



# **AGNICO EAGLE**

**HOPE BAY**

## **Care and Maintenance Plan**

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**APRIL 2022  
VERSION 1**

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DOCUMENT CONTROL

| Version | Date       | Section | Page | Revision   | Author                     |
|---------|------------|---------|------|--|----------------------------|
| 1       | April 2022 | All     |      | In compliance with Agnico Eagle’s Type A Water Licence 2AM-DOH1335, Part J, Item 5 | Agnico Eagle Mines Limited |
|         |            |         |      |  |                            |
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## ACRONYMS

|               |  |
|---------------|--|
| Agnico Eagle  | Agnico Eagle Mines Limited                         |
| AANDC         | Aboriginal Affairs and Northern Development Canada |
| CCME          | Canadian Council of Ministers of the Environment   |
| CPR           | Crown Pillar Recovery                              |
| CWP           | Contact Water Pond                                 |
| CWS           | Canada wide Standards                              |
| DMCMP         | Doris-Madrid Care and Maintenance Plan             |
| IOL           | Inuit Owned Land                                   |
| KIA           | Kitikmeot Inuit Association                        |
| MVLWB         | Mackenzie Valley Land and Water Board              |
| NIRB          | Nunavut Impact Review Board                        |
| NTI           | Nunavut Tunngavik Incorporated                     |
| NWB           | Nunavut Water Board                                |
| PDA           | Project Development Area                           |
| (the) Project | Hope Bay Project                                   |
| TIA           | Tailing Impoundment Area                           |
| Water Licence | Type A Water Licence 2AM-DOH1335                   |

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## SECTION 1. INTRODUCTION

---

Agnico Eagle Mines Limited (Agnico Eagle) is operating the Hope Bay Project (the Project). The Project is a gold mining operation and exploration project on a property approximately 20 km by 80 km along the south shore of Melville Sound in Nunavut, Canada. The Project comprises four distinct areas of known mineralization plus extensive exploration potential and targets. The four areas that host the primary gold deposits are Doris, Madrid North, Madrid South, and Boston.

### 1.1 Purpose and Objectives

The Doris-Madrid Care and Maintenance Plan (DMCMP) details the site activities to continue or to be initiated through the temporary suspension period in accordance with Part J Item 5 of the Type A Water Licence 2AM-DOH1335. Management and monitoring activities to be completed at the Doris-Madrid sites during the temporary suspension of production are described in accordance with the terms and conditions in the Nunavut Water Board (NWB) Type A Water Licence 2AM-DOH1335 (the Water Licence) and Nunavut Impact Review Board (NIRB) Project Certificate No. 009.

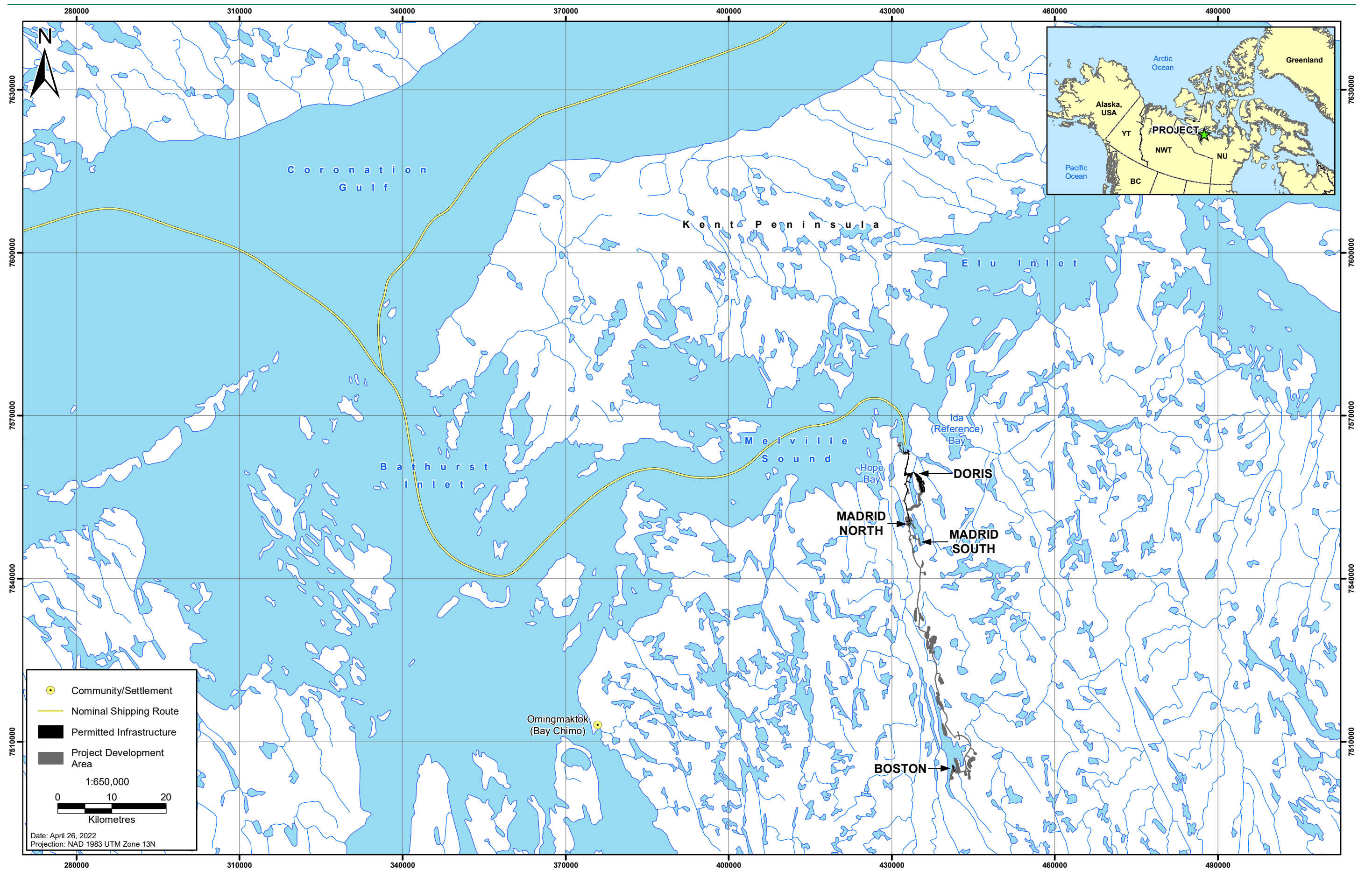
The temporary closure principles and goals at the Doris-Madrid site are similar to the overall closure criteria: ensure the site is safe for humans, animals, and the environment, by ensuring physical and chemical stability; and protecting the future use of the site by, where practicable, maintaining mine infrastructure in a state that is amenable to recommencement of operations. Thus, the objectives of the DMCMP are to provide:

- The key roles and responsibilities of the site personnel for the duration of the temporary closure period;
- Activities to be implemented for the maintenance of mine site facilities for the duration of the temporary closure period; and
- Management and monitoring measures, and procedures to be implemented in accordance with temporary closure goals and regulatory requirements.

### 1.2 Project Overview

#### 1.2.1 Project Location

The Project is located on Inuit Owned Land (IOL) administered by the Kitikmeot Inuit Association (KIA) east of Bathurst Inlet, approximately 150 km southwest of Cambridge Bay and 700 km northeast of Yellowknife (Figure 1-1). The nearest settlements are Omingmaktok, located approximately 60 km to the west, and Kingaok (Bathurst Inlet), located 130 km southwest. Both Omingmaktok and Kingaok are historical settlements; past residents have moved to Cambridge Bay or other communities, although the settlements continue to be used seasonally intermittently.



**Figure 1-1: Hope Bay Project Location**

### 1.2.2 Project Environment

A summary of the environmental conditions for the Project are provided below and is detailed in TMAC (2017).

The climate at the Project is classified as Arctic, semi-arid. Snow accumulation and freeze-up of lakes begins in mid to late September and remains into mid-June, with areas in the higher elevation persisting through July. Temperatures in January are often below -30°C and the mean annual precipitation is approximately 220 mm. Prevailing winds are strong and steady from the northwest. Due to its location above the Arctic Circle, the site experiences 24-hour sunlight in mid-summer and 24-hour darkness in mid-winter.

Air quality in the Project area and elsewhere in Nunavut is generally of good quality, reflecting the low amount of air pollution from large populations. Outside of the Project area, most air emissions are from the use of diesel generators, heaters, vehicles, snowmobiles, all-terrain vehicles and boats. Noise levels are generally low.

The Project is located on the Canadian Shield. Exposed bedrock outcrops are common, and mostly devoid of vegetation. Surface observations and subsurface investigations of the foundation soils found in the Project area are characterized mostly by marine deposits of silty-clay with trace sand, as well as small pockets of glaciofluvial deposits of coarse sand and some gravel. Eskers are common in the southern part of the project area, but not within the disturbed footprint of the Doris-Madrid sites. Project-wide overburden consists of permafrost soils, which are mainly marine clays, silty clay, and clayey silt, with pockets of moraine till underlying these deposits.

Where rock outcrops, water, and cliffs are absent on the landscape, trees and summer flowers are numerous and dense in the tundra of the Project area. Terrestrial animals in the region include barren-ground caribou (of the Dolphin/Union, and Beverly herds), muskox, grizzly bear, wolverine, and grey wolves, as well as several species of raptor, waterfowl, and upland breeding birds.

Four species of cliff-nesting raptors (peregrine falcon, gyrfalcon, rough-legged hawk, and golden eagle) and three ground-nesting raptor species (snowy owl, short-eared owl, and northern harrier) may live in the area. Waterbird species in the Project area include geese, tundra swan, several species of ducks, gulls, Arctic tern, four species of loons, and sandhill crane.

A total of 14 fish species are found in lakes, ponds, and streams in the Project area. The most common fish species is the Ninespine Stickleback, followed by Lake Trout, Arctic Char, Arctic Grayling, Slimy Sculpin, Lake Whitefish, Cisco, Least Cisco, Burbot, and Broad Whitefish.

### 1.2.3 Project Infrastructure

The Doris Project (Phase 1) of the Hope Bay Project was approved by NIRB in 2006 (NIRB Project Certificate 003) and licensed by NWB in 2007 (Type A Water Licence 2AM-DOH0713). The Water Licence was amended in 2010, 2011, and 2012 and received modifications in 2009, 2010, and 2011. Construction of

the Doris Project began in early 2010 and in early 2012, the Doris Project was placed into care and maintenance, suspending further Project-related construction and exploration activity along the Hope Bay Greenstone Belt. In 2016, the NIRB approved an amendment to Project Certificate No. 003 and NWB granted Amendment No. 1 to the Water Licence, extending operations from two to six years through mining two additional mineralized zones (Doris Connector and Doris Central zones) to be accessed via the existing Doris portal. The Doris Project began production early in 2017. In 2018 the Madrid-Boston (Phase 2) was approved and focused on the mining of the Madrid North, Madrid South, and Boston deposits by utilizing and expanding upon the Doris project infrastructure. The Madrid-Boston construction activities overlapped with the operation activities at Doris and extended the life of mine of the Project. The Project currently has developed infrastructure at four main sites: Roberts Bay, Doris, Madrid North, and Boston.

