

Environment General Supervisor  
Agnico Eagle Mines Limited – Hope Bay  
c/o BBE Global Logistics  
#18 Yellowknife Airport  
Yellowknife, NT, X1A 2T2  
Canada

Project: CAPR003066  
March 26, 2025

**Subject** Hope Bay Site-Wide – 2024 Annual Geotechnical Inspections

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Dear Guy and Brennan,

Agnico Eagle Mines contracted SRK Consulting (Canada) Inc. to conduct the 2024 Annual Geotechnical Inspection for the Hope Bay site in Nunavut. Hope Bay is a gold mine, located in Nunavut Territory 705 km northeast of Yellowknife, NWT and 153 km southwest of Cambridge Bay, NT. The mine is currently in care and maintenance.

The objective of the inspection, in addition to meeting regulatory, license and policy requirements, is to ensure that the project's surface infrastructure is performing as intended from a geotechnical perspective. Due to the location's cold climate, most geotechnical designs rely on keeping permafrost frozen, as such the inspection puts emphasis on ensuring the integrity of the continuous permafrost is upheld.

This letter provides the observations and recommendations from the site inspection and review of monitoring data.

### **Background**

Surface infrastructure construction to support mining operations at Hope Bay started at Doris in 2007, and Madrid in 2010. Surface construction at Boston began in 1993. With the exception of exploration activities, no significant surface activities have occurred at Boston since 2011. A history of the Boston site and context prior to 2023 was provided in the 2022 AGI (SRK 2023).

Annual geotechnical inspections (AGI) at Hope Bay have been carried out since 2007, and all previous inspections have been conducted by SRK. The geotechnical inspection is an annual requirement for the Doris and Madrid water license<sup>1</sup>, Part I and the Boston water license<sup>2</sup>, Part D.

The annual geotechnical inspection report provides observations and recommendations and is submitted to the Nunavut Water Board on an annual basis as part of the Hope Bay Annual Report.

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<sup>1</sup> Water Licence 2AM-DOH1335 – Amendment #2, issued December 7, 2018

<sup>2</sup> Water Licence 2BB-BOS1727 Part D Item 13, issued December 7, 2018

## 2024 Annual Geotechnical Inspection

This letter presents the findings of the 2024 site-wide AGI, which includes:

- Doris North (including vent raise and Doris Crown Pillar Recovery Trench)
- Roberts Bay
- Madrid
- Rock fill roads (Doris, Windy, Madrid, Tailings Impoundment Area (TIA))
- Doris Airstrip
- The former Patch Lake drill shop area (only inspected aerially)
- Boston

The inspection of the Doris Tailings Impoundment Area and supporting infrastructure such as the water treatment plant, reclaim pond jetty, access roads and catch basins will be reported on in a separate, stand-alone, AGI report.

The 2024 AGI was carried out from September 11<sup>th</sup> to 14<sup>th</sup>, 2024 by Peter Luedke, PEng and Anton Novikov, EIT of SRK, accompanied by Site Geotechnical Staff, Brennan Jay, EIT. Weather conditions during the inspection were sunny with overcast periods and periods of fog with strong winds. The site inspection included driving, on-foot, and aerial reconnaissance of the entire Doris, Madrid North and Boston areas. The inspection of the 10 km long Doris to Madrid road (Windy All-weather Road), the Secondary Road (Tail Lake Road) from the Doris camp to the tailings impoundment area, and the portion of the Madrid North to South road that has been constructed to date was conducted via truck with frequent stops for physical inspections at key areas. Boston was inspected on foot on September 14, 2024. In addition to the physical inspections, discussions with Agnico Eagle staff while on site, and review of monitoring data were used to supplement site observation and are part of this 2024 AGI.

A ground penetrating radar survey (GPR) of the Doris airstrip was also carried out by SRK during the time on site. Anton Novikov and AEM site staff completed the data collection, and transmitted the data daily to a GPR specialist GroundRadar Inc. who processed and reviewed the data.

A short hybrid teleconference and in-person meeting was held on September 17, 2024, to provide an overview of the main observations, and help action the inspection recommendations.

Overall, the 2024 geotechnical inspection suggests that the geotechnical performance of surface infrastructure at Hope Bay are relatively unchanged from what was observed in 2023, with improvement of some maintenance items noted previous years.

Overview figures are provided in Attachment 1 and Attachment 2. Observations from the site visit and review of the monitoring data along with comments and recommendations are provided in Attachment 3 for Doris and Doris to Madrid Road, in Attachment 4 for Madrid, and Attachment 5 for Boston. Plots of survey monitoring data are in Attachment 5, while the ground temperature monitoring data are provided in Attachment 7.

The top priority recommendations identified during the geotechnical inspection are provided below.

- Agnico Eagle has indicated the Pad T waste rock pile (WRP) may be relocated in 2025. Prior to relocation, an excavation plan should be developed to mitigate for potential oversteepening of the existing slopes. If material from Pad T is to be used for other works on site, the material should be sourced from the south pile crest, which is currently the steepest portion of the slope. This will further reduce the height and slope of the pile and incrementally increase the factor of safety.
- The results of the ground penetrating radar survey indicate two point reflectors were identified within the airstrip fill at 1.9 m and 2.2 m below the airstrip surface. These point reflectors may be the result of potential voids, ice, or other anomaly within the fill, and would be 0.4 to 0.5 meters in diameter based on the wavelength of the survey. Multiple other point reflectors were identified at depths below the airstrip fill, which is expected based on the permafrost and frost wedge polygons in the area. Due to the frequency of the method used, significant depth was achieved, however the resolution to resolve the exact cause of each the reflection is limited. Based on the findings of the GPR campaign at the airstrip, completion of higher frequency survey (500 Hz) was discussed with AEM. Using the GPR unit AEM has on site (Noggin 500) a GPR survey should be first carried out near observed point reflectors within the airstrip fill to improve the understanding of the subsurface conditions. These reflectors may represent a potential thermokarst void in the rock fill, an ice lens or a change in material type such as a zone of large boulders in the airstrip fill.
- A sinkhole was observed in the helipad in 2023 has since been backfilled and water management practices upstream of the pad have been improved. No sinkholes have been observed in 2024. It is recommended that in conjunction with GPR conducted at the airstrip, higher frequency GPR survey (500 Hz) be used to identify point reflectors or anomalies that could indicate the presence of a thermokarst void, ice lenses or other features that could cause sinkholes in the helipad.
- The Doris Contact Water Pond tie in remains frozen and does not show notable signs of warming based on GTC data. The water-retaining element of the contact water pond is the HDPE liner tied into the underlying permafrost. In order for the pond to continue to retain water the permafrost tie-in must be maintained, ponding water near the toe of the berm can lead to thermal erosion and loss of containment. The low area of ponded water on the southwest corner of the pond, which is the current pumping point, should be shifted northward (offset approximately 5 meters from the thermal berm toe). If grading in this area is undertaken, the water flowing along the north edge of the pond should also be directed towards the new pumping location. When practical to do so, the sumps or pumping low points should be maintained in a pumped down state.
- Continue development and construction of higher capacity sumps at the Madrid North Waste Rock Pile to limit potential for surface water bypass during freshet.
- Monitoring frequency of survey points (Pad B, Madrid CWP (to be replaced in 2025), Naartok East CPRT) was below the target frequency. Only one survey monitoring event occurred in 2024. Survey monitoring should be conducted at the target frequency established based on the performance and use of the structure (at a minimum once every two months, between May and November). Completion of repairs to the ground temperature cables (GTC) SRK10-DCB1, SRK10-DCB2 and SRK-12-GTC-DH01 should also be completed. If repairs of cable connections are not

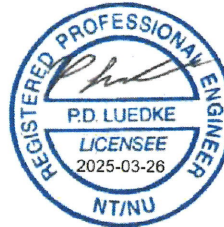
possible, then consider direct wiring into dataloggers which can provide improved data resolution and simplified data collection.

Notwithstanding the observations and recommendations provided in this AGI, the Hope Bay surface infrastructure (across Doris, Madrid and Boston) is in good condition and performing satisfactorily.



Regards,  
SRK Consulting (Canada) Inc.

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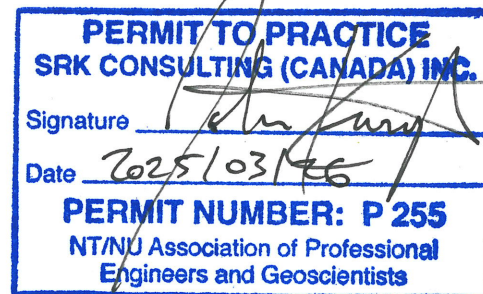


Anton Novikov, EIT  
Consultant

Peter Luedke, PEng  
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Reviewed by:

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Megan Miller, PEng  
Principal Consultant

SRK Consulting (Canada) Inc. Engineers and Geoscientists BC Permit to Practice No: 1003655

#### References

SRK Consulting (Canada) Inc. 2023. Boston Advanced Exploration Project – 2022 Annual Geotechnical Inspection. SRK Project Number CAPR001815. Letter prepared for Agnico Eagle Mines Ltd. April 13.

#### Attachments:

- |              |                                       |
|--------------|---------------------------------------|
| Attachment 1 | Doris and Madrid Overview Figures     |
| Attachment 2 | Boston Overview Figure                |
| Attachment 3 | Doris Inspection Observations         |
| Attachment 4 | Madrid Inspection Observations        |
| Attachment 5 | Boston Inspection Observations        |
| Attachment 6 | Survey Monitoring Data and Dashboards |
| Attachment 7 | Ground Temperature Cable Data         |

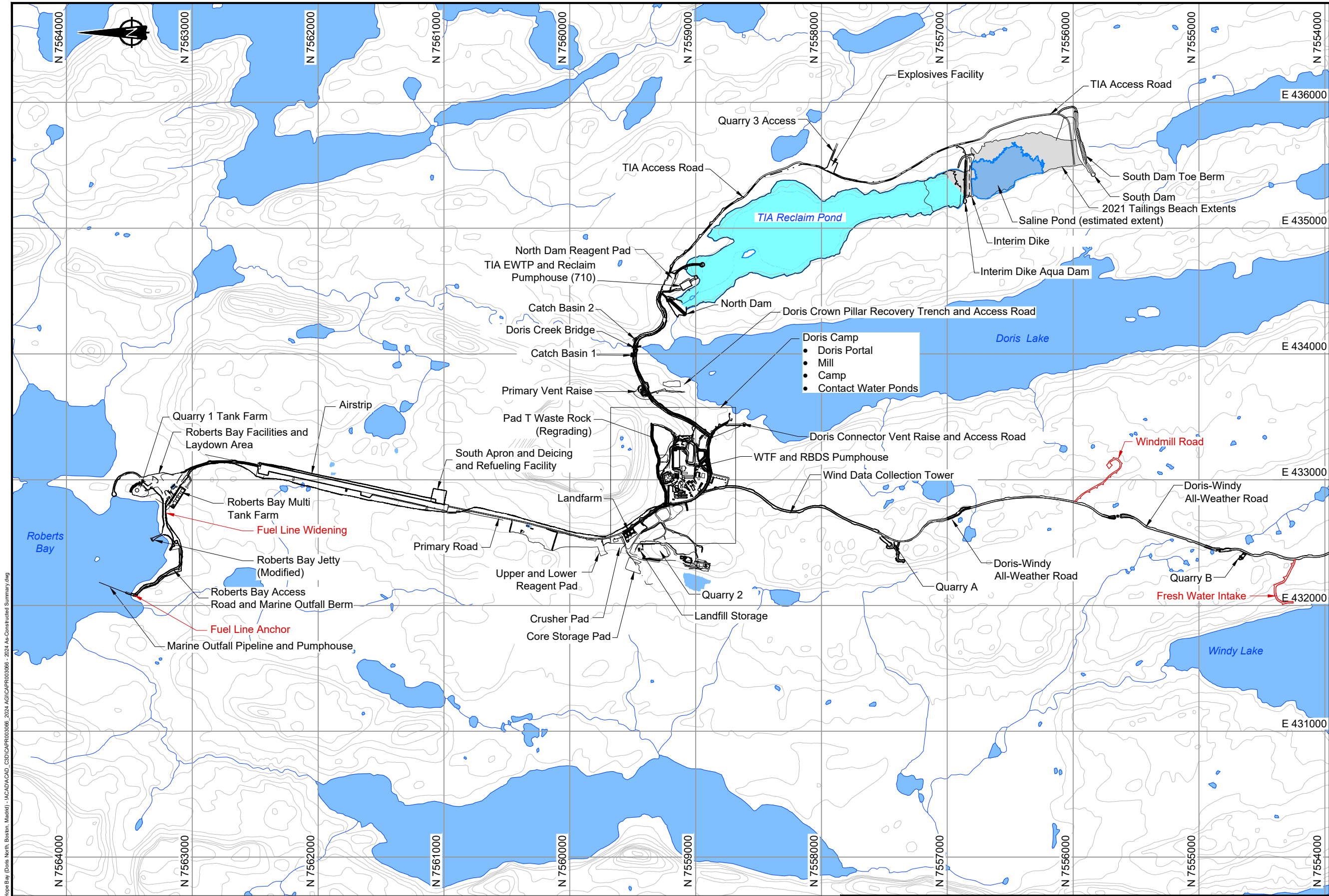
**Canada**     Saskatoon 306 955 4778 // Sudbury 705 682 3270 // Toronto 416 601 1445 // Vancouver 604 681 4196 // Yellowknife 867 873 8670

**United States**     Alaska 907 677 3520 // Clovis 559 452 0182 // Denver 303 985 1333 // Elko 775 753 4151 // Reno 775 828 6800 // Tucson 520 544 3688

**AFRICA ■ ASIA ■ AUSTRALIA ■ EUROPE ■ NORTH AMERICA ■ SOUTH AMERICA**

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## **Attachment 1      Doris and Madrid Overview Figures**



LEGEND

Existing As-Constructed Infrastructure

2024 As-Constructed Infrastructure

Tailings Beach Extents

TIA Reclaim Pond

- NOTES
1.

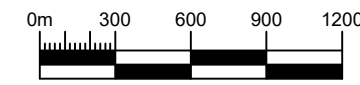
All units are in meters unless otherwise specified.
2.

Contours are shown at 10.0 m intervals.

REFERENCES

NAD83 CSRS UTM Zone 13.

