channel segment that extends from approximately 32+800 to 32+600.



Photo 7-04.: Looking east at channel downcutting (up to 2 m depth) and bank washout creating near vertical bank exposures within the channel bottom resulting in collapse of the riprap along the top of bank (32+650).



Photo 7-05.: Looking west (downstream) at channel erosion (32+650). There was slightly worse channel downcutting and washout of the riprap rock within the bottom of the channel since the 2024 callout inspection.



Photo 7-06.: Looking west (downstream) at a buildup of washed out riprap, sediment and woody debris from erosion within the upstream north channel that has caused channel infill near 32+575 and diverted the high water flow to overtop both banks and flow around the upper drop structure on the south side.



Photo 7-07.: Looking west (downstream) along the south channel bank where an upstream buildup of washed out riprap has infilled the channel and caused overflow above the south bank and outside the upper gabion drop structure (32+550). High flow path evident from grass disturbance and sediment buildup outside the banks.



Photo 7-08.: View north towards the upper gabion drop structure (32+550). Major basket deformation and wire damage along channel centreline. Scour within the bottom of the structure has caused sag of the sidewalls. Sediment buildup and pooling in bottom.



Photo 7-09.: View east towards the upper gabion drop structure (32+550) with major basket deformation and damage. Some riprap was displaced at the toe of the structure, but the downstream channel riprap was intact up to the lower drop structure approximately 40 m further downstream.



Photo 7-10.: View east towards the lower gabion drop structure (32+480). Minor basket deformation in the southeast inlet area. Debris and sediment buildup indicative of high flow around the outside of the structure with an erosion gully formed on the north side.



Photo 7-11.: View west at the top of the lower gabion drop structure (32+480). The 2024 high flow went outside the drop structure on the north side and formed an erosion gully which in 2025 was approximately 6 m wide and 2 m deep. Previous erosion damage has been observed in this area in the past.



Photo 7-12.: Multiple areas with localized scour and riprap displacement were observed within the channel segment for an approximately 100 m length downstream of the lower drop structure (32+425). Majority of riprap was intact and there was no major erosional downcutting or washout.



Photo 7-13.: View downstream (west) of major channel downcutting (up to 5 m in depth) and washout for an approximately 100 m length of the channel between 32+280 and 32+380.



Photo 7-14.: View northeast of the channel segment with major channel downcutting and washout near 32+325. Undermining of the south bank has resulted in bank collapse and sliding towards the highway embankment. Near vertical bank exposures have developed on the north bank.



Photo 7-15.: View east of the channel segment with major channel downcutting and undermining of the south bank that has resulted in the development of slides into the north toe of the highway embankment between approximately 32+275 and 32+350.



Photo 7-16.: View northwest towards the gabion retaining wall near 32+275 where the riprap at the base of the wall has been washed out as a result of severe channel downcutting.



Photo 7-17.: View east along the west end of the gabion retaining wall with visible tilt towards the channel due to undermining at the base from channel scour (32+225).



Photo 7-18.: View downstream from west end of the gabion retaining wall (32+250) where channel was infilled with a buildup of washed out channel riprap and sediment, displacing water flow to the channel sides.



Photo 7-19.: View of the channel downstream from the western limits of the channel armouring section near 32+200 that had significant accumulation of washed out riprap and channel soils.



Photo 7-20.: Centreline culvert inlet at the south ditch near 32+050. Minor ditch erosion and partial flow beneath the culvert.



Photo 7-21.: Previously observed channelized erosion has since revegetated within the rolled erosion control product (turf reinforced matting) test section (32+100). Minor erosion was present along tire ruts.



Photo 7-22.: Looking east towards 300 m diameter channel sock erosion control section (32+150). Section generally had good vegetation growth within previous erosion gully in ditch bottom. A 0.5 m deep scour pool was observed downstream of the Coletanche erosion control transition.



Photo 7-23.: Looking upslope (east) at the Coletanche geomembrane erosion control section (32+250). Was in good condition with no new damage observed in previous patch repair area.



Photo 7-24.: Looking upslope the ditch (east) at the geoweb control section (32+400). No major change since the 2023 condition. Section had vegetation growth and some cells along the ditch bottom were only partially filled and broken.



Photo 7-25.: Looking upslope the ditch (east) at the gabion mattress section (32+500). Section had vegetation growth and was performing well. Minor rill damage was noted on the north side of the ditch.



Photo 7-26.: View of the damage within the interlocked concrete block (i.e., Lafarge paving stones) paving stone section (32+600). Blocks have deteriorated and broken up in numerous locations and have been undermined by erosion exposing geotextile fabric beneath. Overall section is worse relative to the other test sections but had no major changes since the 2023 condition.



Photo 7-27.: Looking east towards cabled concrete section (32+700). Section was performing well. Minor erosion damage was noted on the north side of the ditch. No major change from the 2023 condition.



Photo 7-28.: Looking east towards pillow concrete section (32+800). Section was performing well. Minor concrete deterioration was noted in select areas and there were some protruding rebar pins, but erosion mitigation function was not impacted.



Photo 7-29.: Looking east (upslope) at the top of the erosion control test ditch (32+900). Ditch upslope of the test section has been lined with gabion mattress as part of the 2018/2019 East Daishowa (PH042) mitigation work. The ditch and new mitigation works were in good condition with no observable change apart from increased vegetation growth since 2023.