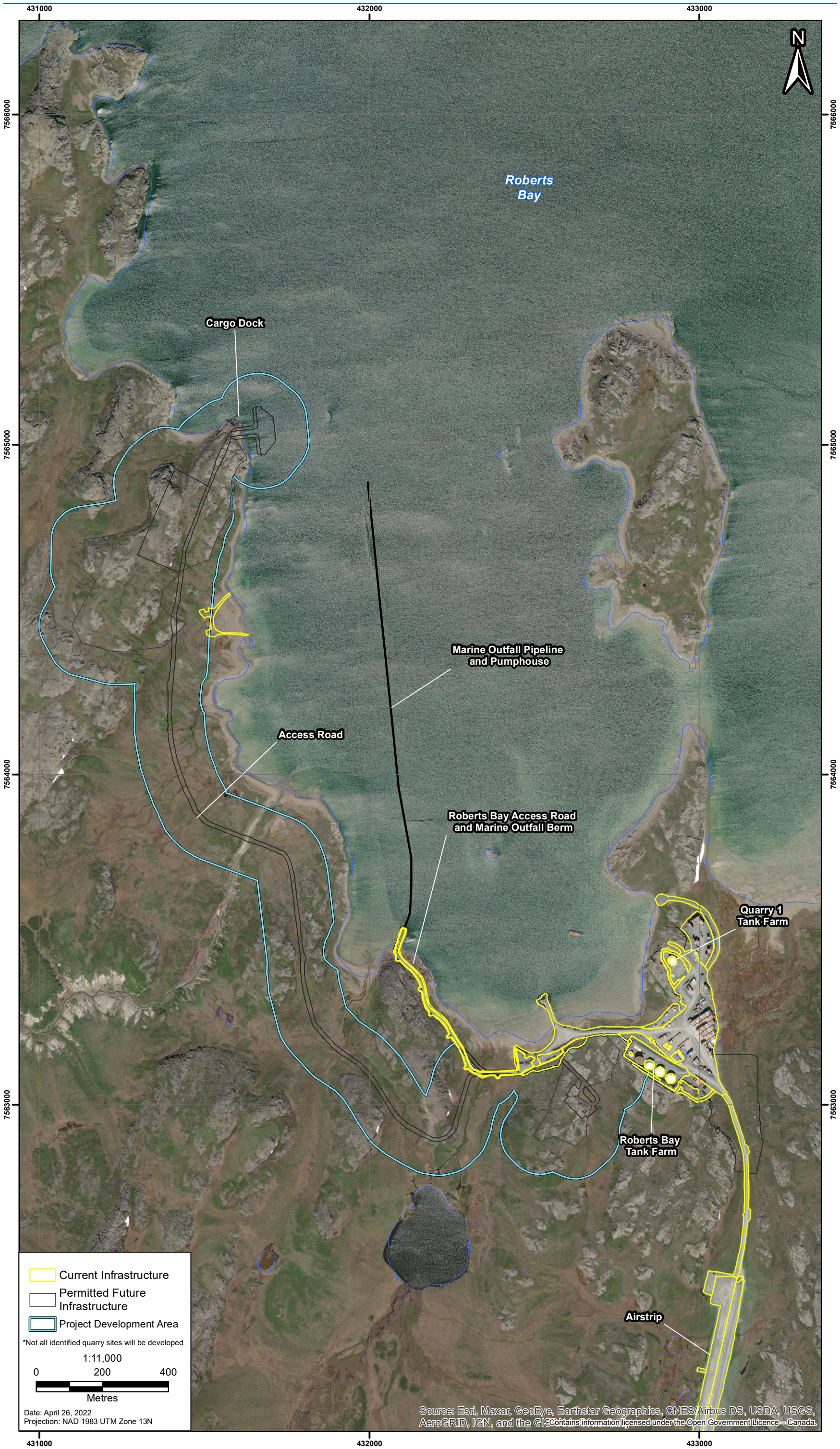
Currently the Roberts Bay area includes the seaport infrastructure, which consists of a jetty and large storage and laydown facilities, including two tank farms (one with capacity of 5 million litres and a second with capacity of 20 million litres) and a laydown area for offloaded equipment and materials (Figure 1-2). The Roberts Bay area also includes the Marine Outfall berm and underwater pipeline that facilitates marine discharge from the Doris underground mine and the Tailing Impoundment Area (TIA) at Doris.

The Roberts Bay port facilities are connected by an all-weather road to the Doris area, along which the aerodrome and waste management and incineration facilities are located. At Doris, there is a 345-person camp, administration facilities, power plant, firefighting facilities, water and sewage treatment facilities, contact water ponds and water management infrastructure, process plant, maintenance shop, core shack, warehouse, laydown areas, an airstrip and helicopter staging area, a 7.5-million-liter fuel tank farm, and a portal that leads to the underground mine (Figure 1-3).

The Doris area is connected by an all-weather road to Madrid North and Windy Lake potable water intake area, 10 km to the south of Doris Mine. Madrid North infrastructure currently includes mining of the Naartok East Crown Pillar and Madrid North underground decline. Mining support infrastructure includes an overburden stockpile, contact water pond, waste rock storage pad, laydown area, and access roads (Figure 1-4). Doris camp currently houses employees for the Doris and Madrid operations. An old Windy Camp at Windy Lake will be decommissioned (Figure 1-4).

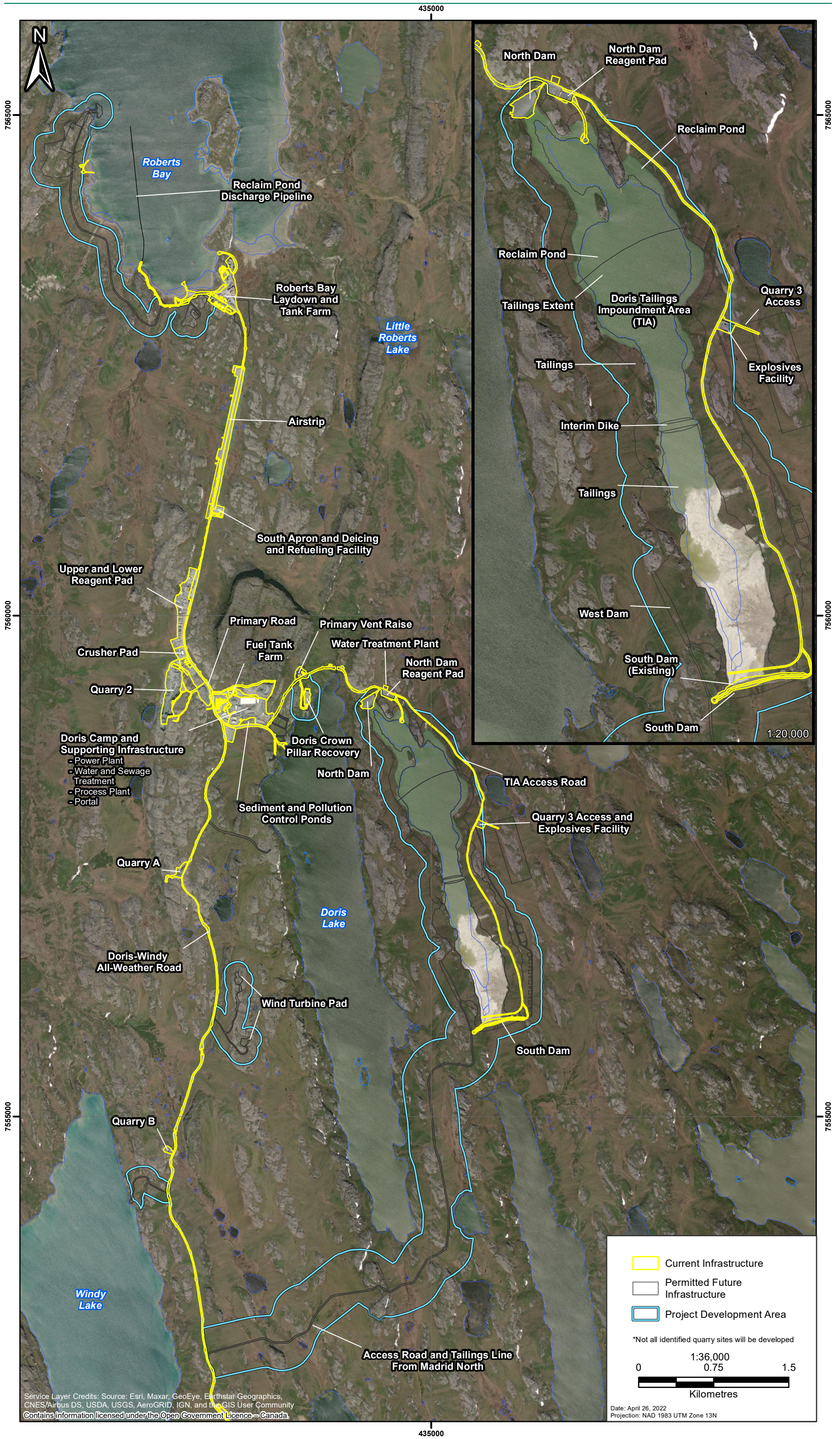
The Boston area is 55 km south of Madrid South and is currently accessible by aircraft using a site airstrip or seasonally via a winter track. The Boston site has a 65-person camp, power generation, sewage treatment plant, incinerator, core shack and fuel storage facilities. The camp at Boston remains empty and has not been used since 2019. The underground portal has been barricaded and sealed with an ice plug to prevent inflow of water and flooding of the mine workings.