2024 As-constructed linework derived from drawings provided by Client. File name: 6213-005-210-001\_RB.dwg.



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srk consulting

SRK JOB NO.: CAPR003066

FILE NAME: CAPR003066 - 2024 As-Constructed Summary.dwg

AGNICO EAGLE

Hope Bay

2024 Annual Report

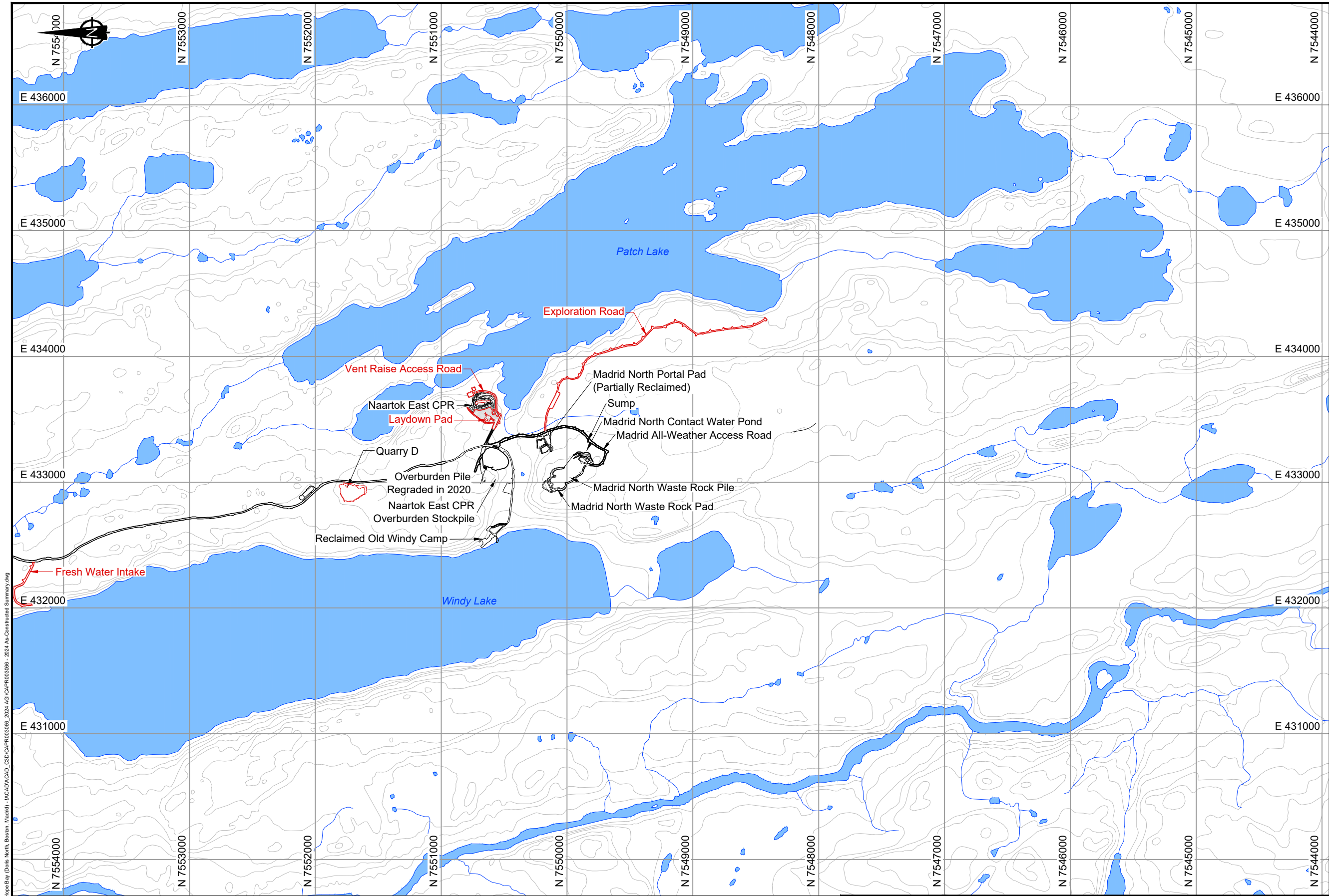
Doris Area 2024 As-Constructed Summary

DATE: February 2024

APPROVED: PDL

FIGURE: 01





**LEGEND**

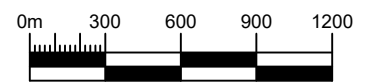
- Existing As-Constructed Infrastructure
- 2024 As-Constructed Infrastructure

**NOTES**

- All units are in meters unless otherwise specified.
- Contours are shown at 10.0 m intervals.

**REFERENCES**

NAD83 CSRS UTM Zone 13.  
2024 As-constructed linework derived from drawings provided by Client. File name: 6213-005-210-001\_RB.dwg.



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SRK JOB NO.: CAPR003066  
FILE NAME: CAPR003066 - 2024 As-Constructed Summary.dwg



**AGNICO EAGLE**

Hope Bay

2024 Annual Report

Madrid North Area 2024  
As-Constructed Summary

DATE: February 2025  
APPROVED: PDL  
FIGURE: 02

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## **Attachment 2      Boston Overview Figure**





**Notes:**

- 1) Imagery provided by Agnico Eagle, collected by aerial drone around the end of summer 2022 overlaid on an image from 2021.



Job No: CAPR003066  
Filename: BOS\_AGI\_Overview\_20250313.pptx



Hope Bay

2024 Annual Geotechnical Inspection  
Boston

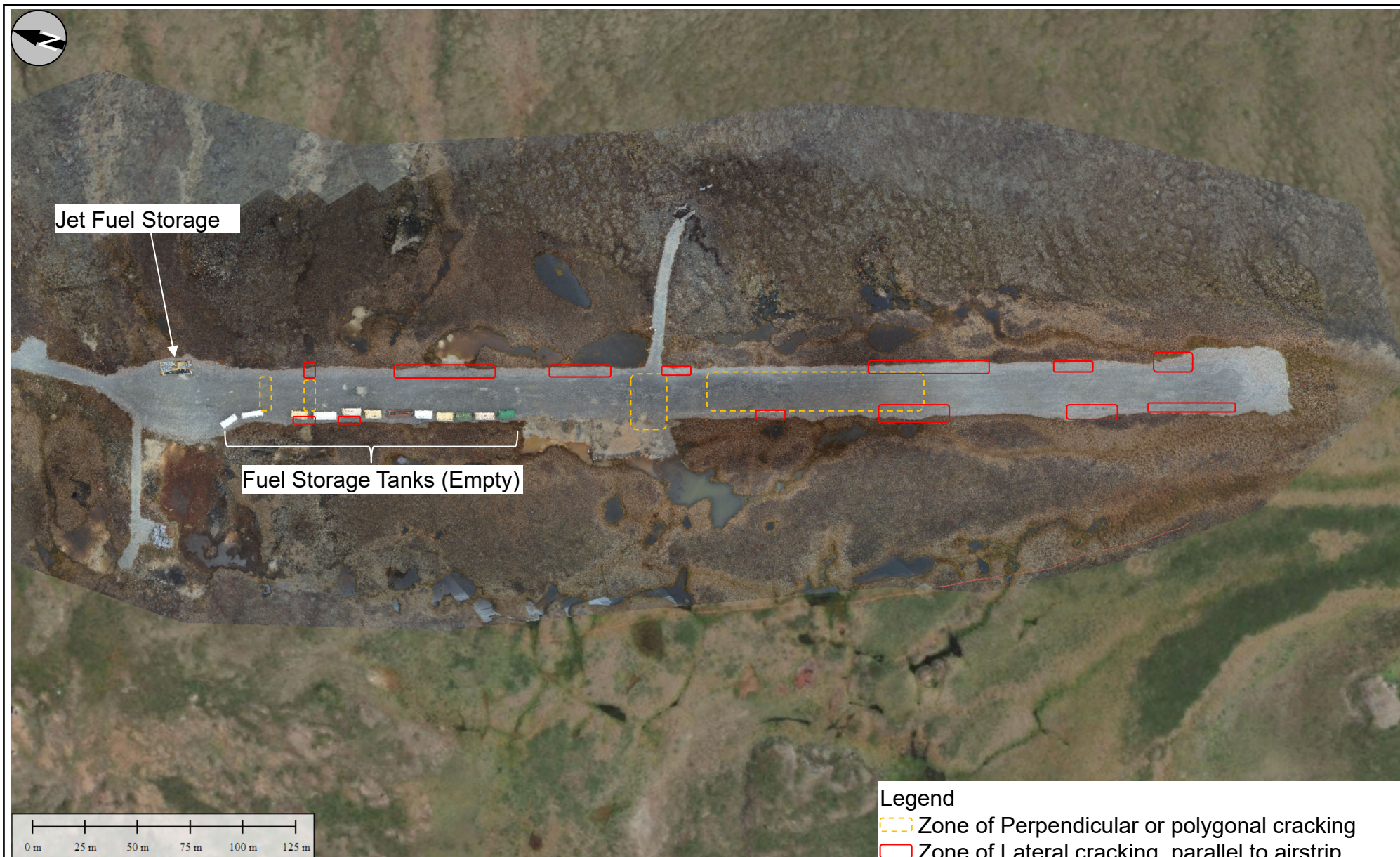
**Boston Camp and Tank Farm  
Overview**

Date:  
Mar. 13, 2025

Approved:  
PDL

Figure: **1**





Notes:

- 1) Imagery provided by Agnico Eagle, collected by aerial drone around the end of summer 2022 overlaid on an image from 2021.



Job No: CAPR003066  
Filename: BOS\_AGI\_Overview\_20250313.pptx



**AGNICO EAGLE**

**Hope Bay**

2024 Annual Geotechnical Inspection  
Boston

**Boston Airstrip**

Date:  
Mar. 13, 2025

Approved:  
PDL

Figure: **2**

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## **Attachment 3      Doris Inspection Observations**



**Table 1: Doris Inspection Observations and Recommendations**

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
Doris Diversion Berm (North of Pad T and Camp Pads)	<ul style="list-style-type: none"> <li>Downstream side of berm where berm runs along access road is over steepened, due to snow clearing, and the geotextile protecting the diversion berm geomembrane is exposed in a few areas.</li> <li>Tension cracking and thaw settlement of thermal protection layer toe on upstream side of the berm.</li> <li>The waste rock and Madrid Ore that had spilled over the berm have been removed to the extent practical.</li> <li>Minor differential settlement observed near upstream side of west diversion.</li> </ul>	<ul style="list-style-type: none"> <li><i>Overall, the structure is in satisfactory condition, with no pressing geotechnical concerns</i></li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> </ul>
		<ul style="list-style-type: none"> <li>Cover exposed diversion berm geotextile. Consider reestablishing the design slope and/or establishing practices to limit further cutback of the downstream berm during snow clearing and grading.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-23</li> </ul>
		<ul style="list-style-type: none"> <li>Consider methods to limit future migration of waste rock to the upstream side of the diversion berm</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-24</li> </ul>
Pad T Waste Rock Pile	<ul style="list-style-type: none"> <li>No significant changes have been made to the Pad T WRP in the past year, waste rock which noted to be displaced beyond the diversion berm was relocated to the south side of the berm.</li> <li>No changes to past recommendations.</li> </ul>	<ul style="list-style-type: none"> <li>The stability of the pile should be reassessed following resumption of operations or if any significant changes occur before that time.</li> <li>If material from Pad T is to be used for other works on site, the material should be sourced from the south pile crest, currently the steepest portion of the slope, in an effort to further reduce the height and slope of the pile and incrementally increase the factor of safety.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-25</li> </ul>
7.5ML Tank Farm	<ul style="list-style-type: none"> <li>A small erosion gully was noted in the crushed rock on the interior berm near the northeast corner.</li> <li>Similar to previous inspections, minor rock spalling from the highwall was noted, signage is present to warn personnel of the hazard.</li> <li>No new undercutting of liner slopes or formation of tension cracks was observed.</li> <li>The rock high wall was inspected by an SRK geotechnical engineer (rock mechanics) on October 14, 2024. (SRK 2024<sup>3</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>Review and implement recommendations provided by SRK geotechnical engineer (rock mechanics).</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-07</li> </ul>
		<ul style="list-style-type: none"> <li>Continue to limit vehicle travel in the tank farm secondary containment area, and when vehicle travel is required, care should be taken to avoid driving on the toe of the slopes to prevent over-liner damage.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-27</li> </ul>
		<ul style="list-style-type: none"> <li>Examine the updated 2024 LiDAR data to assess cover depth and apply additional crushed material where design thickness specifications are not met.</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-08</li> </ul>
Pad B	<ul style="list-style-type: none"> <li>A small, excavated area remains under the pipe rack on the east side of the powerhouse. No changes observed.</li> <li>One survey monitoring event occurred in 2024, with a notable vertical error (observed systematically on all survey data). Horizontal displacements do not indicate any substantial movement in 2024.</li> </ul>	<ul style="list-style-type: none"> <li><i>Overall, the structure is in satisfactory condition</i></li> <li><i>Attachment 5 presents a summary of the Pad B survey data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> </ul>
		<ul style="list-style-type: none"> <li>Consider establishing a new survey pin to replace the displaced PH2 location, particularly if inconsistent readings or issues with GPS reception is noted in future. The new location must be near the southwest corner of the concrete powerplant pad near the crest of the slope where the placed pad fill is thickest.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-28</li> </ul>

<sup>3</sup> SRK Consulting (Canada) Inc, 2024. Hope Bay Fuel Tank Highwall Visual Inspection, Presentation, CAPR003065, December 19, 2024.

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
		Implement survey procedures with recorded control point check shots to provide survey error verification.	2024-AGI-09
Helipad	<ul style="list-style-type: none"> <li>No further sinkholes or issues have been noted at the helipad in 2024, and the proactive water management improvements appear to have been beneficial.</li> <li>There is limited ponded water on the upstream side of the helipad during the inspection, while a constant water flow is observed on the downstream side.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to monitor the area near the sinkhole, including under the nearby buildings, and pump the sump to reduce the water level in the pad. If water ponding is observed upstream of the helipad, consider pumping that water away to reduce the source of waterflow and thermal loading.</li> <li>If additional settlement or sinkholes are observed, implement additional mitigation strategies such as ditching or pumping to decrease ponding water and infiltration into the rock fill at the upslope side of the pad.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-30</li> </ul>
		<ul style="list-style-type: none"> <li>When high frequency (500 Hz) GPR surveys on the airstrip are completed, consider completing a survey of the helipad.</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-10</li> </ul>
Contact Water Pond	<ul style="list-style-type: none"> <li>As observed since 2017, the floor of the contact water pond is undulating due to active layer deepening. As a results small ponds form preventing complete drainage of the pond.</li> <li>While the pond was empty, water was ponded in the southeast corner of the facility against the thermal protection layer overlying the liner tie-in in what appears to be the regular pumping location. Water was also noted to be flowing along the north edge of the pond floor and flowed into the rockfill along the west side of the facility.</li> <li>Some small tension cracks were noted in the thermal protection layer.</li> <li>Most of the pond floor is bare earth or dead vegetation, coco matting has been placed in some areas,</li> <li>SRK-12-GTC-DH01 continues to be broken, and no readings were obtained in the 2024 monitoring period.</li> </ul>	<ul style="list-style-type: none"> <li><i>The water retention elements of this pond are the underlying permafrost and HDPE liner which is tied into the permafrost. Therefore, to ensure the pond continues to retain water the permafrost tie-in must be maintained.</i></li> <li>In order to prevent thermal erosion and thawing of the contact water pond liner tie-in leading to loss of pond containment, backfill the area of ponded water in the southwest corner of the pond with overburden material and establish a pumping location away from the edges of the pond to prevent ponding water (and the subsequent heat transfer) along the thermal protection layer. Place overburden in a manner that prevents water from flowing along the thermal protection layer and divert the water flowing along the north edge of the pond towards the pumping location.</li> <li>Attempt another repair of the SRK-12-GTC-DH01 GTC connector with a new trident connector from the supplier (RST Instruments) along with the repair of other site wide GTCs.</li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> <li>2023-AGI-31 (updated)</li> </ul>

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
	<ul style="list-style-type: none"> <li>SRK-12-GTC-DH02 and SRK-12-GTC-DH03 ground temperature measurements indicate slightly warmer minimum ground temperatures in 2024, which have been seen across site, but are also indicative of potential warming along the CWP berm and liner-in.</li> </ul>	<ul style="list-style-type: none"> <li>Although minimum monitoring frequency stated in the water license has been met for active cables, consider increasing frequency of readings to maintain resolution of data. Consider installation of a datalogger at SRK-12-GTC-DH02 and SRK-12-GTC-DH03 to increase the resolution of the thermal data collected in this location.</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-11</li> </ul>
Doris Sediment Pond	<ul style="list-style-type: none"> <li>Several holes and cuts noted in liner, on slope near crest of berm. These are patterned cuts (parallel and perpendicular to the direction of the HDPE roll and appear to be located above the overflow culverts installed in the downstream berm of the pond.</li> <li>Wrinkles in the liner are present in the north corner.</li> </ul>	<ul style="list-style-type: none"> <li><i>Overall, the pond is in satisfactory condition, though repairs are needed to prevent the observed defects from getting worse, and to prevent water from leaking through the cuts when the pond is full.</i></li> <li>Inspect the liner for additional defects and confirm elevation of any observed defect is above the overflow culvert elevation.</li> <li>Consider getting the holes and cuts observed in the liner repaired by a specialty liner contractor to prevent the cuts from getting larger.</li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> <li>2023-AGI-32</li> </ul>
Doris Sumps	<ul style="list-style-type: none"> <li>Minor change from previous years</li> <li>Large wet area with dead vegetation in area of sumps</li> <li>The sump dewatering appears to be effectively managed.</li> </ul>	<ul style="list-style-type: none"> <li>Take measures to prevent water from ponding on the tundra around the sumps. Monitor for bypass of sumps and backfill around the sumps where needed to direct all water into the sumps. Ensure water within the sumps is pumped down, and when pumping water from one sump to the other, ensure that the discharge pipe is discharging into the sump rather than the tundra near the sump to reduce thermal erosion of the tundra in the area around the sumps.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-33</li> </ul>
Doris Overburden Pile	<ul style="list-style-type: none"> <li>The small sinkholes previously observed were not observed in 2024.</li> <li>Drill cuttings have not been placed here since 2023.</li> </ul>	<ul style="list-style-type: none"> <li>No changes to past recommendations.</li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> </ul>
Quarry 2	<ul style="list-style-type: none"> <li>Nothing of concern noted</li> </ul>		
Landfarm	<ul style="list-style-type: none"> <li>Landfarm is in good condition</li> <li>Some minor over steepening of the toe of the overliner material was observed, which appeared to occur to the level of previous water storage. No changes observed from 2023 inspection.</li> </ul>	<ul style="list-style-type: none"> <li><i>Overall this facility is in satisfactory condition.</i></li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> </ul>

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
Doris Pads	<ul style="list-style-type: none"> <li>■ The mill pad highwall was not inspected due to the difficult access to the area with the mill building and linear infrastructure in the area.</li> <li>■ The core storage pad is new in as of 2022.</li> <li>■ Green ponded water and permafrost degradation, likely from historic sewage discharge at the location, present at the south toe of the Core Storage Pad.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>No changes to past comments:</i></li> <li>■ <i>Overall, the pads are in satisfactory condition.</i></li> <li>■ <i>Site could consider a small expansion of the core storage pad to the south to cover the area of permafrost degradation and ponded water, to prevent long-term ponded water in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Comment</i></li> </ul>
Doris Creek Bridge Abutments	<ul style="list-style-type: none"> <li>■ As noted in previous geotechnical inspections the gabion baskets which form part of the bridge abutment structure are deformed (and have been since construction), and therefore it is not possible to tell if additional deformations of the gabion wall have occurred. However this gabion wall only retains road fill.</li> <li>■ Some tension cracks were noted along the edge of the turnout near the bridge.</li> <li>■ No signs of deformation or settlement below the abutment are observed.</li> <li>■ Ground temperature cable connections are still damaged.</li> </ul>	<ul style="list-style-type: none"> <li>■ Recommendation made as part of TIA AGI, provided here for ease of reference <ul style="list-style-type: none"> <li>– <i>Repair or replace the ground temperature cable connections to ensure continuity of monitoring of the abutments, as required by the Water License.</i></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ 2024-AGI-12</li> </ul>
Vent Raise Pad	<ul style="list-style-type: none"> <li>■ Tension cracking on gravel pad on south side of vent raise toward the rock sump. No notable changes were observed in 2024.</li> <li>■ Renewed interest from the mining team on the vent raise surface water diversion project.</li> <li>■ The rock high wall was inspected by an SRK geotechnical engineer (rock mechanics) on October 14, 2024<sup>4</sup>.</li> </ul>	<ul style="list-style-type: none"> <li>■ The tension cracks on the gravel pad should be monitored for additional changes.</li> <li>■ A potential phased approach concentrating on the area directly upstream of the vent raise and reducing ponding on the vent raise pad were the preferred options for the vent raise surface water diversion project</li> <li>■ Review and implement recommendations provided by SRK geotechnical engineer (rock mechanics).</li> </ul>	<ul style="list-style-type: none"> <li>■ 2023-AGI-36</li> <li>■ 2023-AGI-37</li> <li>■ 2024-AGI-13</li> </ul>
Doris Crown Pillar Recovery Trench (CPRT)	<ul style="list-style-type: none"> <li>■ Access to the areas is restricted by signage at the entrance road.</li> <li>■ Two sinkholes are present at the surface of the backfilled trench. The extent has been documented by the 2024 LiDAR. The larger northern sinkhole is approximately 13 meters in diameter and the smaller sinkhole is approximately 5 meters in diameter.</li> </ul>	<ul style="list-style-type: none"> <li>■ Continue to restrict access to the area</li> <li>■ The sinkholes are conical in nature and area and appear to indicate migration of materials into void space within the backfill. A plan should be made to safely backfill and monitor the area before any general access is re-established</li> <li>■ Implementation of the vent raise surface water diversions, may reduce the likelihood of further sinkhole formation. Consider increasing the priority of the Doris CPRT surface water diversion berm.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2023-AGI-39 (updated)</li> <li>■ 2024-AGI-14</li> </ul>

<sup>4</sup> SRK Consulting (Canada) Inc, 2024. Hope Bay Fuel Tank Highwall Visual Inspection, Presentation, CAPR003065, December 19, 2024.

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
Airstrip and Aprons	<ul style="list-style-type: none"> <li>Airstrip has been undergoing increased grading maintenance which has greatly reduced visible cracking on the surfacing material.</li> <li>A ground penetrating radar survey was completed to identify potential voids within the airstrip fill or foundation (which may progress to sinkhole formation).</li> <li>The results of the ground penetrating radar survey indicate two point reflectors (potential voids) were identified within the airstrip fill at 1.9 m and 2.2 m below the airstrip surface. Multiple other point reflectors were identified at depth. Due to the frequency of the method used, significant depth was achieved, however the resolution to resolve the potential cause of the reflection is limited. Higher frequency surveys have been discussed and should be carried out to improve the understanding of the subsurface condition.</li> </ul>	<ul style="list-style-type: none"> <li>Based on the visual inspection the airstrip appears to be in satisfactory condition, however, visual inspection cannot rule out the formation of sinkholes in the future. Additionally, the placement of crush material limited what could be seen over the surface of most of the airstrip.</li> <li>Conduct regular visual inspections prior to flights.</li> <li>As noted in previous inspections, the cracking observed along the slopes of the airstrip is expected to be due to thaw settlement. Limiting disturbance to the permafrost on either side of the airstrip and taking steps to reduce the water flowing or ponding along the airstrip will likely reduce the required maintenance. Site can also consider strategic placement of additional fill material at the western toe of the airstrip in areas to limit permafrost degradation and move ponded water further from the toe of the airstrip.</li> <li>Continue dewatering the upstream ponds early in freshet, limiting potential for thaw.</li> <li>Site should continue to limit traffic near the crest and shoulders of the airstrip (particularly outside of the runway lights), especially during the summer and early fall when the active layer is deepest.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-40 (updated)</li> </ul>
		<ul style="list-style-type: none"> <li>The point reflectors identified by the GPR within the airstrip fill are at depths greater than 1.9 meters, these areas should be inspected and monitored regularly for signs of surface expression. In addition, they should be investigated further using GPR techniques available on site (500 MHz Noggin GPR used to conduct ice surveys for exploration)</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-15</li> </ul>
		<ul style="list-style-type: none"> <li>If functional, monthly monitoring of the site wide thermistor located near the airstrip (SRK-22) should be resumed for at least one year to determine if there are any changes in the ground temperature regime in the area.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-41</li> </ul>
		<ul style="list-style-type: none"> <li>The design slope of the east side of the airstrip, along the access road, should be reestablished and markers should be placed during to winter to prevent additional undercutting of the slope due to snow clearing.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-42</li> </ul>
Doris Roads	<ul style="list-style-type: none"> <li>Roads were generally observed to be in good condition.</li> </ul>	<ul style="list-style-type: none"> <li>Overall roads are in satisfactory condition, and nothing more than routine maintenance was noted.</li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> </ul>
Jetty	<ul style="list-style-type: none"> <li>The jetty access ramp was lowered slightly in 2024 near the nose to accommodate new NEAS barge ramps.</li> <li>Sealift in progress and performing well during the inspection.</li> <li>No change to geogrid on the eastern side of the jetty.</li> </ul>	<ul style="list-style-type: none"> <li>SRK understands the following have been implemented as part of modified jetty operations <ul style="list-style-type: none"> <li>Ensure erosion protection measures are placed at the end of the Jetty when the sea lift is complete.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Comment</li> </ul>

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
		<ul style="list-style-type: none"> <li>– <i>Inspect the jetty prior to use and ensure lock blocks are replaced at the head of the jetty when jetty is not in use.</i></li> <li>▪ Discuss with fisheries biologist if they have any concerns about this geogrid on the eastern side of the jetty. Remediate if necessary during Jetty expansion.</li> </ul>	
Marine Outfall Berm	<ul style="list-style-type: none"> <li>▪ Geotextile was exposed at many locations along the south side of the berm and the north corner.</li> <li>▪ On the north corner of the berm, north of the outfall pipes, riprap is missing from the upper portion of the slope. It appears as though the riprap originally in this location has been relocated to the ocean floor beside the berm.</li> <li>▪ Wave erosion resulted in minor undercutting at the end of the berm, near the outfall lines.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Replace the missing riprap.</li> <li>▪ Consider placing riprap at the end of the berm where wave erosion has displaced some of the rock fill.</li> <li>▪ Blast matting could serve as temporary protection.</li> <li>▪ Consider incorporating repairs into future Jetty modifications.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2023-AGI-43</li> </ul>
20 ML Tank Farm	<ul style="list-style-type: none"> <li>▪ The overall condition of the tank farm is good.</li> <li>▪ The rigid fuel line has been installed which connects to the tanks on the south side (between the tanks and the high wall).</li> <li>▪ There are limited visual signs of cracking, which may have been addressed during the pipeline installation.</li> <li>▪ Improvements have been made to water discharge to minimize erosion of the liner material.</li> <li>▪ There has been some rockfall from the highwall, with the largest pieces measuring approximately 30 cm.</li> <li>▪ The rock high wall was inspected by an SRK geotechnical engineer (rock mechanics) on October 14, 2024.<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Inspect liner crest and avoid causing further erosion of materials</li> <li>▪ Continue to monitor the crushed rock overliner material and replace material with regular maintenance as required. Crushed rock should be compacted.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2023-AGI-44</li> <li>▪ 2022</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Review and implement recommendations provided by SRK geotechnical engineer (rock mechanics).</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2024-AGI-16</li> </ul>
		<ul style="list-style-type: none"> <li>▪ Review cover thickness with new 2024 LiDAR to confirm cover thickness.</li> <li>▪ Reestablish liner cover where below design thickness.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2024-AGI-17</li> </ul>
Quarry 1 (50 ML) Tank Farm	<ul style="list-style-type: none"> <li>▪ Overall in good condition with no areas of concerns during 2024 AGI inspection.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Review cover thickness with new 2024 LiDAR to confirm cover thickness.</li> <li>▪ Reestablish liner cover where below design thickness.</li> </ul>	<ul style="list-style-type: none"> <li>▪ 2022-AGI-31 (updated)</li> </ul>

<sup>5</sup> SRK Consulting (Canada) Inc, 2024. Hope Bay Fuel Tank Highwall Visual Inspection, Presentation, CAPR003065, December 19, 2024.

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
Overburden Pile / Laydown Area and Sediment Berm	■ No concerns observed	■ <i>While at one point the sediment berm was used as an access road, that is not its primary purpose, or current use, therefore the observed settlement and cracking is not a concern. The pile and sediment berm are in satisfactory condition, given their current use.</i>	■ <i>Comment</i>
Roberts Bay Pads	■ No concerns observed		

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## **Attachment 4**

## **Madrid Inspection Observations**



**Table 2: Madrid North Inspection Observations and Recommendations**

Infrastructure	Observations	Recommendations and Comments	Rec ID
Waste Rock Pile	<ul style="list-style-type: none"> <li>Drill cuttings are actively being deposited on top of the waste rock on the northmost side.</li> <li>The waste rock pile appeared to be in good condition.</li> <li>Tundra burn was observed on the north side of the WRP. This has been investigated by AEM and remedial measures are underway including seepage sump improvements and changing drill cutting placement practices.</li> </ul>	<ul style="list-style-type: none"> <li>Relocate cuttings placement to the south side of the WRP to direct seepage to the CWP and proposed larger capacity Sump 1</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-18</li> </ul>
Contact Water Pond	<ul style="list-style-type: none"> <li>A few folds or wrinkles were noted along the liner where the liner is attached to bedrock, and there were a few wrinkles in the exposed liner along the slope.</li> <li>Some water ponding on the downstream side of the south portion of the pond.</li> <li>Only one survey monitoring event occurred in 2024 (May 2024).</li> <li>Where survey data is available, total displacements are within a similar range to 2023 (See Attachment 6).</li> </ul>	<ul style="list-style-type: none"> <li>Site should monitor the folds and wrinkles in the geomembrane as that is the area where cracks or holes are most likely to form.</li> <li>Increase monitoring frequency of surficial settlement points (Monthly between May and November) to provide better resolution on the displacements observed.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-46</li> </ul>
Sumps	<ul style="list-style-type: none"> <li>A pumping system is in place at each sump and each sump was dewatered during the inspection, however it was noted by site that operational challenges exist, particularly at freshet, when water in the sump is frozen.</li> </ul>	<ul style="list-style-type: none"> <li>Consider modifying operational practices such as dewatering the sump into the early winter to minimize water within the sump, and steaming out the frozen water prior to freshet.</li> <li>Where possible, implement the proposed increased capacity sumps to alleviate operational challenges.</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-19</li> </ul>
		<ul style="list-style-type: none"> <li>Site needs to take steps to ensure that the sumps do not overflow.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-47 (updated)</li> </ul>
		<ul style="list-style-type: none"> <li>The area around the southeast most sump (Sump 4) should be backfilled so that water does not pond outside of the sump and thermally erode the surrounding permafrost.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-48</li> </ul>
Madrid Portal Pad and Waste Rock Pile Access Road	<ul style="list-style-type: none"> <li>The portal to the underground is flooded, however dewatering efforts in 2024 have lowered the water level to well below the spill point elevation.</li> <li>Additional road maintenance leading towards the Madrid North portal and waste rock pile has improved the condition of the road shoulder (tension cracks are no longer as pronounced).</li> </ul>	<p>The following recommendations from the 2022 AGI should be carried forward:</p> <ul style="list-style-type: none"> <li>Consider resloping the slopes of the access road (to 2H:1V) to mitigate the tension cracking if surface grading is not continued.</li> <li>Visual monitoring of the portal pad and remediated area should occur monthly between May and September (when clear of snow). Visual monitoring should look for signs of increasing rates of thermal degradation and any signs of erosion.</li> </ul>	<ul style="list-style-type: none"> <li>2022-AGI-38 (Updated)</li> </ul>
Naartok Overburden Pile	<ul style="list-style-type: none"> <li>Some small erosion features such as rills and small gullies observed in the overburden pile.</li> <li>Some animal burrows present in the pile.</li> </ul>	<ul style="list-style-type: none"> <li><i>Overburden pile and sediment berm is in satisfactory condition</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Comment</i></li> </ul>