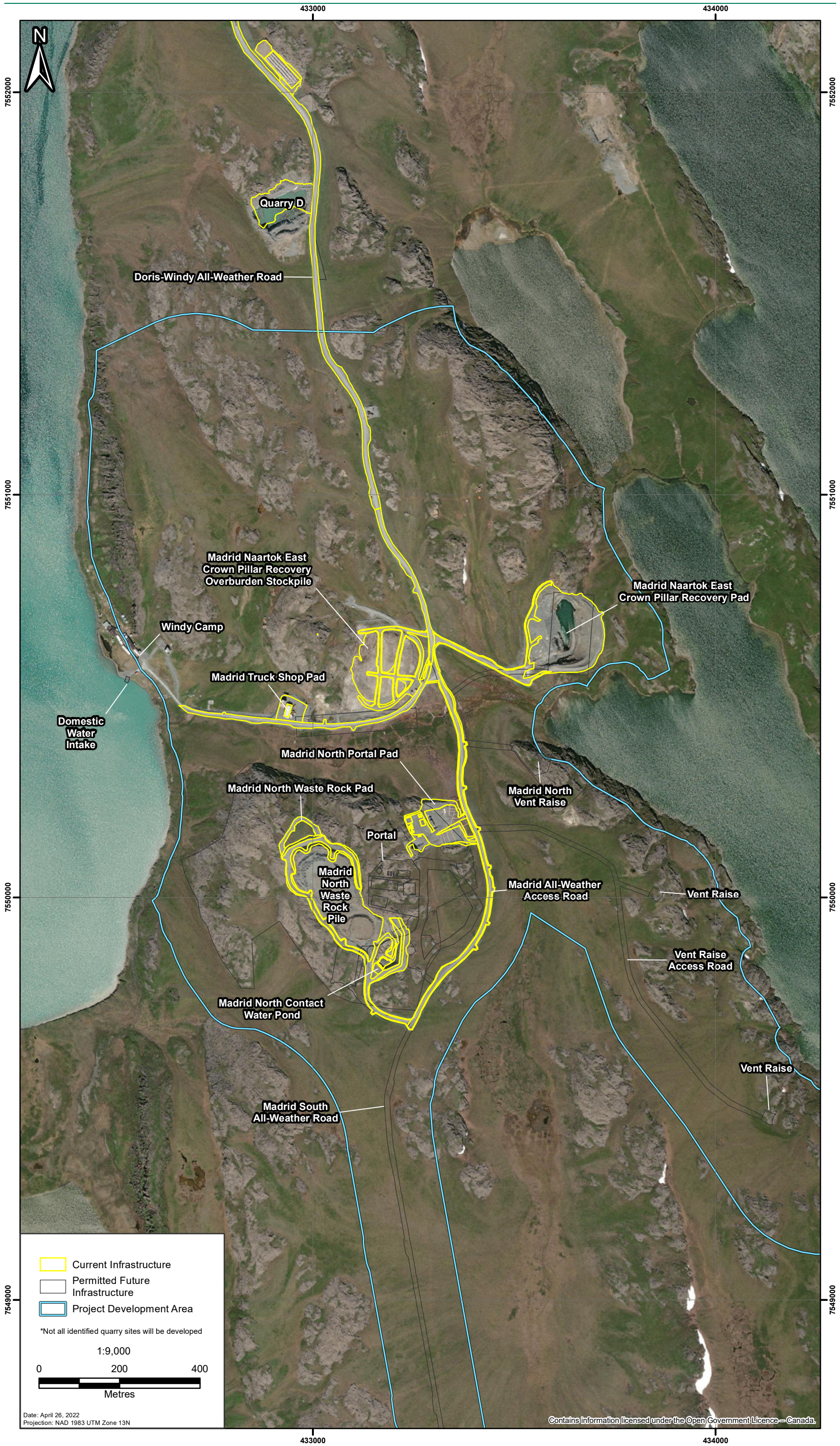
**Figure 1-2: Roberts Bay Site Layout**





**Figure 1-3: Doris Site Layout**





**Figure 1-4: Madrid North Site Layout**



### 1.3 Temporary Closure

As defined in the Water Licence, Care and Maintenance is “in respect of a mine, means the status of the facility when the Licensee ceases production or commercial operation temporarily for an undefined period of time”.

Agnico Eagle announced its decision on February 18, 2022 to place the Doris Mill into Care and Maintenance and suspend production on the Project. On March 30, 2022, Agnico Eagle provided the NWB with a formal written notice of Care and Maintenance for the Doris-Madrid operations under Part J, Item 4 of the Water Licence.

Care and Maintenance at Doris and Madrid includes the temporary suspension of ore extraction at Doris and Madrid and milling operation at the Doris Mine. Agnico Eagle intends to continue exploration activities (site activities) as well as management and modification of facilities to remain in regulatory compliance with various permits, licenses, and approvals for the Project.

### 1.4 Regulatory Context

#### 1.4.1 Legislation

Legislation applicable to mine operations including temporary suspension and planning in Nunavut include:

- Nunavut Agreement (1993);
- *Territorial Lands Act* (1985);
- Territorial Lands Regulations (undated);
- *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (2002);
- Nunavut Waters Regulations (2013);
- *Fisheries Act* (1985), and applicable regulations;
- *Arctic Waters Pollution Prevention Act* (1985);
- Arctic Waters Pollution Prevention Regulations (undated);
- *Transportation of Dangerous Goods Act* (1992);
- Transportation of Dangerous Goods Regulations (2001);
- *Environmental Protection Act* (1988);
- *Environmental Rights Act* (1988);
- *Mine Health and Safety Act* (1994); and
- Mine Health and Safety Regulations (1995).

#### 1.4.2 Licences, Project Certificates, Approvals, and Permits

The regulatory and legal documents for the Project that are relevant to mine operations including temporary suspension are listed in Table 1-1.

Surface rights for IOL are vested in the KIA, which administers the access and management of the IOL for the benefit of the Inuit in the region. This is done through land use permits and lease agreements. Use of water resources and waste disposal in Nunavut is regulated by the NWB, and therefore, the Project operates under the Water Licence for mine development, pursuant to the Nunavut Waters Act. The DMCMP, including the associated cost estimate, will require approval under the Water Licence. Notification and submissions applicable to Care and Maintenance under the Water Licence and the Project's exploration Type B Water Licence 2BB-MAE1727 shall be provided to the NWB as indicated in Table 1-2.

The Project Certificate No.009, issued by NIRB for the development of the Madrid-Boston area for the operation of three new mines at Hope Bay: Madrid North, Madrid South, and Boston. Notification and submissions applicable to Care and Maintenance under Project Certificate No.009 shall be provided to the NIRB as indicated in Table 1-3.

**Table 1-1: Hope Bay Project Licenses and Approvals Applicable to Doris and Madrid Care and Maintenance**

| Name  | Approval No. | Scope / Purpose  | Term / Duration       | Expiration Date |
|---|--------------|--|-----------------------|-----------------|
| Nunavut Impact Review Board (NIRB) Project Certificate              | 009          | Authorization for Madrid-Boston to proceed, provided certain conditions and requirements are incorporated in the various regulatory permits and authorizations issued by the regulatory agencies with permitting authority for the Hope Bay Project. The Project includes the construction of all required surface Infrastructure and operation of three new mines at Hope Bay: Madrid North, Madrid South and Boston.     | Life of Doris Project | None            |
| NIRB Project Certificate  | 003          | Authorization for Doris to proceed provided certain conditions and requirements are incorporated in the various regulatory permits and authorizations issued by the regulatory agencies with permitting authority for the Hope Bay Project.  | Life of Doris Project | None            |
| Nunavut Water Board (NWB) Type A Water Licence Amendment No.2       | 2AM-DOH1335  | Water Licence for Doris and Madrid project that authorizes the construction, operation and reclamation of the Doris, Madrid and the all- weather road of the Hope Bay Project. Licence scope includes Amendment No.1.  | 22 years              | March 2035      |
| Type B Water Licence for the HBVB including a camp at Windy Lake    | 2BE-HOP1222  | Water Licence that allows for the use of water and disposal of waste associated with regional exploration program including drilling and camp operations.  | 10 years              | June 2022       |
| Type B Water Licence for Madrid Advanced Exploration Amendment No.2 | 2BB-MAE1727  | Water licence that allows for the use of water and the disposal of waste for an undertaking classified as Mining and Milling as per Schedule II of the Regulations for the Madrid Advanced Exploration Project (Amended in 2018).  | 10 years              | May 2027        |
| Framework Agreement   | -            | Framework Agreement provides comprehensive land tenure governing the issuance of surface exploration licenses, advanced exploration leases, commercial leases, and compensation associated with tenure. Framework Agreement includes a beltwide Land Use Licence, an Inuit Impact and Benefits Agreement (IIBA) and a Water and Wildlife Agreement. Framework Agreement was signed in March 2015 for beltwide land tenure. | 20 years              | March 2035      |
| Water and Wildlife Agreement  | -            | Included as a Schedule to the Framework Agreement, this Agreement details compensation to be provided to the Kitikmeot Inuit Association (KIA) and Inuit beneficiaries for negative effects that may occur to wildlife harvesting and water as a result of mining related activities across the Belt.  | 20 years              | March 2035      |

| Name   | Approval No.              | Scope / Purpose   | Term / Duration   | Expiration Date                  |
|--|---------------------------|---|---|----------------------------------|
| Amended and Restated Inuit Owned Lands Commercial Lease                              | KTCL 313D001              | Commercial Lease for use of designated lands associated with the Hope Bay Volcanic Belt (HBVB) area. Currently, lands have been designated that encompass Doris. Expansion to include other areas of the HBVB is administrative in nature. Original Commercial Lease was amended and restated in March 2015 as a means to obtain surety of belt-wide land tenure.             | 20 years  | March 2035                       |
| Inuit Impact and Benefits Agreement  | -                         | Included as a Schedule to the Framework Agreement, this Agreement details the benefits to be provided to the KIA and Inuit beneficiaries from the Hope Bay Project, including compensation, employment and contracting opportunities. The IIBA originally signed in association with Doris was revised in March 2015 and expanded in scope to encompass belt-wide activities. | 20 years  | March 2035                       |
| KIA Advanced Exploration Agreements  | KTAE15C002                | Agreements as per the terms of the Framework Agreement enabling advanced exploration at Boston.   | 5-year renewable annually thereafter for up to 20 years | March 2022 (renewal in progress) |
| KIA Land Use Licenses  | -                         | Enables exploration activities across the Hope Bay Belt as per the terms of the Framework Agreement.  | 1-year automatic renewable for 20 years                 | March 2023                       |
| DFO authorization  | NU-02-0117.2              | Construction of the jetty in Roberts Bay.   | N/A   | -                                |
| DFO authorization  | NU-1000-0028              | Changes to the Doris jetty.   | N/A   | -                                |
| DFO authorization  | NU-02-01117.3             | Construction of the Doris Tailings Impoundment Area (TIA) north dam.  | Life of Mine  | None                             |
| Navigable Waters Permit  | 8200-02-6565              | Installation of the jetty in Roberts Bay.   | N/A   | N/A                              |
| Navigable Waters Permit  | 2018-600028               | Approval for Jetty in Roberts Bay   | N/A   | N/A                              |
| Navigable Waters Permit  | 2018-600006               | Approval for Marine Outfall Berm  | N/A   | N/A                              |
| Jetty Lease  | 77A3-1-2                  | Foreshore lease from the Crown for construction and operation of the Roberts Bay Jetty.   | 30 years  | June 2047                        |
| Marine Outfall Berm  | 77A/3-3-2                 | Lease from Crown for construction and operation of Roberts Bay Marine Outfall Berm.   | 30 years  | July 2048                        |
| Amendment to Schedule 2 of the Metal and Diamond Mining Effluent Regulations (MDMER) | Registration SOR/2008-216 | Designation of Tail Lake as a tailings impoundment.   | Life of Mine  | None                             |