Infrastructure	Observations	Recommendations and Comments	Rec ID
	<ul style="list-style-type: none"> <li>■ Sediment berm appears to be in good shape, with some water ponding at the toe.</li> </ul>		
Naartok Crown Pillar Recovery Trench (Naartok East Pit)	<ul style="list-style-type: none"> <li>■ Some tension cracks and minor slumping observed on the middle bench.</li> <li>■ The pond water level peaked at 21.4 masl (above the rock overburden interface level of 20 masl) and was drawn down to 14.7 masl by September 10, 2024 (LiDAR Survey)</li> <li>■ Naartok East Portal construction was ongoing during the inspection.</li> <li>■ One survey monitoring event was completed in 2024. No substantial changes were observed in comparison to 2023, and no signs of displacement are visible in the September 2024 LiDAR.</li> <li>■ There appear to be a few loose boulders on the East highwall above the flooded portion of the pit, access to the toe of the slope in this area is not possible in current conditions, so these rocks are not an immediate safety concern.</li> <li>■ Regular visual monitoring is expected to have occurred as part of the portal construction.</li> <li>■ Construction activity and long-term mining access within the Naartok East pit highlights the need to maintain the eastern overburden slope in good condition.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>From a visual inspection the trench appears to be in satisfactory condition</i></li> <li>■ <i>The water level within the trench reached a high elevation following freshet (21.4 masl). It is critical to maintain dewatering within the pond prior to freshet to limit potential risk to the portal pad and underground workings, as well as thermal impacts to the slope.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Comment</i></li> </ul>
		<ul style="list-style-type: none"> <li>■ Review the water balance and updated stage storage volumes within Naartok pit to ensure adequate storage volume is available to avoid overtopping or flow into the underground portal (22.5 masl)</li> </ul>	<ul style="list-style-type: none"> <li>■ 2024-AGI-20</li> </ul>
		<ul style="list-style-type: none"> <li>■ Mining operations staff should be trained to complete daily visual monitoring of the overburden slope above the portal ramp.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2024-AGI-21</li> </ul>
		<ul style="list-style-type: none"> <li>■ A cover should be constructed for the newly installed ground temperature cable and the excess cable should be carefully fed into the drill casing.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2023-AGI-51</li> </ul>
		<ul style="list-style-type: none"> <li>■ Ongoing monitoring of the fixed survey points should continue, to monitor the stability of the covered overburden slopes. (Monthly, May to October)</li> <li>■ Water level peak (post-freshet) within the trench should be maintained below the elevation of the overburden-bedrock interface (20 masl) to prevent thawing of the overburden slope and risk to the underground portal.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2022-AGI-37 (Updated)</li> </ul>
Old Windy Camp	<ul style="list-style-type: none"> <li>■ No changes from 2023 inspection.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Old Windy Camp is in satisfactory condition</i></li> <li>■ <i>Erosion control or further maintenance (cocomatting or similar) may be required in the spring to prevent erosion from the exposed overburden.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Comment</i></li> </ul>
Doris-Windy All Weather Road	<ul style="list-style-type: none"> <li>■ The road between Doris and the old Windy Camp appears to be in good condition, with a few limited areas with tension cracks along the road shoulders.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Soft shoulders should be marked to prevent inadvertent access during snowy conditions.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Comment</i></li> </ul>
Doris-Windy All Weather Road	<ul style="list-style-type: none"> <li>■ The bridge abutments and arched culvert generally appear to be in good condition.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Bridge abutments are in satisfactory condition, and while some monitoring and maintenance activities are noted there are no pressing geotechnical concerns.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Comment</i></li> </ul>

Infrastructure	Observations	Recommendations and Comments	Rec ID
Bridges and Arched Culvert  (in order from Doris to Windy: Culvert 1, Bridge 2, Bridge 3, Bridge 4)	<ul style="list-style-type: none"> <li>Some bolts or nuts on the bridge appear loose. They did not appear to impact the function of the bridge. AEM noted that an inspection of the bridges (by a structural engineer) was conducted in 2024.</li> </ul>	<ul style="list-style-type: none"> <li>The ground temperature cable SRK-10-DWB2 should be inspected and the connector replaced or the cable should be connected to a datalogger.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-54 (Updated)</li> </ul>
	<ul style="list-style-type: none"> <li>Some of the large boulders, placed instead of berms where the road fill is thicker than 3 m, on the approach to bridge abutments have been pushed over the edge of the road and no longer act as barriers.</li> </ul>	<ul style="list-style-type: none"> <li>Site should consider backfilling the area of ponded water near the abutment of Bridge 2 with ROQ.</li> </ul>	<ul style="list-style-type: none"> <li>2023-AGI-55</li> </ul>
	<ul style="list-style-type: none"> <li>In 2023, a small crack was noted at the crest of the abutment of Bridge 3, under the bridge at the same level as the concrete sill. This crack was small and away from the concrete sill (No change in 2024).</li> <li>Since the 2022 inspection overburden material and coco matting have been placed on along the toe of the south abutment of Bridge 3 to move the water away from the abutment.</li> <li>Some ponding water was noted along the east side of the south abutment of Bridge 2, no distinct flow path was noticed under this bridge. The water in Culvert 1 was primarily running along the north edge of the culvert, all vegetation within the arched culvert was dead and the area was primarily exposed soil.</li> <li>The connector for ground temperature cable SRK-10-DWB2 is broken, site staff previously noted that the cable can still be connected to the data logger to collect readings, however data quality is becoming increasingly variable. Replacement of the connector or connection to a datalogger is recommended.</li> <li>Temperatures measured by the bridge thermistors are similar to historic values. Beads 1 and 3 on SRK10-DWB1 gave a few readings that appear to be erroneous.</li> </ul>	<ul style="list-style-type: none"> <li>Although minimum monitoring frequency stated in the water license has been met for active cables, consider increasing frequency to maintain resolution of data.</li> </ul>	<ul style="list-style-type: none"> <li>2024-AGI-22</li> </ul>

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## **Attachment 5**

## **Boston Inspection Observations**

**Table 3: Boston Inspection Observations and Recommendations**

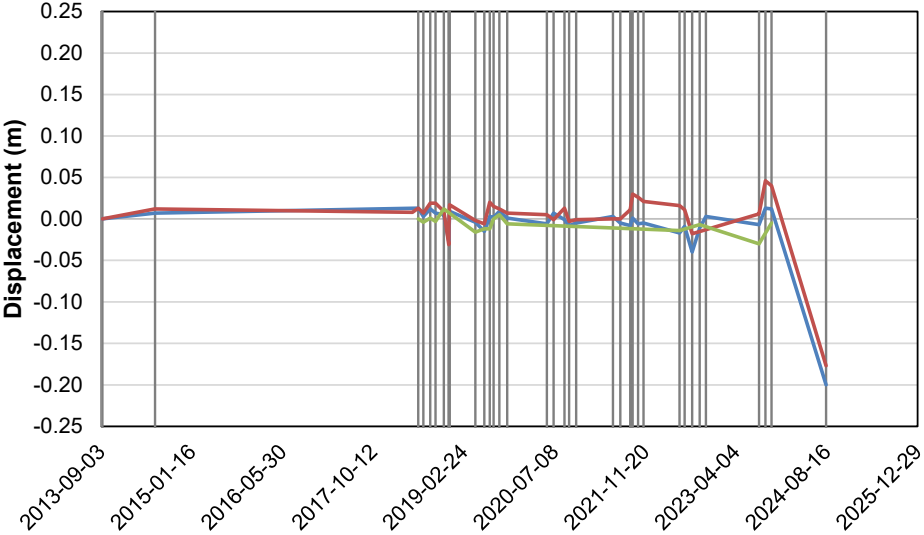
Infrastructure	Observations	Recommendations and Comments	Recommendation ID
Airstrip	<ul style="list-style-type: none"> <li>■ Extensive tension cracking, some settlement and slope relaxation along the airstrip shoulders likely caused by permafrost thaw of the underlying foundation.</li> <li>■ Airstrip surface undulating with some ponding near the edges.</li> <li>■ Some minor cracking observed in the center of the airstrip (away from edges), these cracks appear random in direction.</li> <li>■ Water ponded along the edge of the airstrip and permafrost degradation, in line with previous observations.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>These cracks have been observed in prior years and no significant change was observed in the 2024 inspection.</i></li> <li>■ Prior to landing any aircraft on the runway, the aircraft operators should conduct their own assessment of the runway conditions (in terms of functionality) and make recommendations for maintenance.</li> <li>■ Conduct visual inspections of the airstrip each year during the annual geotechnical inspection. Consider collection of high resolution aerial imagery to provide comparison against the past aerial imagery.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Comment</i></li> <li>■ 2022-AGI-16</li> </ul>
Historic Tank Farm	<ul style="list-style-type: none"> <li>■ The outer slope of the containment berm remains over-steepened and minor cracking is also observed on the berm. There is no concern of an overall berm failure, however cracking is expected to be a result of the over-steepened slopes and overliner slippage.</li> <li>■ SRK understands these tanks are not planned to be used.</li> </ul>	<ul style="list-style-type: none"> <li>■ This has been observed in prior years and would be repaired by rebuilding the fill to the design slope. Consider addressing this at a time when future maintenance or equipment support at Boston is available.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2022-AGI-18</li> </ul>
Lined Water Management Pond	<ul style="list-style-type: none"> <li>■ The liner on the southwestern side of the outer slope and crest of the containment berm is exposed.</li> <li>■ The pond was drained at the time of inspection.</li> </ul>	<ul style="list-style-type: none"> <li>■ Cover exposed edges of the HDPE liner (SW corner) so that it is not damaged, and so it is anchored and not picked up by wind.</li> <li>■ Place some additional material on the downstream (specifically on the ENE side of the bunded area) to stabilize the slopes.</li> <li>■ Do an inspection before using this lined pond to determine a maximum temporary operating level. This maximum level should be based on observations of the top liner elevation and the liner seam elevations.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2022-AGI-19</li> </ul>
Historic Lined Areas	<ul style="list-style-type: none"> <li>■ Historic lined areas (Figure 1) near the east edge of the overall pad are no longer used. Both ponds are compromised and have damage to the berms and liner.</li> <li>■ Lined area 2 contained a shallow pond and the lined area 1 to the north was mostly dry, containing sediments.</li> </ul>	<ul style="list-style-type: none"> <li>■ The historic lined areas should be decommissioned (i.e. breached and graded over) to mitigate the risk of pond overtopping when future maintenance or equipment support at Boston is available.</li> </ul>	<ul style="list-style-type: none"> <li>■ 2023-AGI-22</li> </ul>
Temporary fuel storage	<ul style="list-style-type: none"> <li>■ The pad area, temporary fuel tanks and secondary containment (installed in 2022) are in good condition.</li> <li>■ The secondary containments which contain jet fuel drums were dewatered and hydrocarbon filter drains have been installed.</li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Fuel storage appears in good condition.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ <i>Comment</i></li> </ul>

Infrastructure	Observations	Recommendations and Comments	Recommendation ID
Thermal Erosion Gully	<ul style="list-style-type: none"> <li>No significant changes to past observations. Vegetation growth through the cocomatting appears to be increasing on the upper banks, slopes and within the gully. The gully may be incrementally deeper as the cocomatting is suspended over the flowing water more than observed in prior years and material is deposited at the end of the slope which could be a sign of gradual erosion.</li> </ul>	<ul style="list-style-type: none"> <li>Continue to visually monitor the area carefully and implement permanent remediation if degradation becomes excessive. Remediation may be deferred until Phase 2 Boston mining commences or until long term closure.                             <ul style="list-style-type: none"> <li>Future remediation of this area should consider backfilling this depression with overburden material to create a positive surface expression, or another tundra revegetation strategy. This will help to limit erosion.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>2022-AGI-17 (updated)</li> </ul>

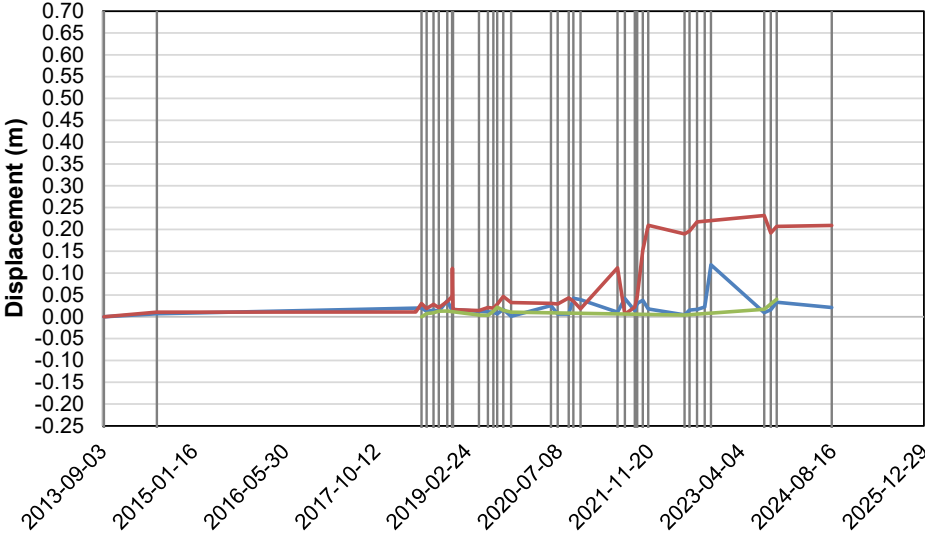
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## **Attachment 6      Survey Monitoring Data and Dashboards**

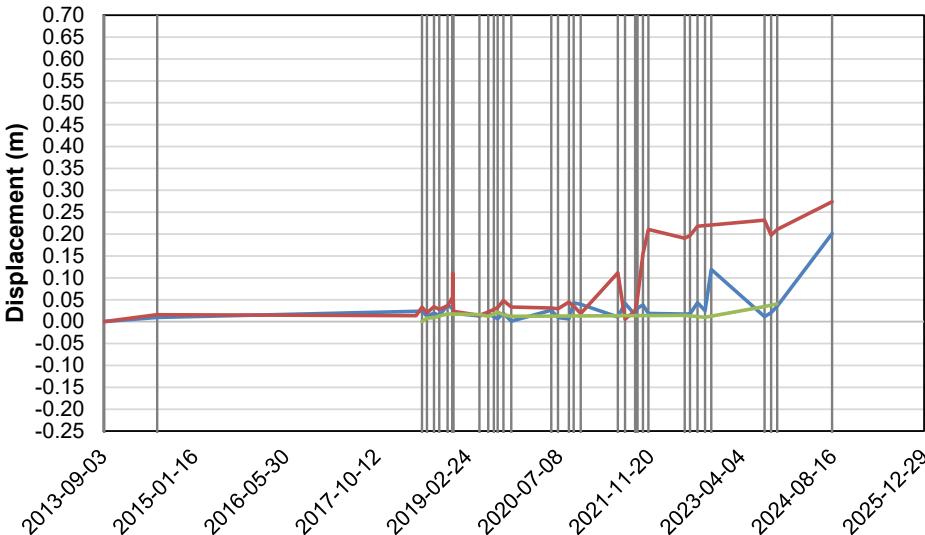
Vertical Displacement



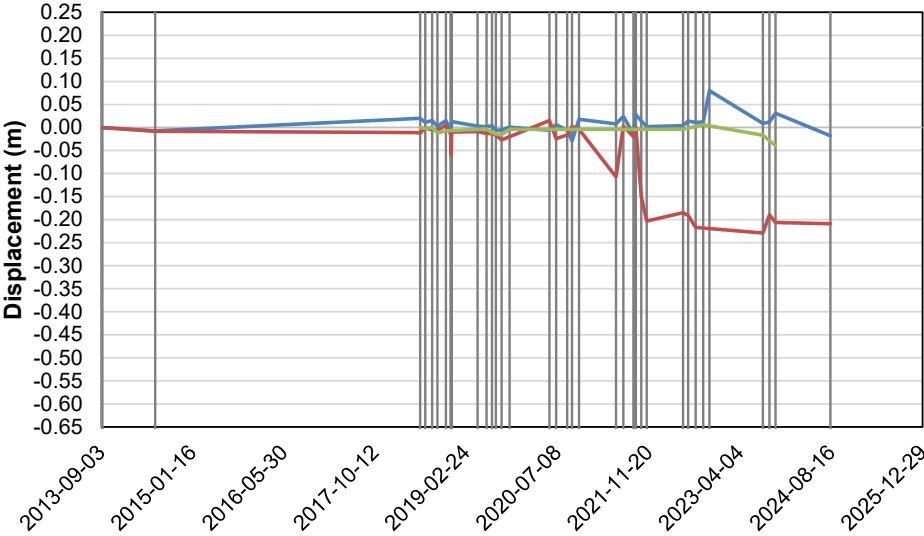
Horizontal Displacement



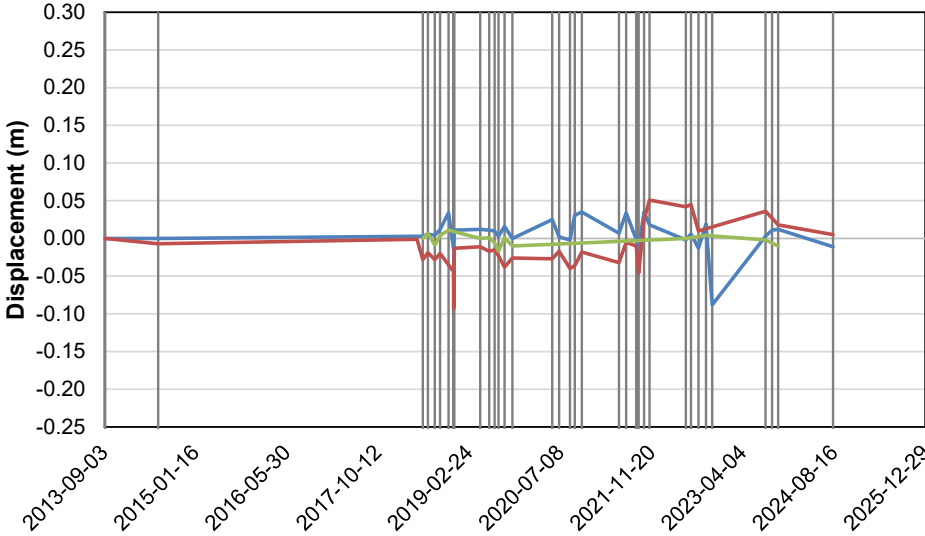
Total Displacement



Change in Easting



Change in Northing



LEGEND:

PH1

PH2

CP1

Survey Date

NOTES:

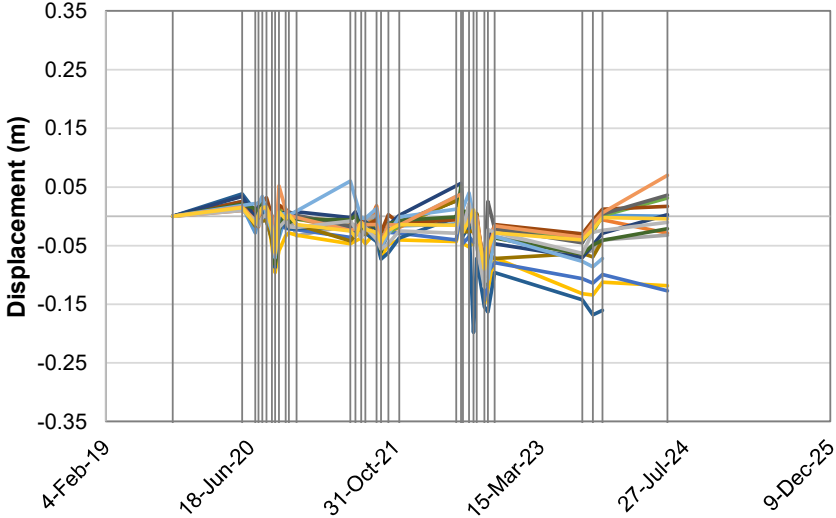
1. CP1 corresponds to a control point (rock bolt in bed rock) that used as a check/secondary base point

2. PH2 is leaning at about 30 degrees to the west. This occurred in 2021, when the 0.2m displacement was observed.

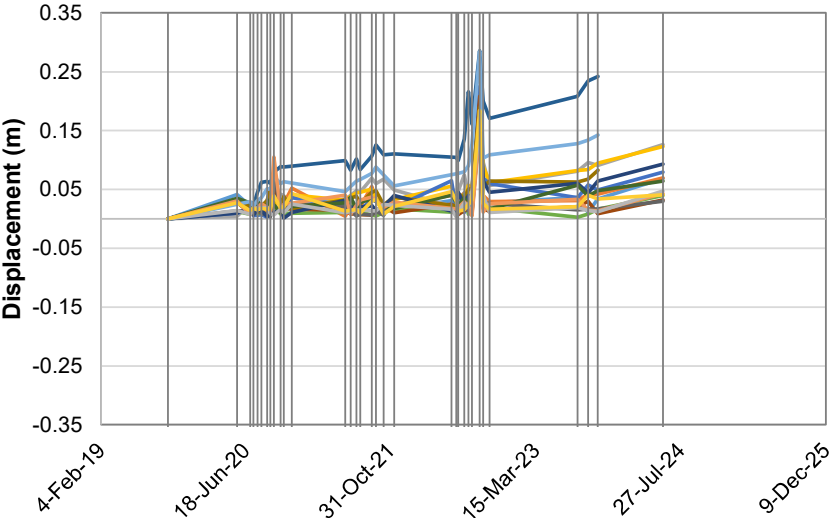




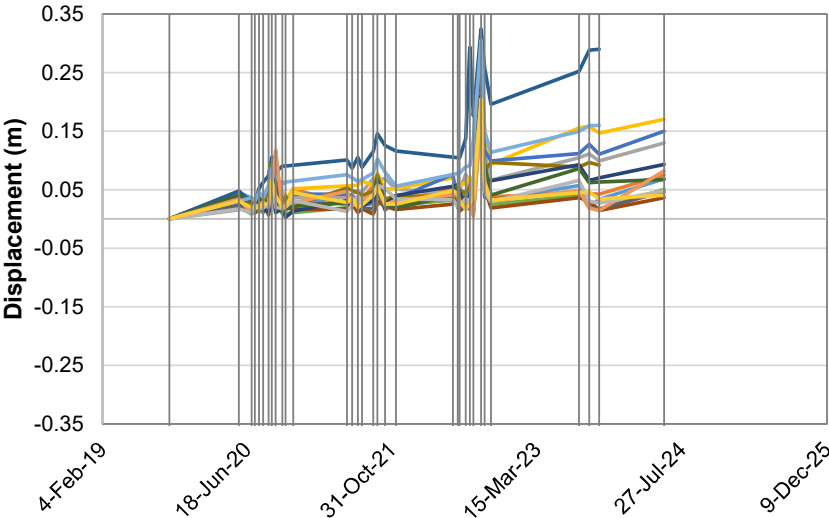
Vertical Displacement



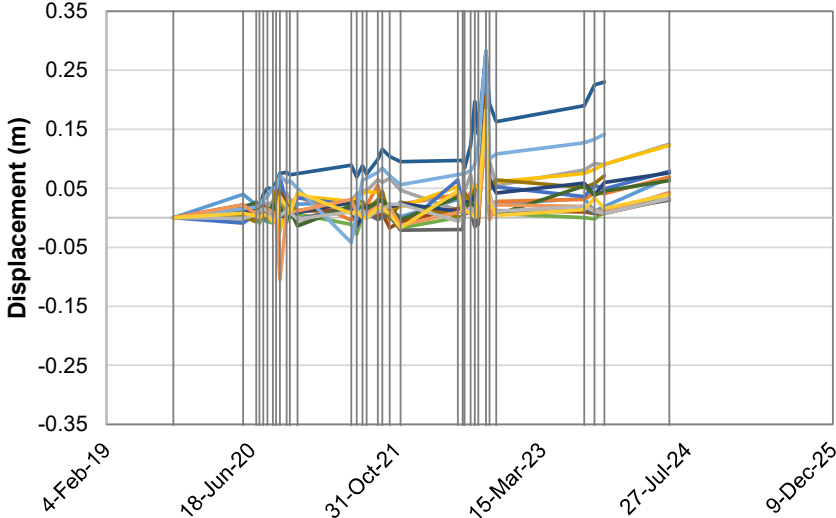
Horizontal Displacement



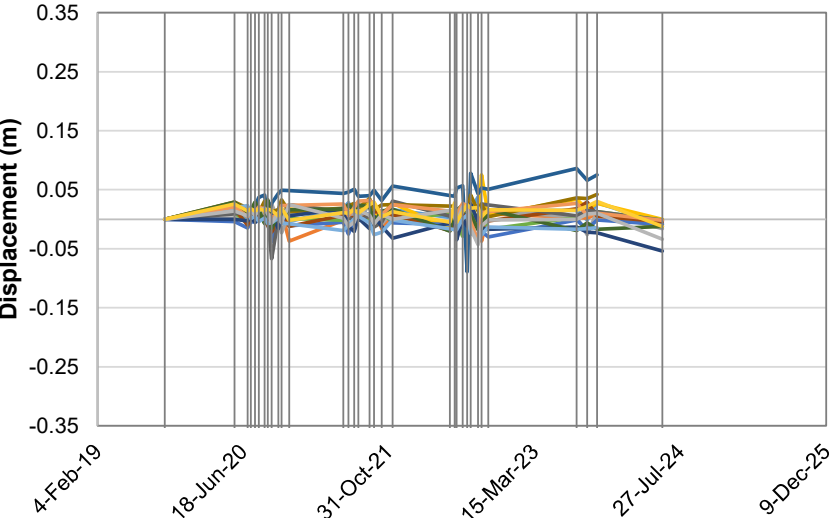
Total Displacement



Change in Easting



Change in Northing



LEGEND:

- CWP-SSP-01

CWP-SSP-02

CWP-SSP-03

CWP-SSP-04

CWP-SSP-05

CWP-SSP-06

CWP-SSP-07

CWP-SSP-08

CWP-SSP-09

CWP-SSP-10

CWP-SSP-11

CWP-SSP-12

CWP-SSP-13

CWP-SSP-14

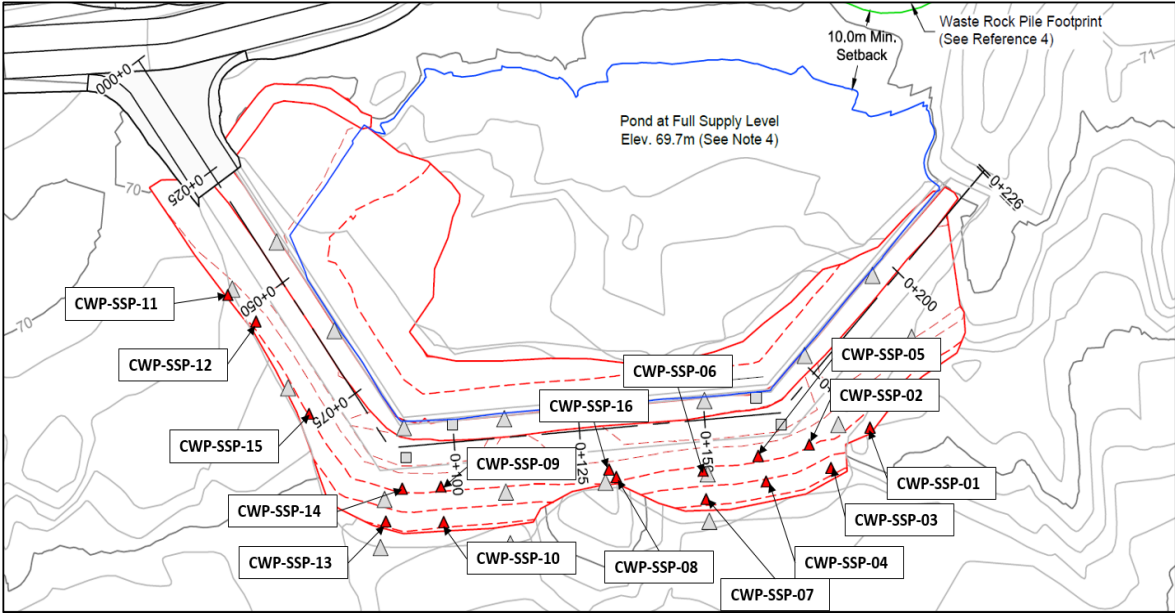
CWP-SSP-15

CWP-SSP-16

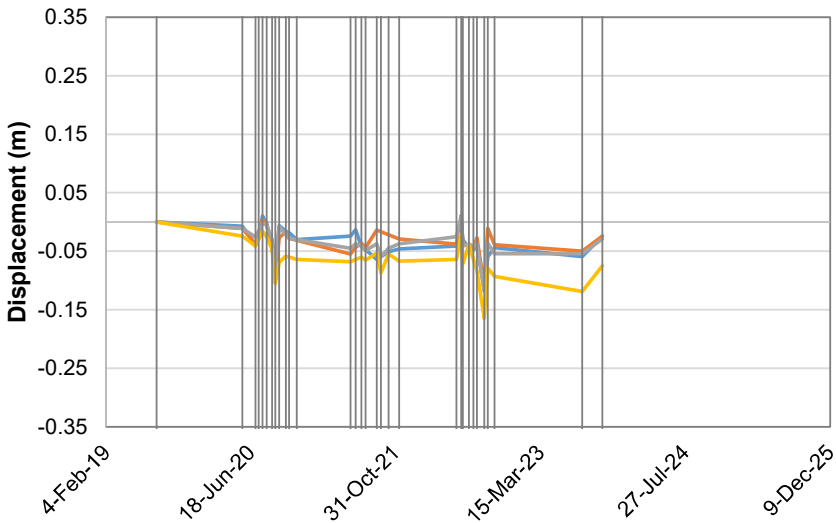
Survey Date

NOTES:

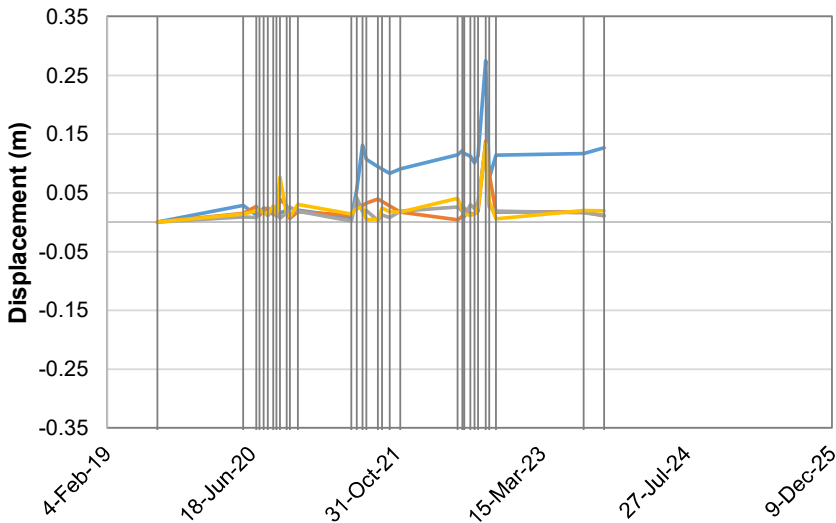
1) CWP-SSP-10, CWP-SSP-11 and CWP-SSP-13 were not surveyed during the single survey in 2024 due to snow build up along the toe of the CWP.