**Table 1-2: Water Licence Requirements for Care and Maintenance**

| Condition  | Timeframe  | Requirement   | Status                         |
|--|--|---|--------------------------------|
| Part J Item 4 (Type A Water Licence 2AM-DOH1335) | At least sixty (60) days prior to, or as soon as practically possible.                                   | Notify in writing Agnico Eagle's intention to enter into a Care and Maintenance Phase.  | Completed March 30, 2022       |
| Part J Item 5 (Type A Water Licence 2AM-DOH1335) | Within thirty (30) days of Agnico Eagle providing notice of intent to enter into Care and Maintenance.   | Submit a Care and Maintenance Plan that details Agnico Eagle's plans for maintaining compliance with the Terms and Conditions of applicable water licenses.   | Completed with this submission |
| Part J Item 6 (Type A Water Licence 2AM-DOH1335) | Within twelve (12) months of Agnico Eagle providing notice of intent to enter into Care and Maintenance. | Should the Project remain, or be in Care and Maintenance, submit the NWB an updated estimate of total mine closure restoration liability, and continue to do so every three (3) years thereafter.   | To be completed                |
| Part H Item 6 (Type A Water Licence 2AM-DOH1335) | Within ninety (90) days of providing notice of intent to enter into Care and Maintenance.                | Agnico Eagle will submit to the NWB for approval in writing, an addendum to the Emergency Response Plans and Spill Contingency Plan, detailing the changes in operations, personnel, responsibilities, availability of equipment and access to the site for assistance. | To be completed                |
| Part C Item 4 (Type B Water Licence 2BB-MAE1727) | Within six (6) months of entering into Care and Maintenance.   | Upon the Project entering into or being in Care and Maintenance, the Licensee shall submit to the Board for approval in writing, an updated estimate of total mine closure restoration liability, as above, and every three (3) years thereafter.                       | To be completed                |

**Table 1-3: Project Certificate Requirements – Care and Maintenance**

| Condition                 | Timeframe  | Requirement  | Status          |
|---------------------------|--|--|-----------------|
| Term and Condition No. 35 | Within six (6) months of Agnico Eagle providing notice of intent to enter into Care and Maintenance. | In collaboration with the Hope Bay Socio-Economic Working Group submit an updated Hope Bay Socio-Economic Monitoring Plan to the Kitikmeot Socio-Economic Monitoring Committee that will also include detail regarding specific measures that may mitigate the potential for negative effects as a result of the Project's temporary or permanent closure. | To be completed |
| Term and Condition No. 36 | Within six (6) months of Agnico Eagle providing notice of intent to enter into Care and Maintenance. | Agnico Eagle shall, submit an updated Human Resources Plan and Wellness Strategy for the Project that includes a Workforce Transition Strategy designed to mitigate the potential negative effects of Project closure on the affected communities of Nunavut.  | To be completed |

### 1.5 Roles and Responsibilities

Temporary Care and Maintenance activities will be managed by Agnico Eagles core team of site personnel identified in Table 1-4.

**Table 1-4: Care and Maintenance Roles and Responsibilities**

| Role  | Responsibility  |
|---|---|
| Mine General Manager                                | <ul style="list-style-type: none"> <li>Overall responsibility for implementation of the Doris-Madrid Care and Maintenance Plan (DMCMP)</li> <li>Provide the on-site resources to complete site activities, Care and Maintenance activities, and management and monitoring of mine waste and infrastructure</li> </ul>   |
| Geotechnical Engineer<br>(Alternate: Mine Engineer) | <ul style="list-style-type: none"> <li>Conduct regular inspections of the pads, stockpiles, and containment ponds to determine compliance with the plans, regarding, slopes, volumes, safety berms, snow removal etc.</li> <li>Facilitate Geotechnical Inspection, when required</li> </ul>   |
| Maintenance Manager<br>(or designate)               | <ul style="list-style-type: none"> <li>Conduct regular inspections of the water management facilities and audits of the maintenance records</li> <li>Responsible for tracking water movements between the various water management facilities, including from the pollution control ponds and sumps to the tailings impoundment area (TIA)</li> <li>Maintain records of the source, disposition and volume of water transported/discharged</li> </ul> |
| Environmental Superintendent                        | <ul style="list-style-type: none"> <li>Responsible for updating the DMCMP</li> <li>Provide the necessary resources for completing environmental sampling programs</li> <li>Coordinate compliance reports</li> </ul>   |
| Environment Coordinator                             | <ul style="list-style-type: none"> <li>Ensure sampling programs are completed as needed</li> <li>Keep records of onsite analysis, observations, photographs, and laboratory analysis</li> <li>Conduct or facilitate sampling program as required</li> <li>Conduct monthly and annual regulatory reporting as required</li> </ul>  |
| Mine Geologist                                      | <ul style="list-style-type: none"> <li>Conduct inspections on the underground to confirm geology</li> <li>Instruct the mucking crew regarding waste rock placement on surface</li> </ul>  |
| Underground Supervisor                              | <ul style="list-style-type: none"> <li>Ensure waste rock is placed in the designated location defined in the management plan</li> </ul>   |
| Construction Supervisor                             | <ul style="list-style-type: none"> <li>Ensure use of waste rock confirmed as non-PAG material for construction</li> <li>Provide quantities of waste rock used for construction</li> <li>Oversee and inspect construction projects at Doris and Madrid</li> </ul>  |
| Mill Lab and Metallurgy Superintendent              | <ul style="list-style-type: none"> <li>Implement temporary closure measures at Doris mill</li> </ul>  |
| Site Services Supervisor                            | <ul style="list-style-type: none"> <li>Coordinate with Underground Supervisor for removal of waste rock and temporary placement of ore at surface</li> <li>Ensure placement of waste rock and removal of ore in the intended and designated location for the Madrid area</li> <li>Ensures snow removal at the Madrid Waste Rock Management area</li> </ul>  |

### **1.6 Site Access**

During the temporary suspension of operations, the site will continue to be accessed year-round by air for transport of goods and personnel. The all-weather airstrip at the aerodrome, located between Roberts Bay and the Doris Site, is capable of landing aircraft up to a Hercules C-130. The runway can also accommodate Bombardier Q400 aircraft.

For the duration of the Care and Maintenance period, the primary access route to the site for bulk commodities such as fuel, mechanical and mobile equipment, and sundry supplies will continue to be via a marine link through the Arctic Ocean during the open water season from approximately late July through mid-October when open water allows for passage.

### **1.7 Management Plans**

During Care and Maintenance, environmental management plans will continue to be implemented or modified as required, to address conditions of Care and Maintenance. Management plan updates and timelines for the updates are provided in Table 1-5.



**Table 1-5: Hope Bay Project Management Plans**

| Management Plan   | Current Revision Date | Temporary Closure Updates or Commitment(s)   | Timeline  |
|---|-----------------------|--|---|
| Hope Bay Project Emergency Response Plan                                  | February 2021         | Update as required in accordance with Part H item 6 of the Water Licence.  | June 28, 2022<br><i>To Nunavut Water Board (NWB) within ninety (90) days of providing notice of intent to enter into Care and Maintenance</i> |
| Hope Bay Project Spill Contingency Plan                                   | March 2022            | Update as required in accordance with Part H item 6 of the Water Licence.  | June 28, 2022<br><i>To NWB within ninety (90) days of providing notice of intent to enter into Care and Maintenance</i>                       |
| Hope Bay Project Hazardous Waste Management Plan                          | March 2020            | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Incinerator Management Plan                              | March 2019            | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Aircraft De-icing Management Plan                        | March 2019            | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Quality Assurance Quality Control Plan                   | March 2022            | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Doris-Madrid Water Management Plan                       | March 2022            | Update to water management at Madrid associated with the portal development and potential updates to water management associated with TIA modifications. | April 29, 2022<br><i>To NWB with submission of the Doris Madrid Care and Maintenance Plan</i>   |
| Hope Bay Project Boston Water Management Plan                             | December 2017         | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Water and Ore/Waste Rock Management Plan for Boston Site | January 2017          | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Waste Rock, Ore and Mine Backfill Management Plan        | March 2022            | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Hydrocarbon Contaminated Material Management Plan        | December 2017         | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Air Quality Management Plan, Hope Bay Project                             | April 2019            | No updates based on proposed Care and Maintenance activities.  | N/A   |

| Management Plan   | Current Revision Date | Temporary Closure Updates or Commitment(s)                                     | Timeline  |
|---|-----------------------|--|---|
| Hope Bay Project Domestic Wastewater Treatment Management Plan  | March 2022            | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Boston Sewage Treatment Operations and Maintenance Management Plan  | September 2017        | No updates at Boston site.   | N/A   |
| Doris North Project Wildlife Mitigation and Monitoring Plan   | December 2016         | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Wildlife Mitigation and Monitoring Plan   | April 2021            | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Hope Bay Project Aquatic Effects Monitoring Plan  | April 2018            | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Hope Bay Project Ground Water Management Plan   | March 2022            | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Hope Bay Project, Phase2 Doris Tailings Impoundment Area – Operations, Maintenance, and Surveillance Manual | February 2022         | Updates based on proposed changes to Tailings Impoundment Area.                | April 29, 2022<br><i>To the NWB with the submission of the Doris Madrid Care and Maintenance Plan</i>   |
| Tailings Area Dust Control Strategy for Doris TIA   | December 2016         | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Hope Bay Project Boston Tailings Management Area -Operations, Maintenance, and Surveillance Manual          | December 2017         | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Hope Bay Project Human Resources Plan   | September 2016        | Update within 6 months following notice of an unanticipated temporary closure. | September 30, 2022<br><i>To the Nunavut Impact Review Board (NIRB) within six (6) months of providing notice of intent to enter into Care and Maintenance</i> |
| Oil Pollution Prevention Plan and Oil Pollution Emergency Plan  | May 2022              | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Hope Bay Project Heritage Resource Protection Plan  | December 2017         | No updates based on proposed Care and Maintenance activities.                  | N/A   |
| Health and Safety Management Plan   | December 2017         | No updates based on proposed Care and Maintenance activities.                  | N/A   |

| Management Plan                                      | Current Revision Date | Temporary Closure Updates or Commitment(s)   | Timeline  |
|--|-----------------------|--|---|
| Hope Bay Project Non-hazardous Waste Management Plan | December 2017         | No updates based on proposed Care and Maintenance activities.  | N/A   |
| Hope Bay Project Community Involvement Plan          | December 2016         | No updates based on proposed Care and Maintenance activities.<br>Updated Human Resources Plan and Wellness Strategy for the Project that includes a Workforce Transition Strategy designed to mitigate the potential negative effects of Project closure on the affected communities of Nunavut. | September 30, 2022<br><i>To the NIRB within six (6) months of providing notice of intent to enter into Care and Maintenance</i> |
| Hope Bay Project Explosives Management Plan          | December 2017         | Update to the plan associated with Care and Maintenance activities.  | April 29, 2022<br><i>To the NWB with the submission of the Doris Madrid Care and Maintenance Plan</i>                           |
| Hope Bay Project Quarry Management Plan              | March 2022            | No updates based on proposed Care and Maintenance activities.  | N/A   |

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## SECTION 2. OVERVIEW OF SITE ACTIVITIES

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Agnico Eagle intends to continue pursuing site activities as well as management and modification of facilities to remain in regulatory compliance with permits, licenses, and approvals for the Hope Bay Project. This section describes site activities at the Doris-Madrid sites, which will continue and be implemented during Care and Maintenance.

### 2.1 Drilling

General exploration drilling as approved under the Water Licence and Type B Water Licence 2BB-MAE1727 will continue at Doris and Madrid during Care and Maintenance.

### 2.2 Portal Modification

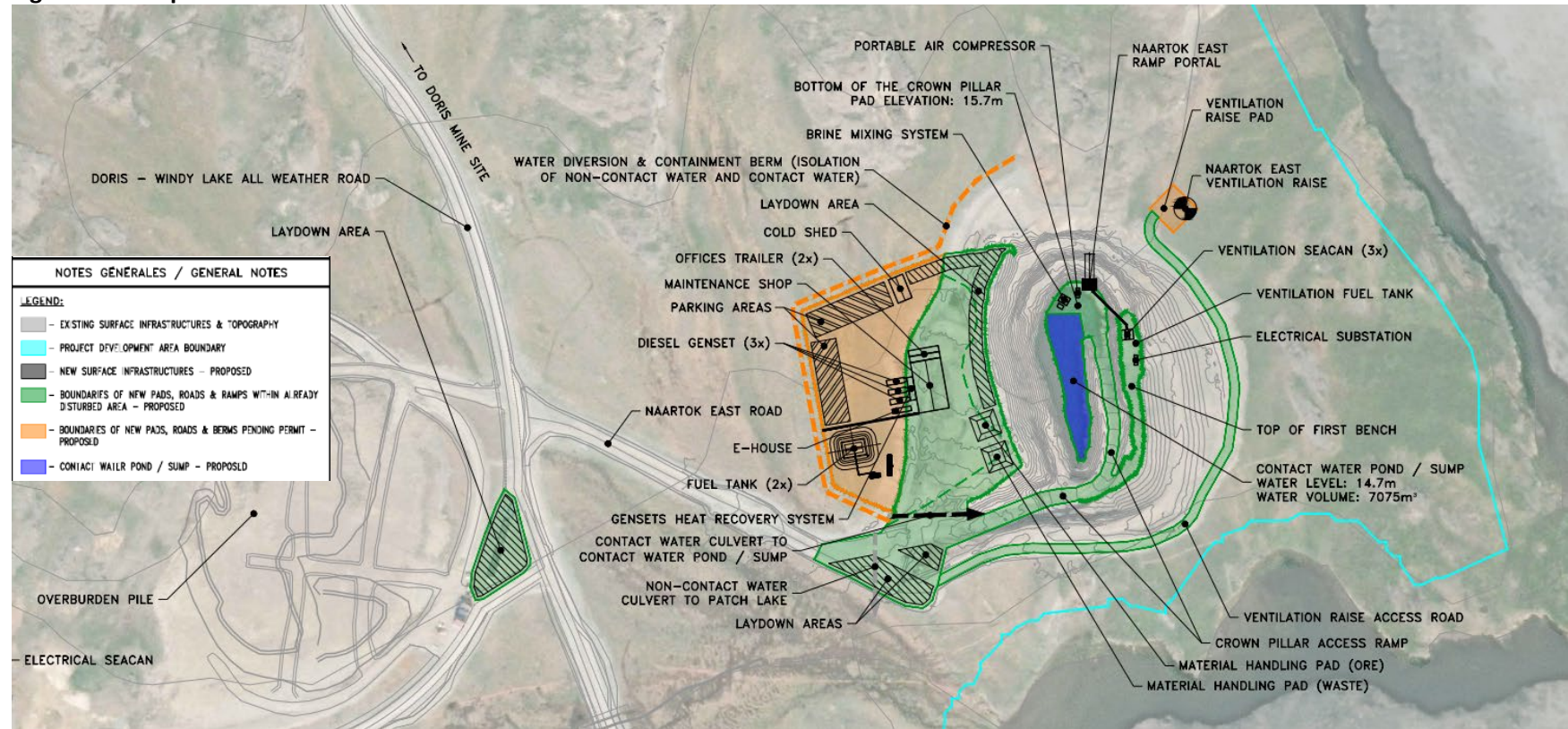
All work at the approved Madrid North portal was stopped in 2021 due to the challenging ground conditions at this location. The Madrid North portal was barricaded and water diversion berms and a water collection sump have been installed to limit water from entering the underground workings.

With the closure of the Madrid North portal, the portal will be relocated (and associated infrastructure) to the approved Madrid Naartok East Crown Pillar area to continue with underground development at Madrid (Figure 2-1). Development of an underground ramp from the existing crown pillar pit will be required. As indicated in the Doris-Madrid Final Environmental Impact Statement (FEIS) (TMAC 2017a) the exact location of the facilities listed at Madrid North are likely to change as the mining plan and engineering is finalized and detail design of the site proceeds. However, all facilities are expected to remain within the boundaries of the Project Development Area (PDA) (TMAC 2017a). Much of the supporting surface infrastructure no longer in use at the Madrid North portal will be moved to the new portal locations including:

- |                                   |   |
|-----------------------------------|---|
| • Electrical Surface E-House      | • Naartok East/West surface vent raise system |
| • Fuel tank                       | • Fuel tank                                   |
| • Naartok East surface portal fan | • Office/lunchroom trailer                    |
| • Ventilation Fuel tank           | • Cold Storage Dome                           |
| • Ventilation Frost fighters      | • Compressor                                  |
| • Ventilation Seacans             | • Brine Mixing System                         |
| • Ventilation Electrical Room     |   |

Civil work will also be required at the approved Madrid Naartok East Crown Pillar area to level and prepare for underground ramp development. All work completed at Madrid Naartok East will be completed within the approved Project development area. Material required to build laydown areas/pads for the maintenance of access roads will be geochemically suitable and obtained from permitted quarries as well as crushed materials from the previous pads built at the Madrid North Portal location.

Figure 2-1: Proposed Portal Relocation to the Madrid Naartok East Crown Pillar



Initially the development and relocated site infrastructure will be within the existing surface operation activities for the Madrid Naartok East Crown Pillar mining area and will include:

- Construction of roads to access the new ramp and associated pads;
- A new laydown/pad area within the approved crown pillar pit area to reach the new portal floor elevation along with an associated contact water pond and sump for water management; and
- Development of an industrial pad required for future infrastructure to support underground operation.

Additional surface infrastructure that may be constructed during the initial development will include a maintenance and operation dome, portal steel arches, and an explosives magazine.

Following the initial construction and relocation of surface infrastructure, the current Madrid Naartok East Crown Pillar area will be expanded to meet the underground operation needs, including:

- Expansion of the existing pad on top of the existing pit to complete the industrial pad required for future infrastructure.
- A new water diversion berm will be constructed to accommodate the west expansion of the existing pad and to ensure appropriate water management as per the approved Hope Bay Project Ground Water Management Plan.
- A new pad northeast of the Crown Pillar operation will be constructed to support a future ventilation raise.
- Access roads and pads will be developed for future surface power and cap magazines.

The ore hauled from the underground activities will be temporarily stored at surface on the ore transit stockpile located on the adjacent industrial pad prior to being transferred to the ore stockpile close to Doris mill's facilities. The waste rock hauled from the underground development activities will be transferred to the existing Madrid waste rock stockpile. Details on ore and waste rock management are summarized in Section 3.2 and provided in the *Waste Rock, Ore and Mine Backfill Management Plan* (Agnico Eagle 2022a).

Water management activities at the relocated portal location at Madrid Naartok East Crown Pillar location will include the following:

- Non-contact water will be diverted from the pit area with a berm and conveyed south to Patch Lake through existing culverts. Approved mitigation measures will be implemented to limit erosion.
- Surface contact water for the pad area will be directed to a sump at the bottom of the pit. Water will eventually be conveyed by truck or via the approved waterline to the TIA at Doris.
- Surface contact water from the portal area will be collected into a contact water pond. Water is discharged to the tundra if water quality is lower than permit limits or conveyed by truck or via the approved waterline to the TIA at Doris, when water quality does not meet permit limits.

### **2.3 Wind Turbines**

Construction of the approved wind turbines under Project Certificate No. 009 will commence late 2022 during Care and Maintenance as indicated in the 2021 NWB and NIRB Annual Reports. These turbines will supplement diesel power generation at the Doris, Madrid, and Boston areas. Site activities include geotechnical drilling, early earthworks, installation of cables, piles, foundations, and wind turbine development. Wind turbine components (access roads, crane pads, and electrical cabling) and construction methods are described in the Hope Bay Wind Energy Project Preliminary Design (November 2017) presented in Package P5-8 of the in the Doris-Madrid FEIS (TMAC 2017).

### **2.4 Airstrip Extension**

An extension to the existing airstrip at Doris may also be completed during the temporary suspension period. The airstrip extension will be within the approved PDA.



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## SECTION 3. CARE AND MAINTENANCE ACTIVITIES

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This section summarizes the main Care and Maintenance activities that Agnico Eagle will implement at the Doris-Madrid site.

### 3.1 Underground Mine Workings

Underground development will continue at Doris during Care and Maintenance. Underground equipment and infrastructure including switches and compressors pumps, motors, pipelines, and electrical systems will be inspected and if not required will be prepared for on-site storage. While people are working at the Doris underground, ventilation will be maintained. In areas where work is not being carried out, the fans will be turned off. Gas checks will be ongoing prior to any blasting. When not in use, the underground and surface mobile equipment at Doris will be stored on surface and as per operating guidelines.

All equipment at the Madrid North portal, with the exception of pumps, has been brought to surface and are stored at Doris. The Madrid North portal has been barricaded to prevent wildlife and unauthorized personnel from entering the underground workings. A door has been installed to provide access for inspection and dewatering. Strategically placed water diversion berms and a water collection sump have been installed to limit water from entering the underground workings. Runoff water due to freshet and rain will enter the portal and run down and pool at the lower levels. A diversion berm was constructed to reduce the flow rate and quantities to be managed. An electric, manually operated, submersible pump is located underground which can be used to pump water into a truck or to the ore lined pad as needed. Underground development will continue at Madrid Naartok East Crown Pillar area once the portal, ramp development, and supporting infrastructure has been completed (see Section 2.2).

### 3.2 Waste Rock Stockpiles, Ore Stockpiles, and Overburden Piles

The *Waste Rock, Ore, and Mine Backfill Management Plan* (Agnico Eagle 2022a) details the geochemical monitoring of waste rock, tracking of volumes and storage locations of waste rock and ore to be continued through Care and Maintenance.

#### Waste Rock Stockpile

Waste rock stockpiles are designed with slopes of 2H:1V and constructed in lifts to provide a high degree of geotechnical stability (Agnico Eagle 2022a). Waste rock has been stored in stockpiles at Doris within the footprint of the Temporary Waste Rock Pads (Pads I and T). Pad I was previously used as a waste rock stockpile which is now used as an ore stockpile at Doris. Pad T was constructed in 2015 and is currently the main Temporary Waste Rock pad at Doris. All Pads are located within the Pollution Containment System, which drains to a Pollution Control Pond (PCP) at the southern edge of the pad complex and collection sumps located at the south east corner of the pad areas. Water collected at the PCPs and collections sumps is discharged to the TIA at Doris.