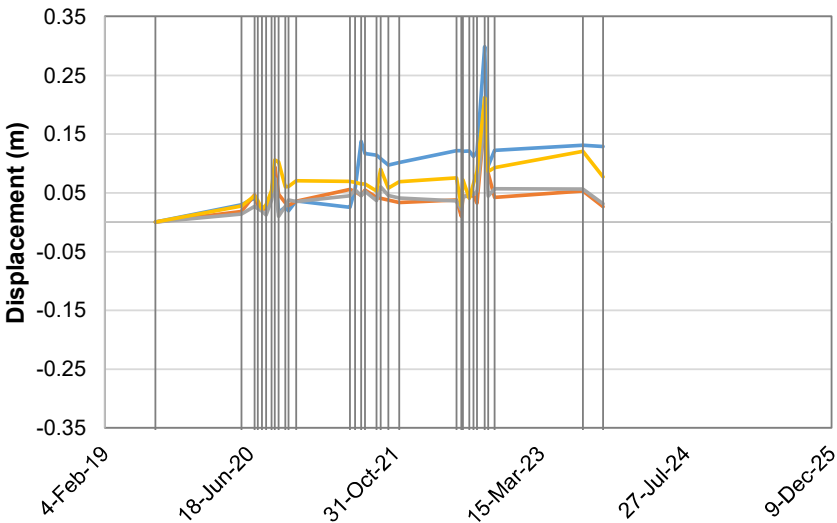
Vertical Displacement



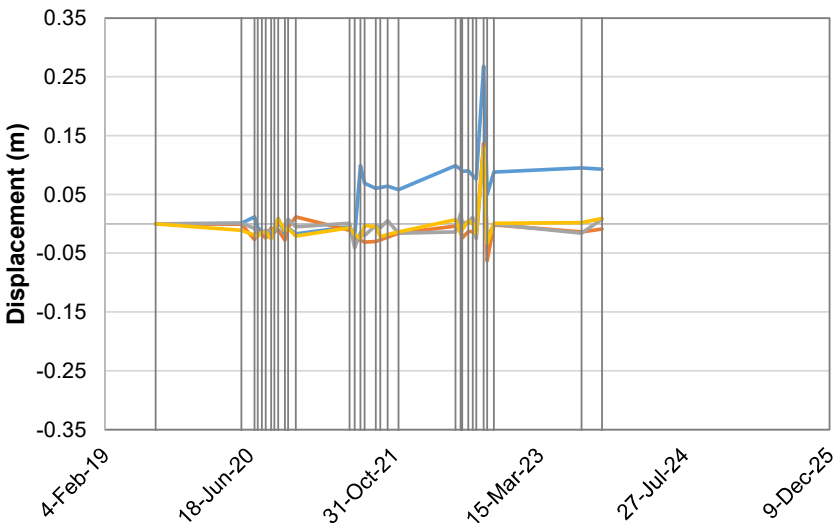
Horizontal Displacement



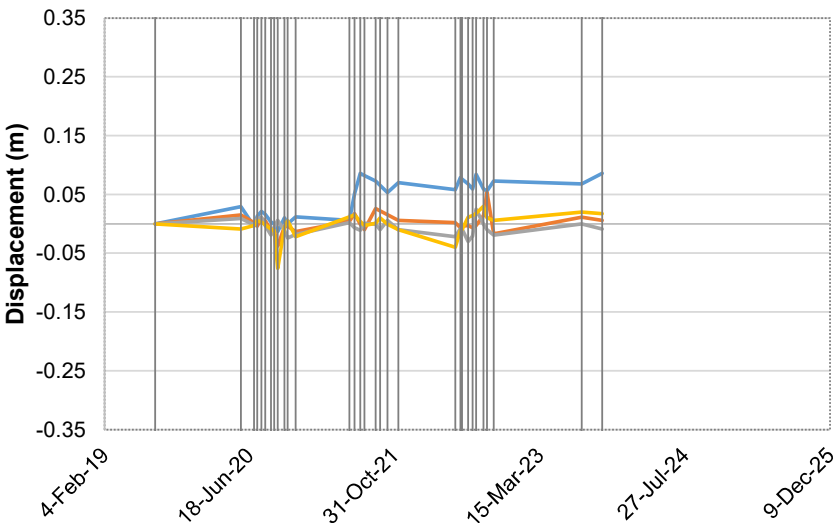
Total Displacement



Change in Easting



Change in Northing

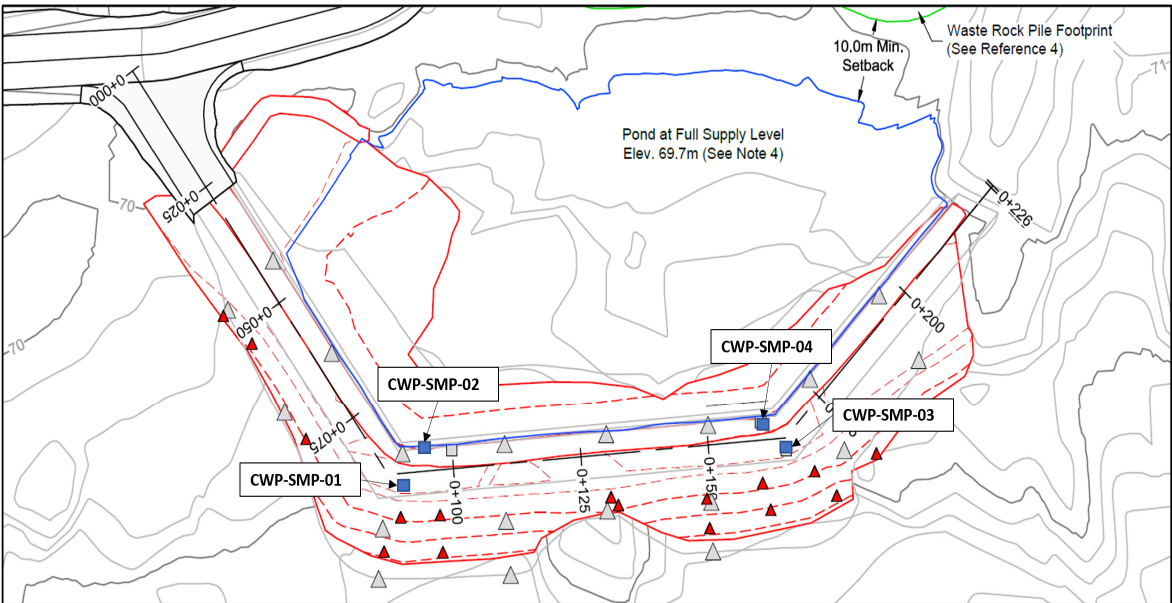


LEGEND:

- CWP-SMP-01
- CWP-SMP-02
- CWP-SMP-03
- CWP-SMP-04
- Survey Date

NOTES:

No settlement monitoring plate survey data collected in 2024.



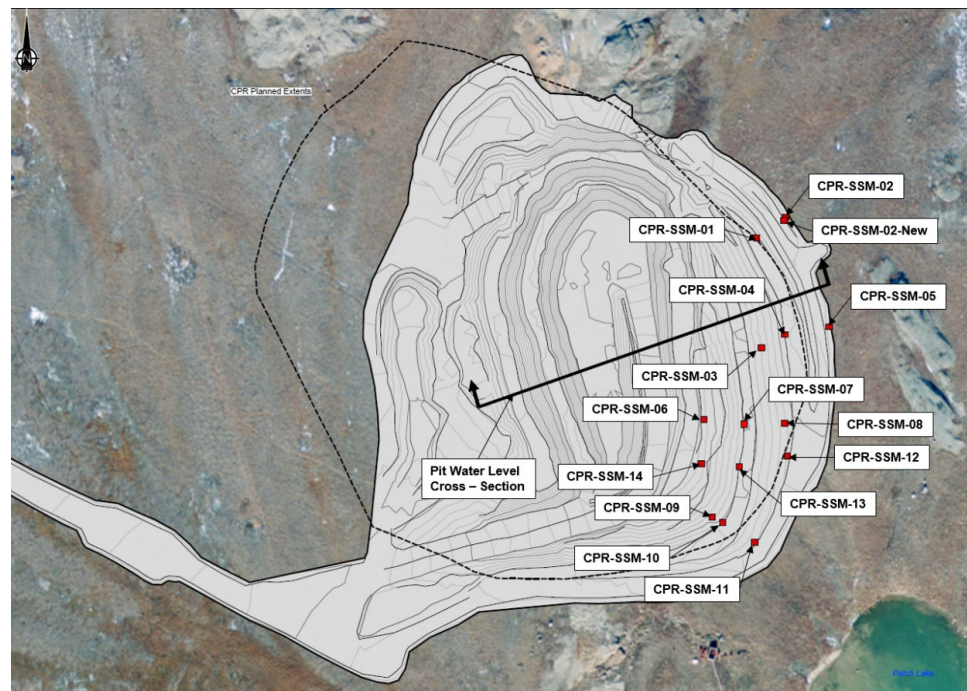
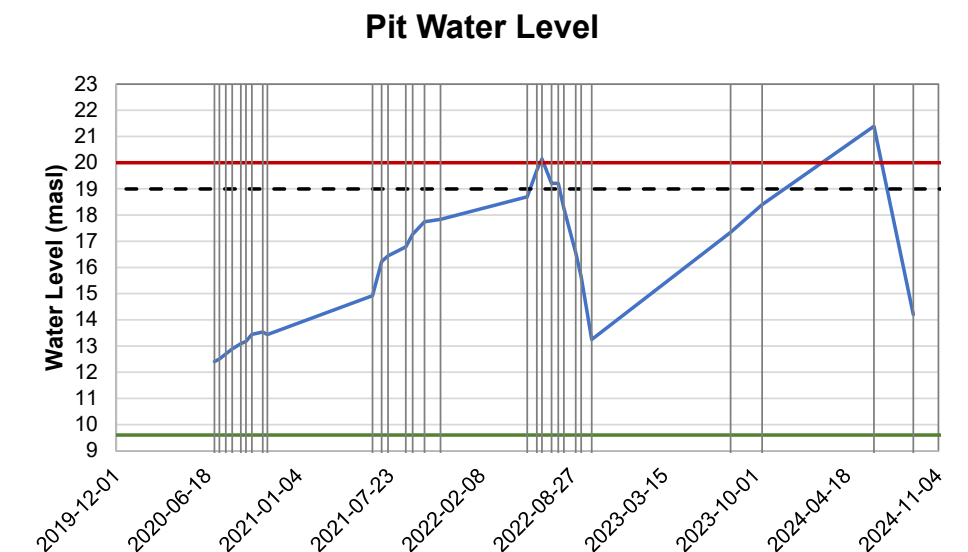
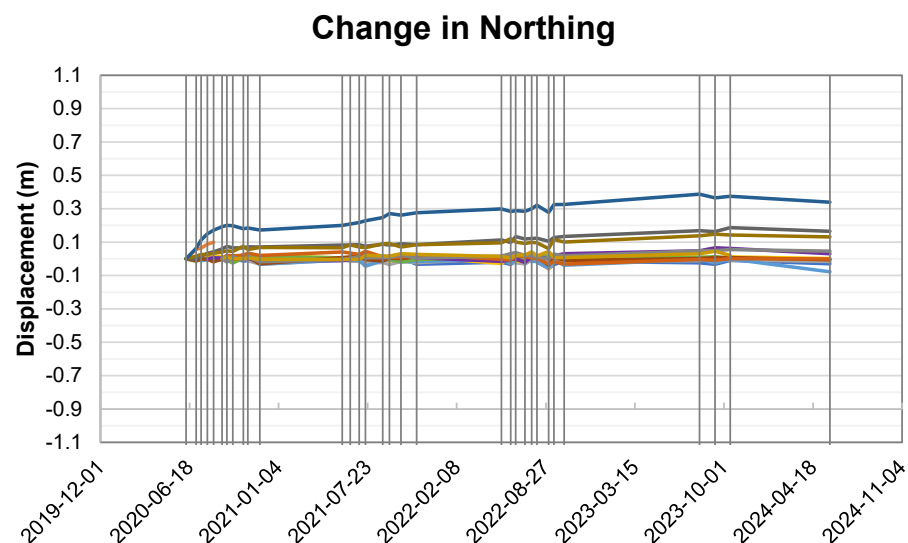
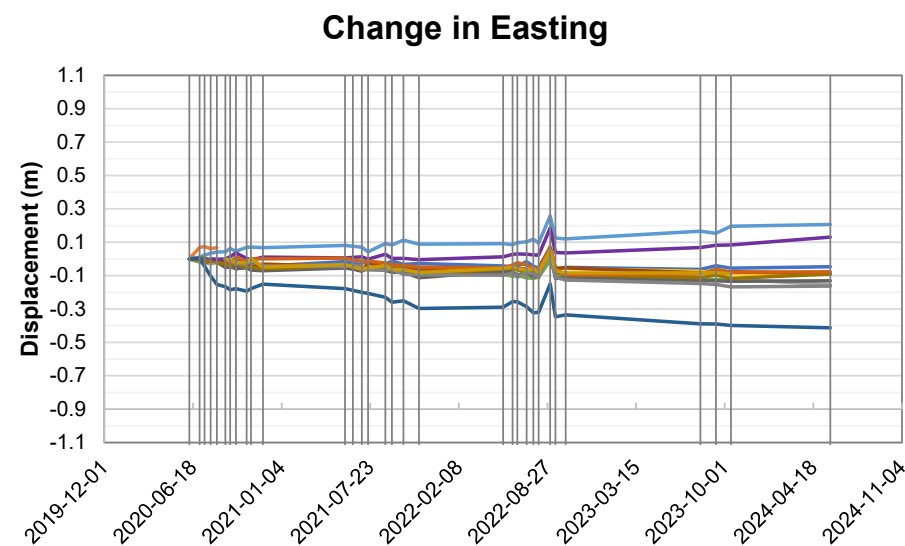
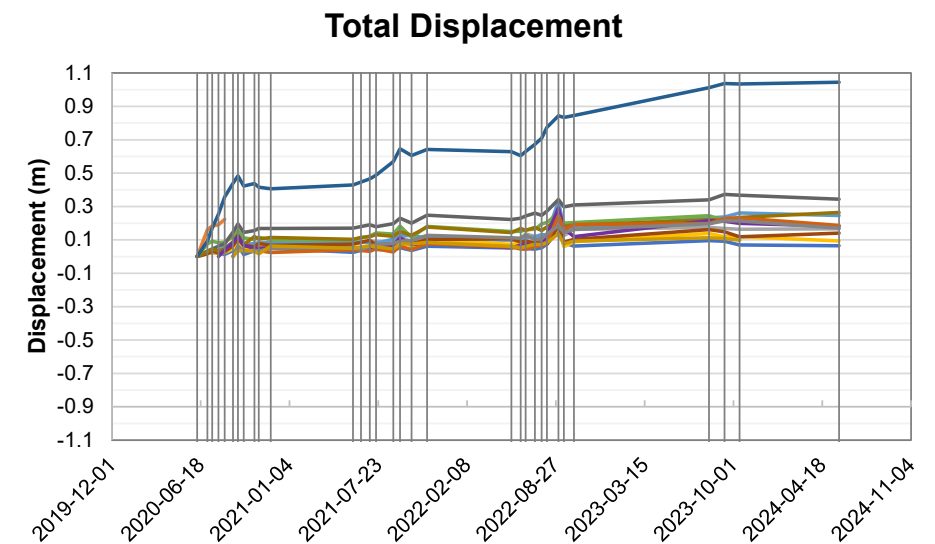
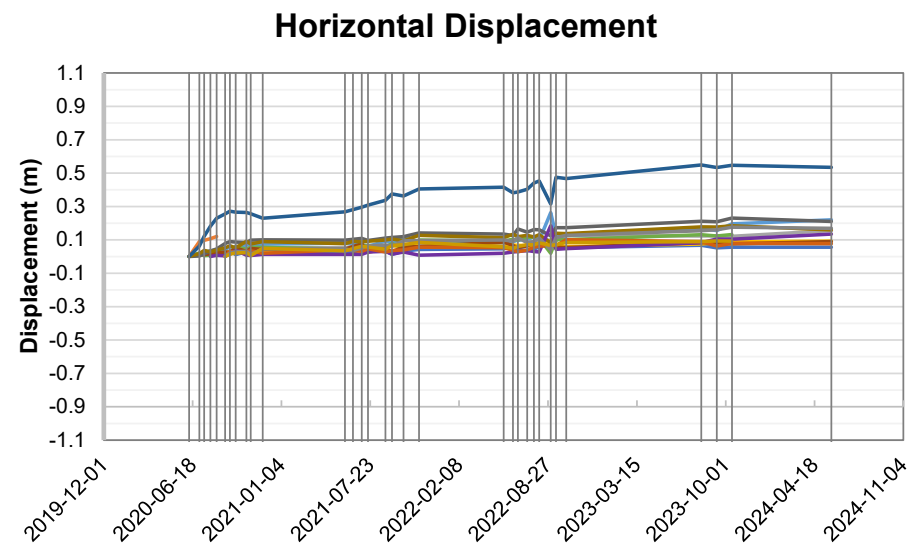
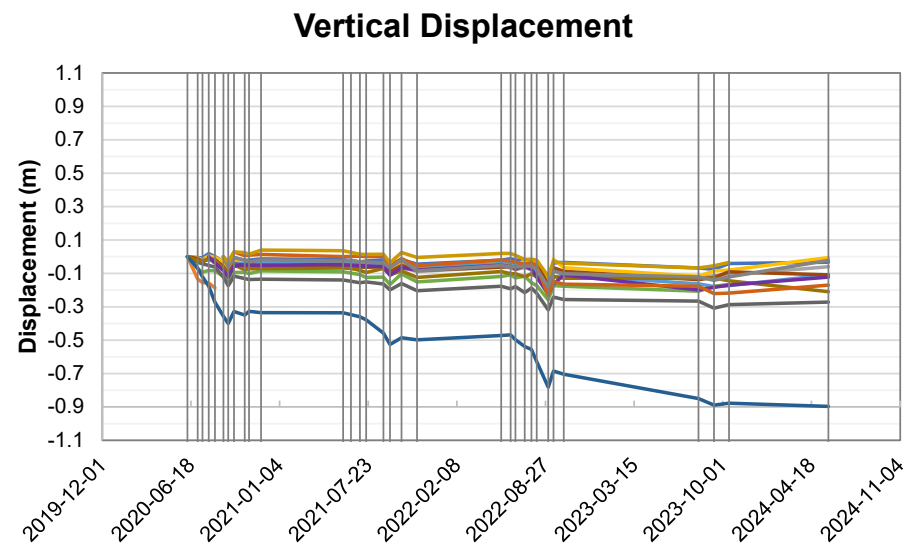
Madrid CWP