During Care and Maintenance, underground exploration activities will continue at Doris and stope development will be postponed as no rock fill will be required. A new surface waste rock stockpile within the approved project footprint at Doris, which will not impact any Nunavut waters, is required for temporary storage of rock fill associated with underground activities at Doris.

All seepage and runoff from the waste rock stockpile pad will be directed to a downstream lined PCP and be managed in accordance with the *Groundwater Management Plan* (Agnico Eagle 2022b).

At the Madrid North Waste Rock Pad, leveling and compaction of the waste rock stockpile (generated from Naartok Trench and Madrid underground mining) has been completed. The contact water pond, perimeter berm, runoff collection ditch and seepage collection sumps were constructed, and water collected in the sumps will be pumped to the contact water pond water and will be trucked or conveyed via the waterline to the TIA at Doris. A new downstream collection sump as outlined in the March 24, 2022 written notification to the NWB "*Water License 2AM-DOH1335 – Conditions Applying to Construction and Operation – Development of Sump (Sump 1) at Madrid North Contact Water Pond*" will be constructed in the spring of 2022 to capture the bypass from the contact water pond. Additional details on the sump management is provided in the *Doris-Madrid Water Management Plan* (Agnico Eagle 2022c).

### **Ore Stockpiles and Overburden**

At Doris, ore is temporarily stockpiled on surface on Pad I and on west side of Pad T prior to being processed in the mill to extract the gold. During Care and Maintenance, ore from exploration at Doris will be stockpiled at surface at the approved ore stockpile location on the west side of Pad T. The ore hauled from the underground mining activities at the relocated Madrid Naartok East Crown Pillar portal will be temporarily stored on the existing ore transit stockpile on the adjacent industrial pad until being transferred to the ore stockpile at Doris. The Contact Water Pond at Madrid North will capture contact water from the Madrid North ore stockpile and will be dewatered to the TIA at Doris.

### **3.3 Tailings Impoundment Area**

The *Doris-Madrid Tailings Management Area Operations, Maintenance, and Surveillance Manual* (Agnico Eagle 2022d) details the management and monitoring of tailings and wastes deposited in the Doris TIA.

The TIA at Doris is located approximately 1.5 km east of Doris mine within the basin of the former Tail Lake. The TIA is in use and listed on Schedule 2 of the Metal and Diamond Mining Effluent Regulations (MDMER). The North Dam was constructed in 2012 to contain reclaim water in the TIA. No tailings have been placed against the North Dam. The South Dam was constructed in 2018 to contain tailings solids. A raise to the South Dam and the construction of the West Dam will be required when operations resume to attain the permitted capacity of 18 Million tonnes.

During Care and Maintenance there will be no active deposition of tailings in the Doris TIA thus activities will be limited to water management for discharge to the receiving environment. Water management will require a new spillway and internal berm(s) at the TIA to address an alternative water management

strategy for mine water and for the TIA water to remain in regulatory compliance for discharge to the receiving environment. A water treatment plant will be installed North of the TIA to address exceedance of authorized discharge criteria prior to discharge.

Dewatering of the TIA will continue during Care and Maintenance to maintain the lowest possible levels. Seepage monitoring frequency was reduced in 2021 due to recommendations made in the Annual Geotechnical Inspection report provided to the NWB on March 31, 2022.

The annual geotechnical inspection will be conducted during the summer months by a Geotechnical Engineer of Record. Any deficiencies noted in the annual Geotechnical Inspection Report will be addressed by Agnico Eagle and documented in the annual reports to the NWB and NIRB.

### **3.4 Buildings and Equipment**

The following building security and maintenance activities will be implemented during Care and Maintenance:

- Secure and restrict access to unused buildings and structures;
- Lockout and secure mechanical, hydraulic and electrical systems and equipment that are not required to operate during the temporary closure period;
- Park mobile equipment in a no-load condition; and
- Guard or block all underground openings that are not being used and place warning signs around the site.

The vacant Windy Camp (located at Windy Lake) will be dismantled and decommissioned.

### **3.5 Waste Management**

The way in which hazardous, non-hazardous, incinerator waste and hydrocarbon contaminated material is managed on site is not expected to change during Care and Maintenance although the volumes of waste are expected to be substantially less.

Management of non-hazardous waste includes recycling, treatment, and disposal of waste streams based on their specific characteristics. Non-hazardous waste management during Care and Maintenance will be in accordance with *Non-hazardous Waste Management Plan* (TMAC 2017a).

Management of Hazardous waste will be in accordance with the *Hazardous Waste Management Plan* (TMAC 2020). Agnico Eagle will collect and inventory hazardous waste (processing chemicals, reagents, and petroleum products) and properly store or remove from site. Hazardous waste collection, segregation, handling, storage, transport and disposal procedures will be carried out to minimize the risk to site workforce and the environment.

Management of incinerator waste will be in accordance with the *Incinerator Management Plan* (TMAC 2019a). Domestic waste streams will be segregated to operate the domestic waste incinerators in a safe,

efficient, and environmentally compliant manner. The Water Licence requires Agnico Eagle to demonstrate that the incinerators are in compliance with the Canadian Council of Ministers of the Environment (CCME) Canada-wide Standards (CWS) for air emissions of dioxin, furan, and mercury. The testing will be conducted when the thresholds for monitoring are met and in accordance with the *Air Quality Management Plan* (TMAC 2019b). Stack test on incinerators will be conducted after a significant change to site activities with the potential to change the waste stream or every three years, whatever is more frequent.

Management of hydrocarbon contaminated materials, including snow and soil, generated at the site and associated facilities will be in accordance with the *Hydrocarbon Contaminated Material Management Plan* (TMAC 2017b). Hydrocarbon contaminated water, snow and soils can be treated on site, or can be permanently stored underground in closed areas of the mine voids. Management of hydrocarbon contaminated soils will include relocation to the Doris landfarm located approximately 0.6 km north of the existing Doris Camp where it will be treated or temporarily stored or relocated to an underground mine for permanent storage.

### **3.6 Mine Infrastructure**

#### **3.6.1 Roads and Airstrip**

Roads will continue to be used during the Care and Maintenance as site activities continue at Doris and Madrid. Ongoing maintenance of access roads (including repairing culverts and employing sediment and erosion control measures) will be completed along with physical inspections in accordance with the Water Licence conditions. Appropriate dust management will be implemented with approved dust management protocols for the Project. Site Services heavy equipment operators will be on site maintaining roads and laydowns to ensure access to all critical areas for purposes of inspection, emergency egress, or equipment repair for the duration of Care and Maintenance.

The Doris aerodrome will continue to operate and be maintained. Tower operators will continue to provide weather reports to any scheduled inbound flights. Dust suppression is managed through the use of water as authorized under the Water Licence as required.

The site services will continue to perform routine inspections of the lights, communication systems, and grading of the airstrip to ensure uninterrupted airplane access to Hope Bay to support emergency requirements.

#### **3.6.2 Doris Mill**

Shutdown procedures for the mill have been underway, since the announcement to place the Doris Mill into Care and Maintenance. The mechanical decommissioning of the crusher and main conveyor belts has occurred and was completed such that periodic cycling is not required to prevent seizing of bearings, conveyor rollers and belting. The bulk of the material has been removed from the reclaim apron feeders,

however a small amount of material remains to maintain the draft barrier. The Primary Jaw crusher plates were lifted, and cribbing was placed to reduce the loading on the shaft.

The reclaim shed has been cleaned and open holes above the two apron feeders will be covered and barricaded to prevent unauthorized personnel from accessing. The reclaim shed will be barricaded to prevent wildlife or unauthorized people from entering. A minimal bed of ore remains as required to maintain the draft barrier.

Ball mills have been emptied and lifted into saddles or cribbed to prevent bearing damage while inactive. The gravity concentrator units have been emptied. All grinding media has been bagged and hauled underground with the detoxified tailings. The flotation cells and pump boxes have been flushed and drained, with water reporting to the TIA at Doris.

Newly installed leach tanks were never wet commissioned and are still in new condition. All other leach and resin circuits have been drained and flushed, and the resin has been removed.

#### *Detoxification*

The detoxification circuit has been cleaned and all detox contact material has been hauled underground. All materials have been disposed of in accordance with best practices for cyanide management and within the discharge limits. The solutions, meeting discharge quality, were deposited into the TIA at Doris.

#### *Reagents*

All reagent tanks have been drained and flushed. The flotation reagent mix and day tanks were cleaned after the shutdown of the flotation circuits. The cyanide mix tank has been cleaned and flushed. Solid reagents used for mixing have been placed back into their respective shipping containers and the containers sealed by warehouse and mill personnel.

#### *Refinery*

The refinery has been shut down and the cells have been rinsed drained. All unused equipment has been removed and equipment decommissioned per manufacturer recommendations. The fuel line to the furnace was disconnected by a qualified plumber/gasfitter and the vacuum pump has been drained.

Potable and emergency shower water tanks have been drained and sent to the tailings berm. The bulk of this was pumped through the tails line before the tailings system was shutdown. After the tailings and reclaim pumping systems were shut down, all water that back flowed to the tailings berm was removed using the vacuum truck and transported to TIA for disposal. The tailings and reclaim pipelines were cleared using a portable compressor, while monitoring the pressure to confirm completion. Further line pigging will occur in the future.

### **3.6.3 Camp Infrastructure**

Camp staffing levels during Care and Maintenance will be reduced and unused camp facilities will be secured and isolated to restrict access. Camp management staffing levels during Care and Maintenance will align with that required to provide sufficient service to on-site personnel.

Weekly inspections will continue to be performed on life safety systems (including power generation), water treatment, sewage treatment, and electrical equipment and systems.

### **3.6.4 Power Generation**

The powerhouse will continue 24/7 operation to produce sufficient electricity to support Care and Maintenance activities and critical services to maintain the Project. Generators will provide minimal spinning reserve to accommodate routine starting and stopping of equipment. Generators will be cycled and maintained per operating manual guidelines. In the event of a major generator failure, the unit will be shut down, isolated and one of the remaining spares will be brought online to support the required electrical demand.

### **3.6.5 Fuel Storage and Distribution**

Diesel fuel will continue to be transported from the Roberts Bay bulk fuel storage facility as required with the consumption expected to drop significantly. Site services personnel will be responsible for transferring the fuel. Fuel tracking and reporting by the site services lead will be consistent with operations.

Determination of fuel needs during Care and Maintenance will be made in sufficient time to allow for delivery of additional fuel by sealift or other means as required to execute the DMCMP and any subsequently defined steps.

## **3.7 Water Management Systems**

### **3.7.1 Pipelines, Ponds, and Collection Sumps**

The water management system at Doris-Madrid consists of pipelines, ponds, and collection sumps. Water Management to be completed during Care and Maintenance is detailed in the *Doris-Madrid Water Management Plan* (Agnico Eagle 2022c).

Tailings and reclaim water pipelines have been constructed between the TIA and the Doris Process Plant. The Doris Mine will continue to be dewatered during Care and Maintenance to preserve underground infrastructure. Mining operations will be responsible for the dewatering of the mine and will have check sheets to monitor the conditions of the sumps and engineering will track the water levels. This will continue throughout the period of the temporary suspension and will be aligned with the *Doris-Madrid Tailings Management Area Operations, Maintenance, and Surveillance Manual* (Agnico Eagle 2022d).

The Roberts Bay discharge system (RBDS) was designed to convey the combined or alternate between groundwater inflow from the underground mine and excess reclaim water from the TIA Reclaim Pond to the undersea diffuser located at approximately the 20 m bathymetric contour line in Roberts Bay.

The RBDS is comprised of the following sub-systems:

- Underground pumping system – pumps untreated mine effluent to the water treatment facility;
- 710 Pump House – pumps water from the TIA to the 720 pump house;
- 720 Pump House – combines treated underground and TIA effluent for discharge of compliant effluent to Roberts Bay;
- 730 Pump House – acts as a booster pump for final discharge into Roberts Bay via the effluent diffuser pipeline; and
- 740 Pump house – mine water treatment facility.

Routine inspections and maintenance of each sub-system will be conducted by on-site Care and Maintenance staff.

During Care and Maintenance underground mine water will be pumped to the surface and sent to the TIA at Doris. The mine water will be segregated within the TIA. Compliant TIA water, will be discharged to Roberts Bay, via the RBDS Pumphouse located at the TIA. Mine water treatment and ocean discharge processes will continue to maintain safe and acceptable water storage levels in both locations.

The Sedimentation Pond, Pollution Control Pond, Contact Water Pond and groundwater interceptor sumps will continue to operate during Care and Maintenance. These water management features collect runoff and groundwater that may have come in contact with the waste rock and ore stockpiles. The water collected will continue to be dewatered to the TIA at Doris.

Various containment sumps that capture runoff or accumulation in containment berms will continue to be dewatered during Care and Maintenance. Water that meets the authorized discharge criteria will be discharged to tundra at an approved location. Water that does not meet discharge criteria will be transported to the TIA at Doris.

Quarry water accumulation in any of the quarries will be managed the same as in operations. Sampling will be conducted and if water from the quarry meets the authorized discharge criteria it will be dewatered to the tundra. Care will be taken during dewatering to not disturb settled solids in the bottom of the sump and pumping of the sump will only take place when conditions are suitable. Water will not be discharged to fish frequented waters and the pump discharge will be positioned in a manner that minimizes erosion and siltation of the area downstream of the discharge. Water that does not meet the authorized discharge criteria will be transported to the TIA at Doris. During Care and Maintenance activities will be in accordance with the *Quarry Management Plan* (Agnico Eagle 2022e).

Excess brine water that is used as a lubricant for drilling, as a means of cleaning off the face and walls for geological mapping, and for dust suppression in the underground mine will be pumped to a settling sump and recycled as per the *Groundwater Management Plan* (Agnico Eagle 2022b).

### 3.7.2 Domestic Wastewater Treatment

Wastewater treatment at the Hope Bay Project during Care and Maintenance is detailed in the *Domestic Wastewater Treatment Management Plan* (Agnico Eagle 2022f).

The Doris Wastewater Treatment Plant will continue to treat domestic sewage and grey water generated by site personnel during Care and Maintenance. A qualified operator will maintain the system to confirm it is operating within an acceptable range. Treated effluent will continue to be monitored, as required, in accordance with the Water License (see Section 4).

The potable water system will continue to be operated and maintained at Doris. Potable water treatment consists of ultraviolet purification as well as microfiltration to remove any suspended material from the water. Windy Lake will continue to be the source of potable water for the Doris camp. Potable water will continue to be sampled on a weekly basis for *Escherichia coli* and coliforms to ensure both the water source and system are not contaminated and is safe for human consumption (see Section 4).

Freshwater required for fire suppression, dust suppression or industrial use will continue to be sourced from Doris Lake for use at Doris as authorized under the Water Licence and from Patch and Windy Lakes for use at Madrid as authorized under the Type B Water Licence (2BB-MAE1727).

### 3.8 Sealift

Quantities of fuel, materials, equipment required will be reduced during Care and Maintenance. Any sealift will be managed consistent with the required and established protocols at the Hope Bay Site. Fuel transfer activities during sealift will be conducted as detailed in the *Oil Pollution Prevention & Oil Pollution Emergency Plan* (Agnico Eagle 2022g).

### 3.9 Progressive Reclamation

Progressive reclamation as outlined by the Mackenzie Valley Land and Water Board and Aboriginal Affairs and Northern Development Canada (MVLWB and AANDC 2013) is defined as:

*“Progressive reclamation takes place prior to permanent closure to reclaim components and/or decommission facilities that no longer serve a purpose. These activities can be completed during operations with the available resources to reduce future reclamation costs, minimize the duration of environmental exposure, and enhance environmental protection. Progressive reclamation may shorten the time for achieving closure objectives and may provide valuable experience on the effectiveness of certain mitigation measures that might be implemented during closure.”*

Progressive reclamation will continue at the Hope Bay Project site during Care and Maintenance including:

- Immediate cleanup of materials (e.g., soil, snow, ice) that may become contaminated during construction and operations due to fuel or other spills.
- Removal, and reclamation of buildings and infrastructure that become unnecessary over the life of the mine.
- Periodic shipment of hazardous waste off-site to minimize the amount of waste requiring removal at final closure.
- Upon completion of diamond drilling, drill equipment is demobilized from site, all drill casings are removed, if the casing is stuck due to permafrost it will be cut off at ground level. Cuttings are either used to fill the depression left by other drill operations in the vicinity or collected and removed. The land is leveled with bentonite if required and covered using overburden.
- Following drilling operations on ice, equipment and soiled and/or oily snow and ice are removed from the surface of the ice and deposited in active sumps.

Other progressive reclamation opportunities that may occur during Care and Maintenance include:

- Regrading and/or cover placement over any area of the TIA at Doris that will not be disturbed by future tailings placement.
- Placement of waste rock in the mine underground for backfill and the reclamation of the waste rock pile footprint, if additional on-surface storage is no longer required.



## SECTION 4. MONITORING AND REPORTING

During Care and Maintenance, the physical stability of all Project components will be monitored. Environmental, compliance, and reclamation monitoring programs will be continued in accordance with conditions outlined in the Water Licence in addition to the Type B Water Licence 2BB-MAE1727, and Project Certificates No. 003 and No. 009. Results of monitoring programs will be presented in the annual reports that are issued to the NWB, NIRB, KIA and Nunavut Tunngavik Incorporated (NTI) as detailed in Section 4.5 of this report. Table 4-1 summarizes the Environmental Management Plans and associated monitoring programs that will continue for the duration of Care and Maintenance.

**Table 4-1: Environmental Management and Monitoring Programs**

| Program                                      | Monitoring Summary  |
|--|---|
| <b><i>Biophysical Environment</i></b>        |   |
| Spill Contingency                            | Post-incident monitoring as required following a spill event as outlined in the Spill Contingency Plan.   |
| Oil Pollution Emergency                      | Post-incident monitoring as required following a spill event to the marine environment as outlined in the Oil Pollution Emergency Plan.   |
| Surface Water Management                     | Water quality monitoring as required in water licences and MDMER, erosion and sedimentation, tracking of water movement and water use volumes, inspections of water management infrastructure and discharges to tundra as outlined in the Doris-Madrid Water Management Plan.   |
| Groundwater Management                       | Mine inflow quality monitoring, and tracking of water movement and volumes as outlined in the Groundwater Management Plan   |
| Domestic Wastewater Treatment                | Monitoring of the Sewage Treatment Plant performance indicators by operators, effluent quality sampling, tracking of effluent discharge and sludge volumes produced as outlined in the Domestic Wastewater Treatment Management Plan  |
| Tailings Management                          | Instrumentation monitoring, data collection and physical inspections of the TIA North and South Dams, tailings surface, Emergency Dump Catch Basins, pipelines, intake structure and pumps as outlined in the Phase 2 Tailings Impoundment Area Operations, Maintenance and Surveillance Manual, including water quality and water level monitoring of the Reclaim Pond. Complete annual updates to the Water and Load Balance Model. |
| Quality Assurance Quality Control            | Implementation of quality assurance and quality control protocols, including the collection of field blanks, travel blanks and duplicates, and data management as outlined in the Quality Assurance and Quality Control Plan.   |
| Waste Rock, Ore and Mine Backfill Management | Geochemical monitoring of waste rock, tracking of volumes and storage locations of waste rock and ore produced as outlined in the Waste Rock, Ore and Mine Backfill Management Plan.  |
| Non-hazardous Waste Management               | Conduct routine inspections of waste management facilities, maintain inventory of all domestic that was produced, including volumes of waste open burned or transported offsite for disposal as outlined in the Non-Hazardous Waste Management Plan. Sampling of bottom ash generated through open burning and incineration.  |
| Hydrocarbon Contaminated Material Management | Soil and water quality sampling of the landfarm facility as outlined in the Hydrocarbon Contaminated Material Management Plan.  |
| Hazardous Waste Management                   | Conduct routine inspections of waste management facilities, maintain inventory of all hazardous was produced and transported offsite for disposal as outlined in the Hazardous Waste Management Plan.   |

| Program                            | Monitoring Summary   |
|------------------------------------|--|
| Incinerator Management             | Conduct routine inspections of waste management facilities, complete Incinerator stack testing as required, tracking of volumes of waste incinerated and sampling of bottom ash generated as outlined in the Incinerator Management Plan.              |
| Quarry Management                  | Water quality monitoring, quarry rock sampling, and tracking of volumes produced and used as per the Quarry Management and Monitoring Plan   |
| Explosives                         | Tracking of volumes stored and used as outlined in the Explosives Management Plan.   |
| Air Quality                        | Collection of meteorological data, dustfall monitoring, and particulate monitoring as outlined in the Air Quality Management Plan.   |
| Aquatic Effects Monitoring Program | Hydrological data collection and water quality monitoring of the receiving aquatic environment as outlined in the Aquatic Effects Monitoring Plan.   |
| Environmental Effects Monitoring   | Water quality monitoring and biological studies in Roberts Bay as required under MDMER.  |
| Wildlife Mitigation and Monitoring | Monitoring programs including: wildlife camera program, habitat loss calculations, noise monitoring, incident and mortality monitoring, and documentation of general wildlife observations as outlined in the Wildlife Mitigation and Monitoring Plan. |
| Fisheries Authorization Monitoring | Monitoring of fish and fish habitat at Roberts Outflow as required by the Roberts Lake Fish Enhancement Monitoring Program commitment under the Doris North No Net Loss Plan.  |
| Annual Geotechnical Inspections    | Inspection to be completed by a registered Geotechnical Engineer as outlined in the Phase 2 Tailings Impoundment Area Operations, Maintenance and Surveillance Manual.   |
| Invasive Plant Surveys             | Monitoring for invasive plants as outlined in the Wildlife Mitigation and Monitoring Plan.   |
| Seepage Sampling                   | Waste rock storage area seepage surveys and sampling as outlined in the Waste Rock, Ore and Mine Backfill Management Plan. Construction rock seepage surveys and sampling as outlined in the Hope Bay Project Quarry Management Plan.                  |
| <b>Socio-economic Environment</b>  |  |
| Socio-Economic Monitoring          | Monitoring to be completed as outlined in the SEMP to support compliance with the Nunavut Agreement and Project Certificate requirements.  |