Settlement Monitoring Plate  
Displacement Timeseries

Job No: CAPR003066  
Filename: MadridCWP\_SurveyMonitoringData\_AGI2024.xlsx

Hope Bay

Date: Mar 2025  
Approved: PDL  
Figure: 3



#### LEGEND:

- CPR-SSM-01
- CPR-SSM-02
- CPR-SSM-02-New
- CPR-SSM-03
- CPR-SSM-04
- CPR-SSM-05
- CPR-SSM-06
- CPR-SSM-07
- CPR-SSM-08
- CPR-SSM-09
- CPR-SSM-10
- CPR-SSM-11
- CPR-SSM-12
- CPR-SSM-13
- CPR-SSM-14
- Survey Date

#### NOTES:

- Water Level
- Maximum Allowable Water Level (Phase 1)
- Minimum Overburden Elevation (Phase 1)
- Pit Lowest Elevation (Phase 1)

	 <b>AGNICO EAGLE</b>	Naartok East CPR		
		Surficial Settlement Monitoring Point Displacement Timeseries		
Job No: CAPR003066 Filename: NaartokE_CPR_SurveyMonitoringData_AGI2024.xlsx	Hope Bay	Date: Mar. 2025	Approved: PDL	Figure: 4

---

**Attachment 7      Ground Temperature Cable Data**





Roberts Bay Jetty Plan View



Doris Creek Bridge Plan View



Doris Pollution Control Pond Plan View

**Note:** Imagery sourced from ESRI World Imagery, except for the Doris Pollution Control Pond, which was provided by Agnico Eagle, and captured in 2021.



Job No: CAPR003066



**AGNICO EAGLE**

Hope Bay

Hope Bay Site-Wide – 2024 Annual Geotechnical Inspections

**Roberts Bay and Doris Infrastructure Thermistor Locations**

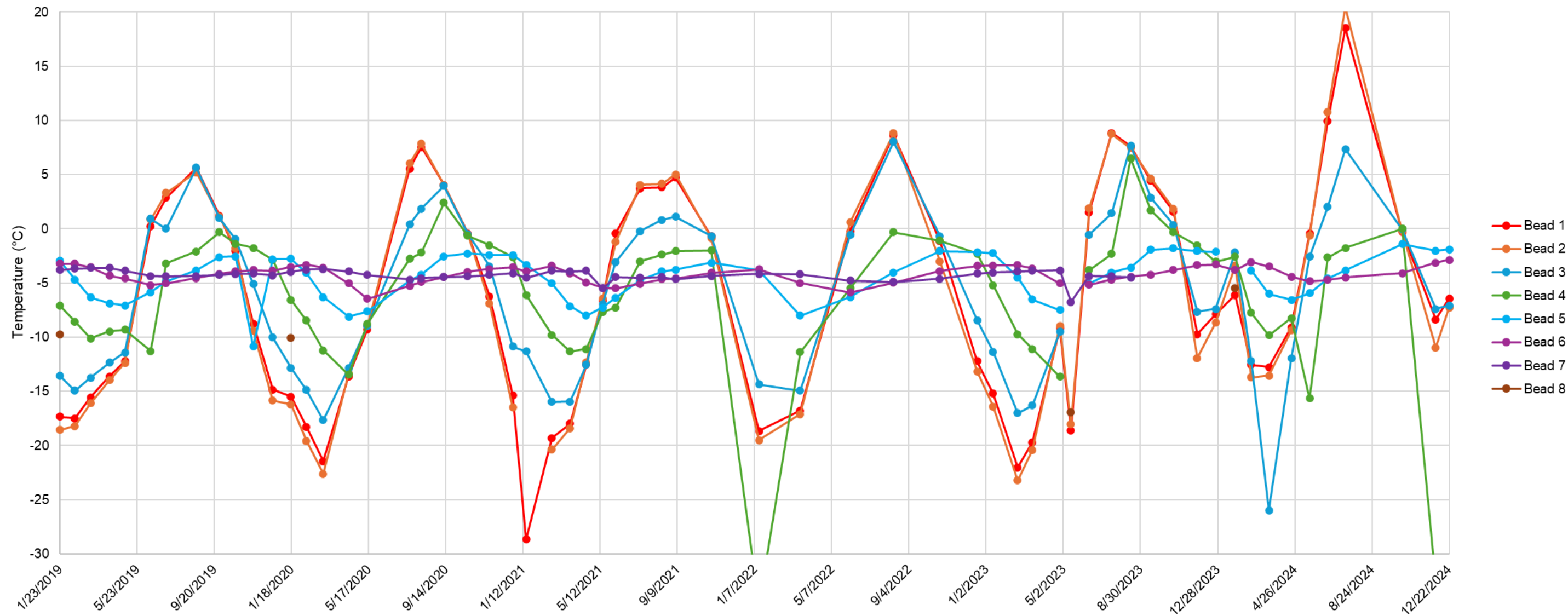
Date: March 2025

Approved: PDL

Figure: **1**



SRK-JT1-09

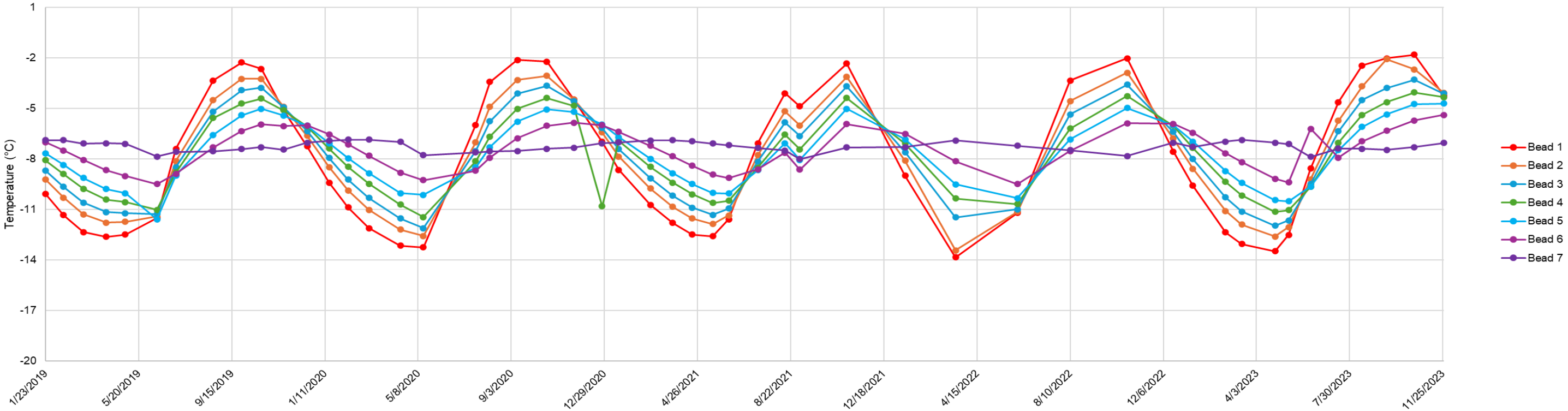


Notes:

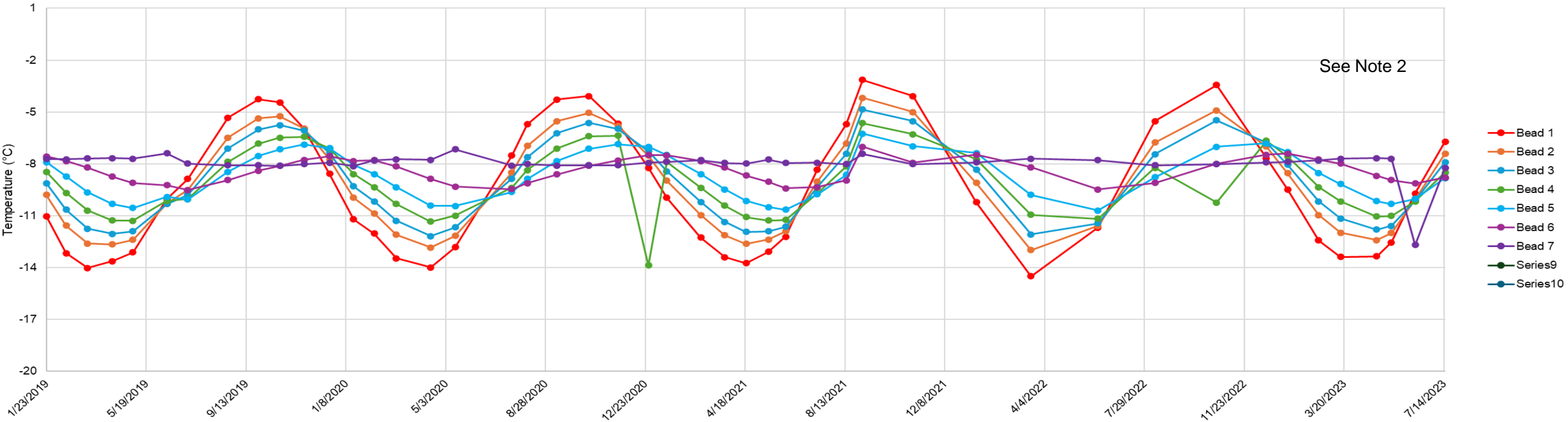
- 1) Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2009.
- 2) For cable SRK-JT01-09, data collected in May 2021 was resistance corrected (from 3,000 to 2,252 Ohms). Data collected in May 2023 is not presented due to poor quality.

 Job No: CAPR003066	 <b>AGNICO EAGLE</b>  <b>Hope Bay</b>	Hope Bay Site-Wide – 2024 Annual Geotechnical Inspections		
		<b>Roberts Bay Jetty Thermistor SRK-JT1-09</b>		
		Date: March 2025	Approved: PDL	Figure: 2

SRK10-DCB1 (Doris Bridge West)



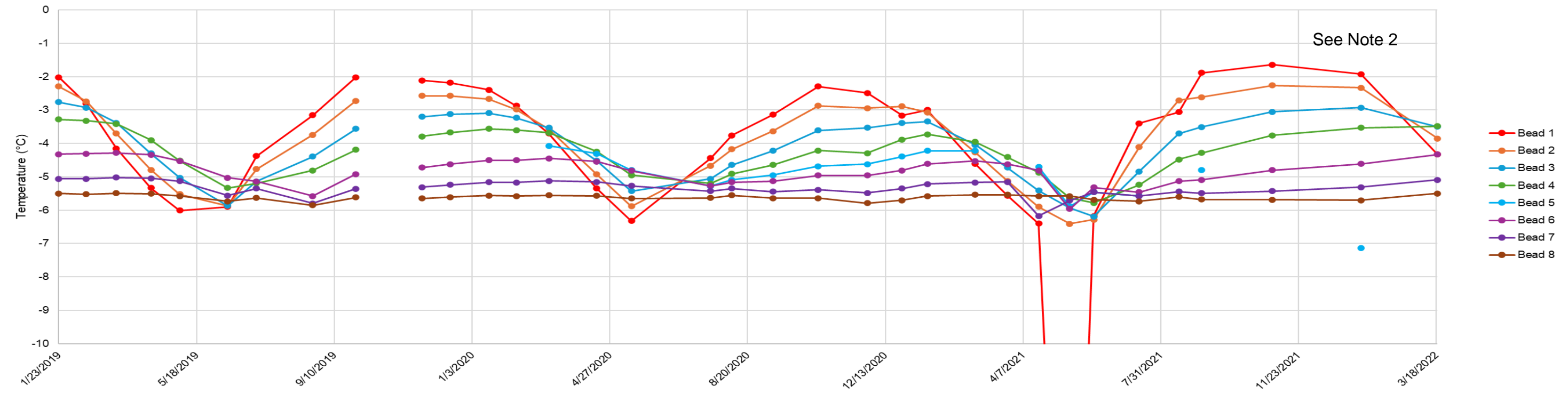
SRK10-DCB2 (Doris Bridge East)



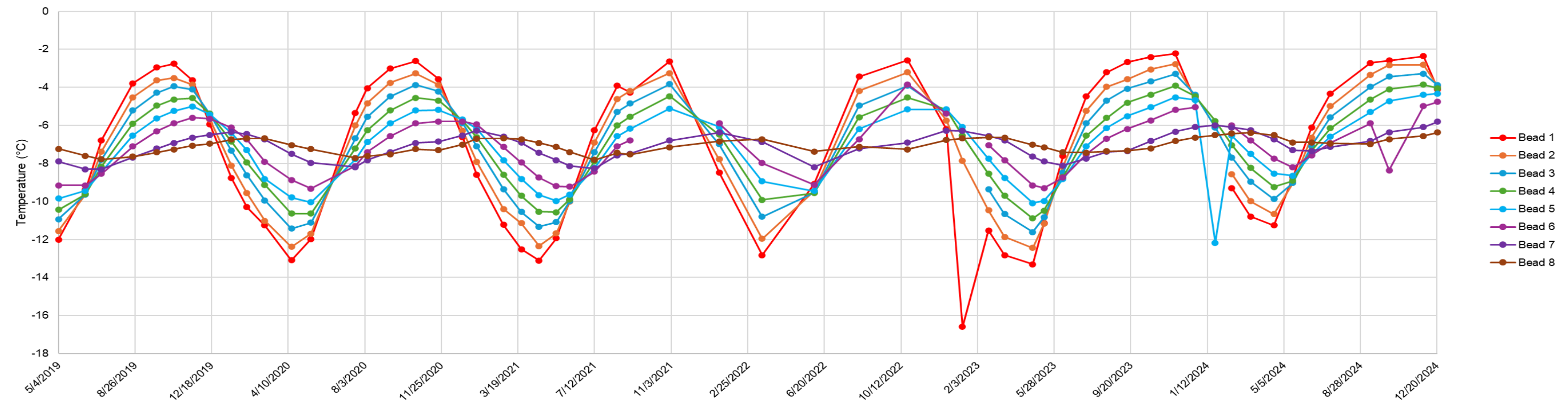
Notes:

- 1) Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2012.
- 2) Cable SRK10-DCB2 (Doris Bridge East) was noted to be damaged after July 2023.