MDMER = Metal and Diamond Mining Effluent Regulations; TIA = Tailings Impoundment Area; SEMP = Socio-Economic Monitoring Plan (SEMP)

#### 4.1 Physical Structures

Physical inspections will be conducted to ensure that all infrastructure is performing as designed. All inspections will be formally recorded and available for review upon request of an Inspector. Generally, this will include monitoring and reporting of the following:

- Physical inspections of TIA North and South dams, Emergency Dump Catch Basins, access roads, pipelines, intake structures and pumps, and tailings surface;
- Data collection and monitoring as outlined in the Phase 2 Tailings Impoundment Area Operations, Maintenance and Surveillance Manual;
- Physical inspections of the Madrid North Contact Water Pond (CWP) as outlined in the Madrid North CWP Operations, Maintenance and Surveillance Manual;
- Annual geotechnical inspections by a qualified geotechnical engineer;
- Recording fuel levels in all fuel tanks and weekly monitoring for leaks or hazards;
- Monthly site inspections by the Environmental Superintendent or designate;

- Detailed inspections by the Environmental Superintendent or designate following extreme events, including freshet, to identify and assess any damage;
- Regular inspections of surface diamond drilling activities and sumps used to support drilling; and
- Data collection from ground temperature cables as required by the Water Licence and Project Certificate No. 003.

#### **4.2 Water and Waste**

Water and waste management and monitoring will continue throughout Care and Maintenance in accordance with conditions outlined in the Water Licence and Type B Water Licence 2BB-MAE1727. This will include monitoring and reporting of the following:

- Record Reclaim Pond water levels;
- Record of pumping volumes when pumping of contact water ponds, sumps and TIA Reclaim Pond as described in the Doris-Madrid Water Management Plan;
- Visual inspections of discharge to tundra from contact water ponds and sumps;
- Record volumes of water used for domestic, drilling, dust suppression, and other purposes;
- Daily monitoring of the potable water quality at Doris camp;
- Record volumes of groundwater dewatered from the underground mine and conduct monitoring as outlined in the Groundwater Management Plan;
- Annual updates to the Water and Load Balance model and compare predicted water quality and water elevation of the TIA at Doris to measured water quality and elevation;
- Track and record of all domestic and hazardous waste produced, including volumes of waste incinerated, open burned, or transported offsite for disposal as described in the Hope Bay Project Hazardous Waste Management Plan and Hope Bay Project Non-Hazardous Waste Management Plan;
- Complete incinerator stack testing when required as outlined in the Hope Bay Project Incinerator Management Plan;
- Conducting weekly inspections of all water management and waste management facilities; and
- Record volumes of effluent discharge and sludge produced from operations of the Sewage Treatment Plant and conduct monitoring outlined in the Domestic Wastewater Treatment Management Plan.

#### **4.3 Environmental and Geotechnical**

Environmental and geotechnical monitoring programs including:

- Water quality monitoring as required under Type A and Type B water licences;
- Water quality and Environmental Effects Monitoring as required under the MDMER;
- Implement monitoring of the aquatic environment as described in the Aquatic Effects Monitoring Plan;

- Monitoring of wildlife and recording of all wildlife incidents, interactions and sightings, and monitoring for invasive plants as described in the Wildlife Mitigation and Monitoring Plan;
- Monitoring of fish and fish habitat at Roberts Outflow as required by the Roberts Lake Fish Enhancement Monitoring Program commitment under the Doris North No Net Loss Plan;
- Monitoring of air quality as described in the Hope Bay Project Air Quality Management Plan;
- Annual geotechnical inspections by a qualified geotechnical engineer;
- Monthly site inspections by the Environmental Superintendent or designate;
- Collection of meteorological and hydrological data;
- Conduct geochemical monitoring as outlined in the Hope Bay Project Waste Rock, Ore and Mine Backfill Management Plan, the Hope Bay Project Water and Ore/Waste Rock Management Plan for Boston Site, and the Hope Bay Project Quarry Management Plan;
- Recording volume of waste rock produced and volume of waste rock stored on the waste rock storage pads;
- Implement protocols described in the Quality Assurance and Quality Control Plan for all sampling; and
- Assess for potential archaeological sites during surface diamond drilling activities in consultation with the Project Archaeologist as described in the Heritage Resource Protection Plan.

#### **4.4 Socio-Economic**

The Hope Bay Socio-Economic Monitoring Plan (SEMP) is designed to support compliance with the Nunavut Agreement and Project Certificate requirements. The SEMP supports Agnico's commitments to fulfil best practices for social responsibility, and to provide relevant and timely information to support community development and management of socio-economic effects.

Within six (6) months of providing notice of intent to enter into Care and Maintenance, Agnico will submit to the NIRB, in collaboration with the Hope Bay Socio-Economic Working Group, an updated Hope Bay Socio-Economic Monitoring Plan to the Kitikmeot Socio-Economic Monitoring Committee that will also include detail regarding specific measures that may mitigate the potential for negative effects as a result of the Project's temporary or permanent closure.

#### **4.5 Reporting**

Reporting requirements that will continue under Care and Maintenance are summarized in Table 4.2.

**Table 4.2: Hope Bay Reporting Requirements**

| <b>Reporting Requirement</b>                              | <b>Submission Date</b>                        |
|---|---|
| NWB Monthly Report  | 30 days after end of each calendar month      |
| NWB Annual Report   | March 31                                      |
| NIRB Annual Report  | April 30                                      |
| NIRB Development Plan Update                              | January 1                                     |
| KIA Annual Report   | March 31                                      |
| NTI Annual Report   | March 31                                      |
| National Pollutant Release Inventory (NPRI) Report        | June 1  |
| Greenhouse Gas Reporting Program (GHGRP) Report           | June 1  |
| Output-Based Pricing System (OBPS) Report                 | June 1  |
| MDMER Quarterly Effluent Monitoring Report                | 45 days after end of each calendar quarter    |
| MDMER Annual Monitoring Report                            | March 31                                      |
| MDMER Annual Effluent and Water Quality Monitoring Report | March 31                                      |
| MDMER First Biological Monitoring Interpretative Report   | 36 months after subject to Section 7 of MDMER |

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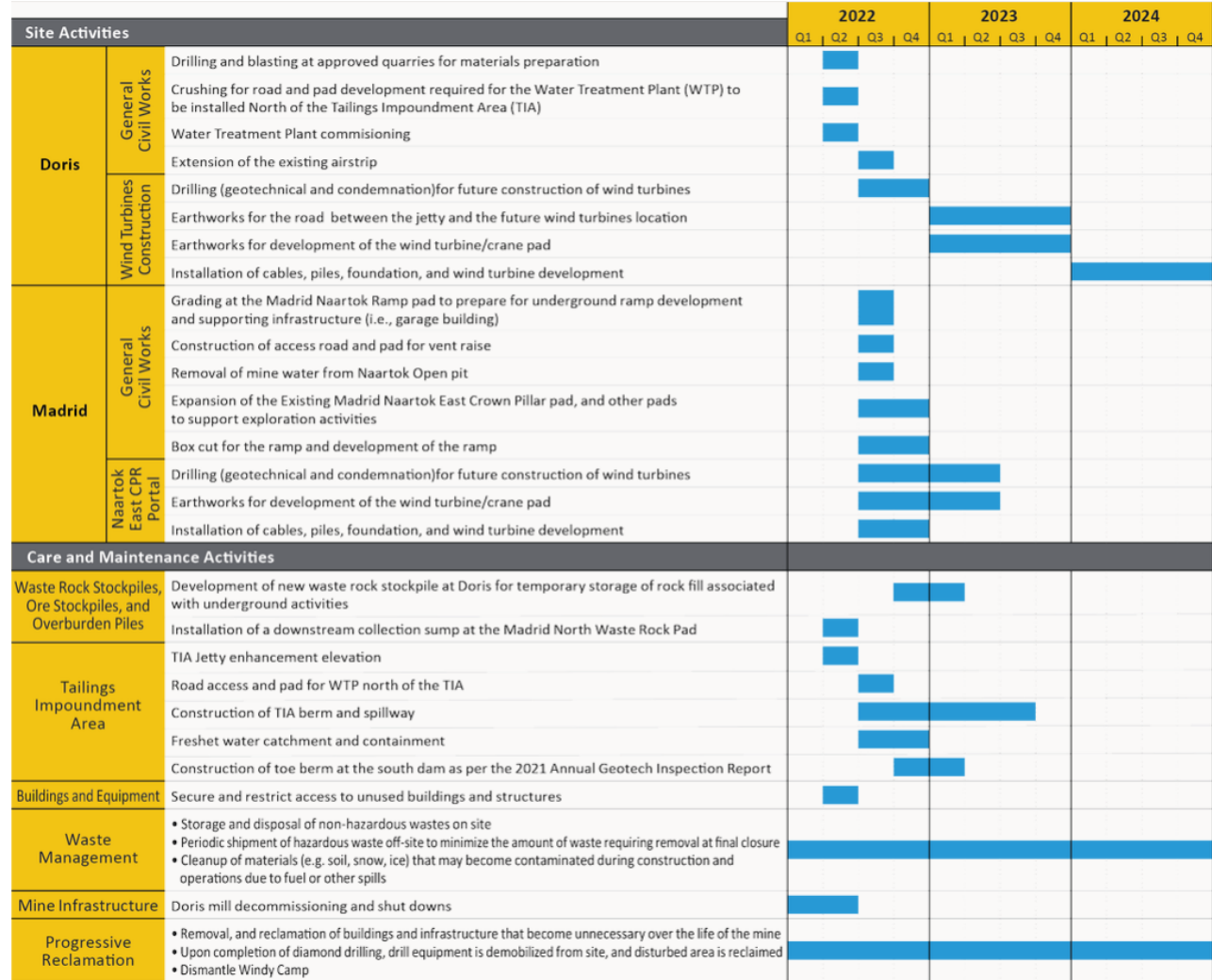
## SECTION 5. SCHEDULE

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Temporary Care and Maintenance activities at Doris and Madrid commenced in 2022 and Agnico Eagle has scheduled activities to the end of 2024. The proposed Doris-Madrid Care and Maintenance planned activities schedule is presented in Figure 5.1. This Schedule will be reviewed and updated on an annual basis to capture any changes to the proposed timing of activities.

Monitoring and reporting will continue during Care and Maintenance as outlined in Section 4 and summarized in Table 4.2.

Figure 5.1: Doris-Madrid Care and Maintenance Planned Activities



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