SRK-12-GTC-DH01



SRK-12-GTC-DH02

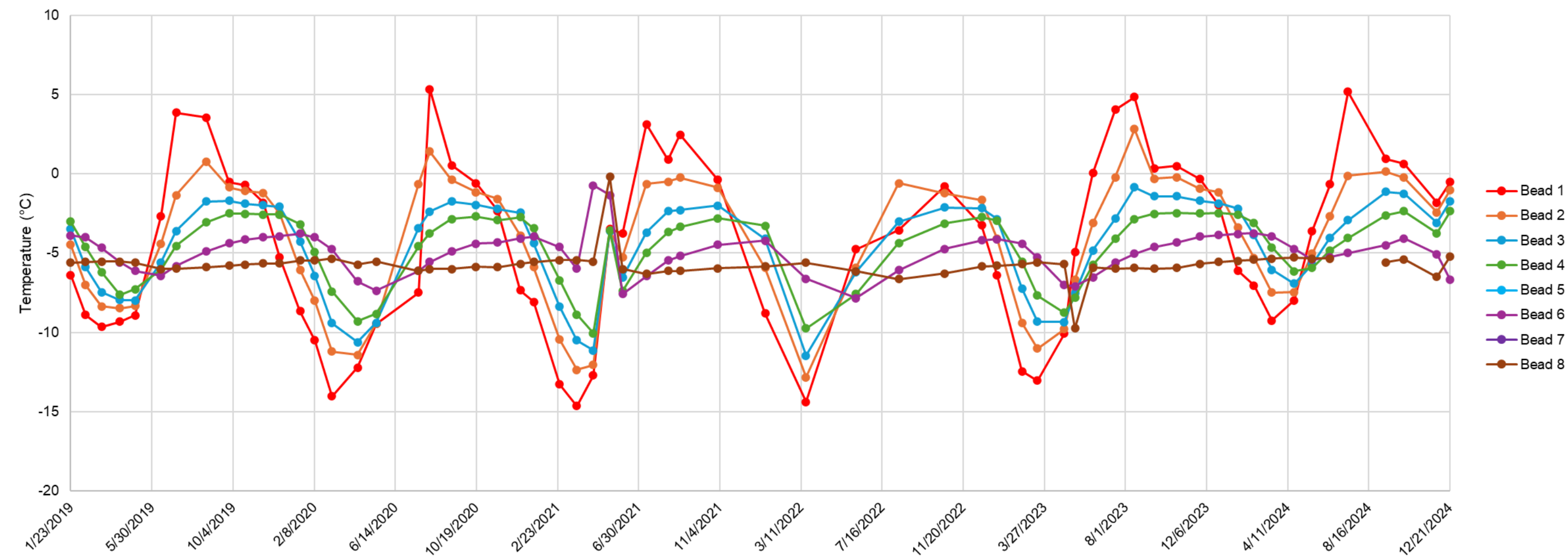


- Notes:**
- 1) Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2012
  - 2) Cable SRK-12-GTC-DH01 was noted to be damaged after March 2022.
  - 3) For cable SRK-12-GTC-DH01, data collected in May 2021 were resistance corrected (from 3,000 to 2,252 Ohms).
  - 4) For cable SRK-12-GTC-DH02, data collected in May 2021, December 2022, March 2023 and July 2024 were resistance corrected (from 3,000 to 2,252 Ohms).

	 <b>AGNICO EAGLE</b>	Hope Bay Site-Wide – 2024 Annual Geotechnical Inspections		
		<b>Doris Pollution Control Pond</b>		
		Date: March 2025	Approved: PDL	Figure: <b>4</b>
Job No: CAPR003066	<b>Hope Bay</b>			



SRK-12-GTC-DH03



Notes:

- 1) Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2012.
- 2) For cable SRK-23-GTC-DH03, data collected in May 2021, Dec 2022, Mar 2023 and July 2024 were resistance corrected (from 3,000 to 2,252 Ohms).

 Job No: CAPR003066	 <b>AGNICO EAGLE</b>  <b>Hope Bay</b>	Hope Bay Site-Wide – 2024 Annual Geotechnical Inspections		
		<b>Doris Pollution Control Pond</b>		
Date: March 2025		Approved: PDL	Figure: <b>5</b>	



Madrid AWR Bridge 2 and 3 Plan View

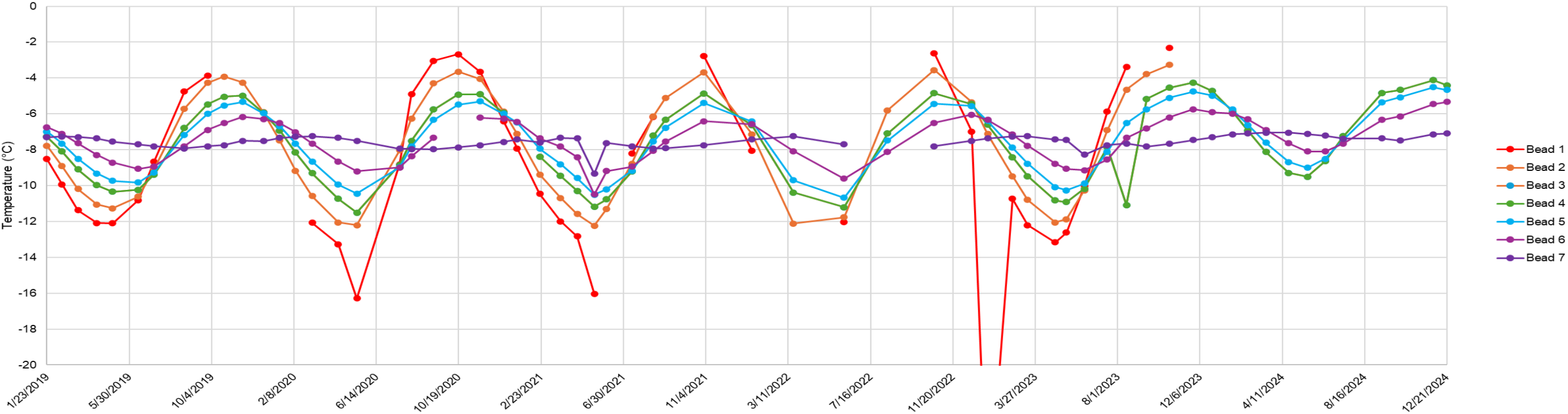


Madrid AWR Bridge 4 Plan View

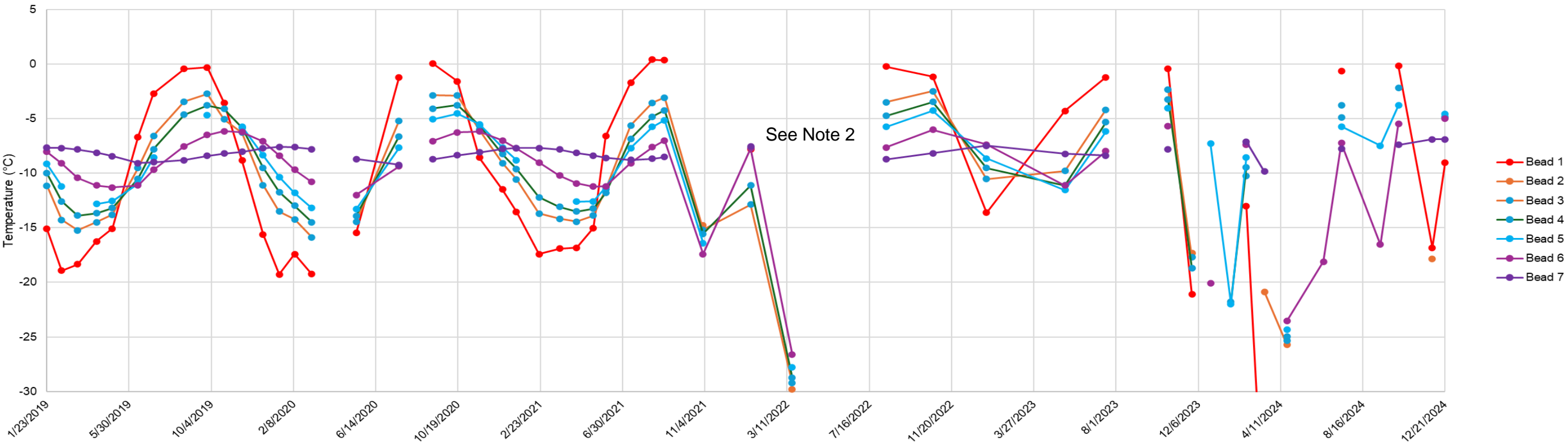
**Notes:** Imagery sourced from ESRI World Imagery.

- 1) Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2012.
- 2) After September 2021 some of the data collected are of poor quality.
- 3) Beads 1-2 are offline since 2023 for SRK10-DWB1

SRK10-DWB1



SRK10-DWB2



**Notes:**

- 1) Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2012.
- 2) After September 2021 some of the data collected are of poor quality.
- 3) Beads 1-2 are offline since 2023 for SRK10-DWB1



Job No: CAPR003066



**AGNICO EAGLE**

Hope Bay

Hope Bay Site-Wide – 2024 Annual  
Geotechnical Inspections

**Madrid All-weather Road  
Bridge 2 and 3**

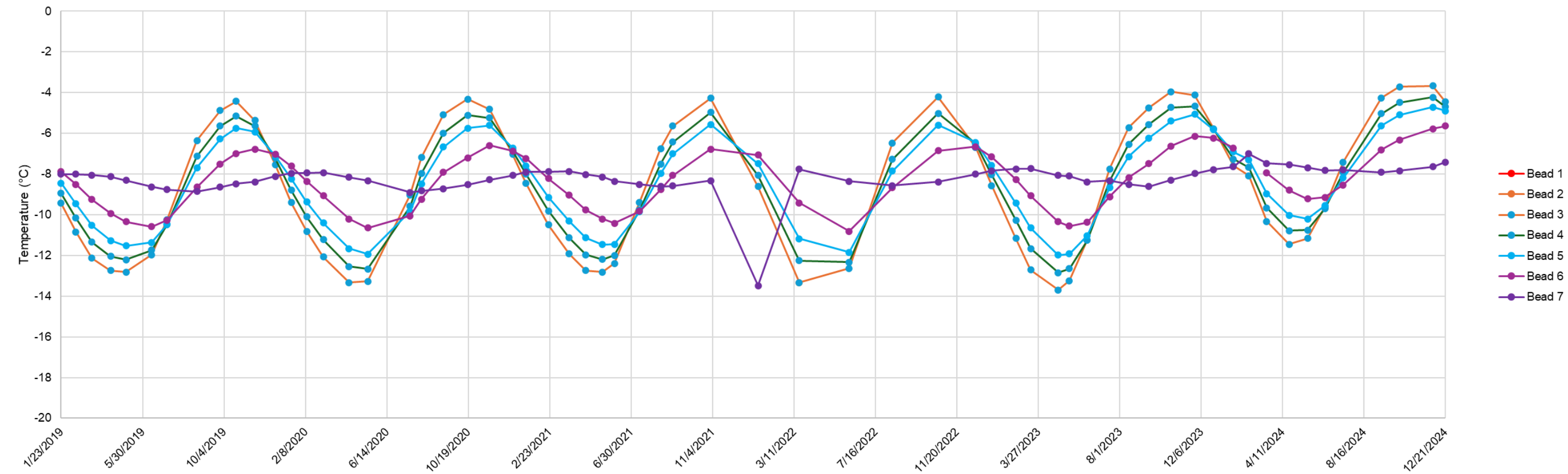
Date:  
March 2025

Approved:  
PDL

Figure:  
**7**



SRK10-DWB3



**Note:** Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2012.



Job No: CAPR003066



AGNICO EAGLE

Hope Bay

Hope Bay Site-Wide – 2024 Annual Geotechnical Inspections

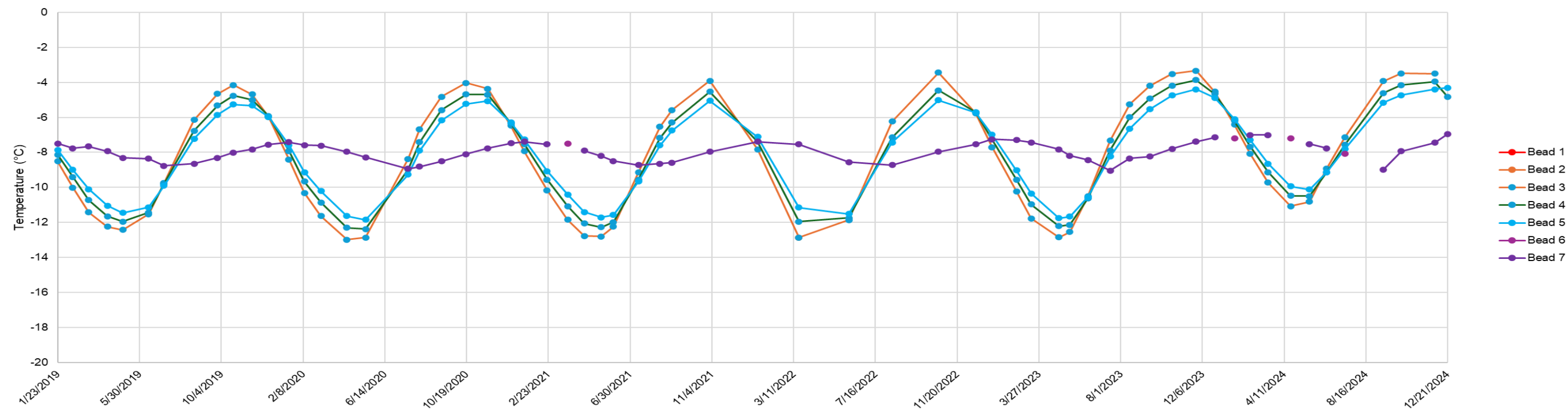
Madrid All-weather Road Bridge 2 and 3

Date: March 2025

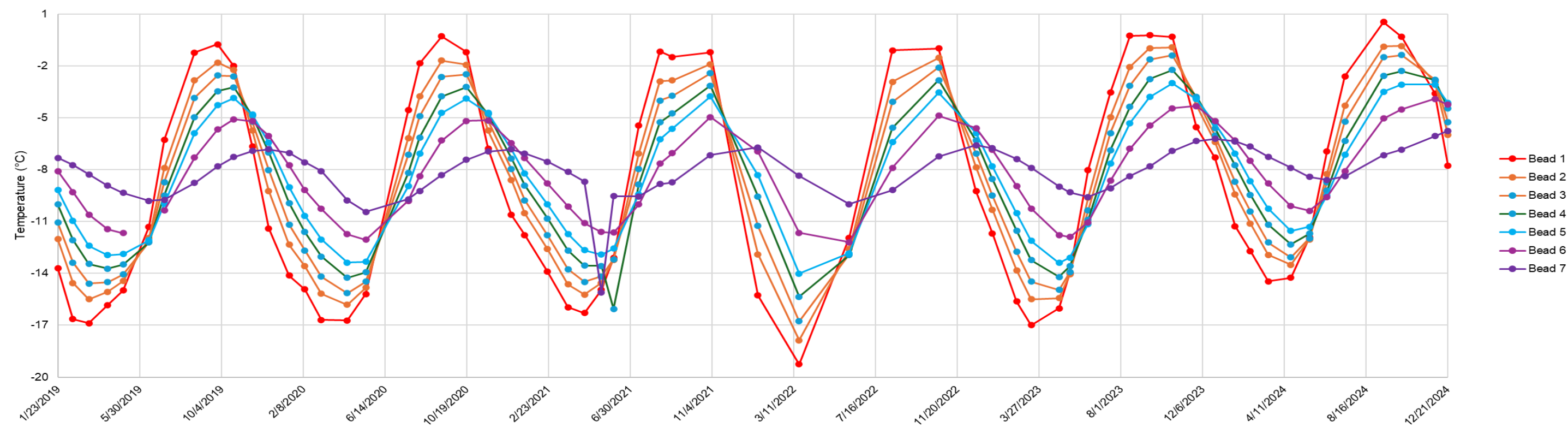
Approved: PDL

Figure: 8

SRK10-DWB4



SRK10-DWB5



**Note:** Data is presented for the past five years, between January 2019 and December 2024. Data records began in 2012.



Job No: CAPR003066



**AGNICO EAGLE**

Hope Bay

Hope Bay Site-Wide – 2024 Annual  
Geotechnical Inspections

**Madrid All-weather Road  
Bridge 4**

Date:  
March 2025

Approved:  
PDL

Figure:  
**9**