



## **Blackwater Gold Project**

### **Cultural and Spiritual Resources Management Plan**

August 2023

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## ACRONYMS AND ABBREVIATIONS

Indigenous nations	Lhoosk'uz Dené Nation, Ulkatcho First Nation, Nadleh Whut'en First Nation, Saik'uz First Nation, Stellat'en First Nation and Nazko First Nation (as defined in the Project's Environmental Assessment Certificate #M19-01)
AIA	Archaeological Impact Assessment
Artemis	Artemis Gold Inc.
BB	Big Bend
BC	British Columbia
Blackwater	Blackwater Gold Project
BLO	Blaze oval
BSD	Bark stripped diamond
BSL	Bark stripped lenticular
BSO	Barked stripped oval
BW Gold	BW Gold LTD.
CEA Agency	Canadian Environmental Assessment Agency
CEO	Chief Executive Officer
CSMP	Cultural and Spiritual Resources Management Plan
CHR	Cultural Heritage Resources
CM	Construction Manager
CMT	Culturally modified tree
COO	Chief Operating Officer
DS	Decision Statement
EM	Environmental Manager
EMLI	Ministry of Energy, Mines and Low Carbon Innovation
EMS	Environmental Management System
EPCM	Engineering, Procurement and Construction Management
ENV	Ministry of Environment and Climate Change Strategy
ERM	ERM Consultants Canada Ltd.
GM	General Manager
IAAC	Impact Assessment Agency of Canada
km	Kilometre
LDN	Lhoosk'uz Dené Nation

MOF	Ministry of Forests
New Gold	New Gold Inc.
NFN	Nazko First Nation
NWFN	Nadleh Whut'en First Nation
Project	Blackwater Gold Project
SFN	Saik'uz First Nation
StFN	Stellat'en First Nation
SMR	Stellako/Mills Ranch
t	Tonnes
TSF	Tailings Storage Facility
UFN	Ulkatcho First Nation
VP	Vice President

## 1. PROJECT OVERVIEW

The Blackwater Gold Project (the Project or Blackwater) is a gold and silver open pit mine located in central British Columbia (BC), approximately 112 kilometres (km) southwest of Vanderhoof, 160 km southwest of Prince George, and 446 km northeast of Vancouver.

The Project is presently accessed via the Kluskus Forest Service Road (FSR), the Kluskus-Ootsa FSR and an exploration access road, which connects to the Kluskus-Ootsa FSR at km 142. The Kluskus FSR joins Highway 16 approximately 10 km west of Vanderhoof. A new, approximately 13.8 km road (Mine Access Road) will be built to replace the existing exploration access road, which will be decommissioned. The new planned access is at km 124.5. Driving time from Vanderhoof to the mine site is about 2.5 hours.

Major mine components include a tailings storage facility (TSF), ore processing facilities, waste rock, overburden and soil stockpiles, borrow areas and quarries, water management infrastructure, water treatment plants, accommodation camps and ancillary facilities. The gold and silver will be recovered into a gold-silver doré product and shipped by air and/or transported by road. Electrical power will be supplied by a new approximately 135 km, 230 kilovolt (kV) overland transmission line that will connect to the BC Hydro grid at the Glenannan substation located near the Endako mine, 65 km west of Vanderhoof.

The Blackwater mine site is located within the traditional territories of Lhoosk'uz Dené Nation (LDN), Uikatcho First Nation (UFN), Skin Tyee Nation and Tsilhqot'in Nation. The Kluskus and Kluskus-Ootsa FSRs and Project transmission line cross the traditional territories of Nadleh Whut'en First Nation (NWFN), Saik'uz First Nation (SFN), and Stellat'en First Nation (StFN; collectively, the Carrier Sekani First Nations) as well as the traditional territories of the Nazko First Nation (NFN), Nee Tahi Buhn Band, Cheslatta Carrier Nation and Yekooche First Nation (EAO 2019a, 2019b).

Project construction is anticipated to take two years. Mine development will be phased with an initial milling capacity of 15,000 tonnes per day (t/d) or 5.5 million tonnes per annum (Mtpa) for the first five years of operation. After the first five years, the milling capacity will increase to 33,000 t/d (or 12 Mtpa) for the next five-years, and to 55,000 t/d (20 Mtpa) in Year 11 until the end of the 23-year mine life. The Closure phase is 24 to approximately 45 years, ending when the Open Pit has filled and the TSF is allowed to passively discharge to Davidson Creek, and the Post-closure phase is 46+ years.

New Gold Inc. (New Gold) received Environmental Assessment Certificate #M19-01 (EAC) on June 21, 2019 under the *Environmental Assessment Act* (2002) (EAO 2019c) and a Decision Statement (DS) on April 15, 2019 under the *Canadian Environmental Assessment Act, 2012* (CEA Agency 2019). In August 2020, Artemis Gold Inc. (Artemis) acquired the mineral tenures, assets and rights in the Blackwater Project that were previously held by New Gold. On August 7, 2020, the Certificate was transferred to BW Gold LTD. (BW Gold), a wholly-owned subsidiary of Artemis, under the *Environmental Assessment Act* (2018). The Impact Assessment Agency of Canada (IAAC) notified BW Gold on September 25, 2020 to verify that written notice had been provided within 30 days of the change of proponent as required in Condition 2.16 of the DS, and that a process had been initiated to amend the DS.

## 2. PURPOSE AND OBJECTIVES

This plan has been developed to meet the requirements of EAC Condition 18 (Cultural and Spiritual Resources Management Plan) and DS Condition 7 (Physical and Cultural Heritage and Structures, Sites or Things of Historical, Archaeological, Paleontological or Architectural Significance), as well as associated conditions of each authorization.

The purpose of the Cultural and Spiritual Resources Management Plan (CSMP) is to mitigate the Project's potential effects on known and as-yet unknown heritage resources or values. The BC *Heritage Conservation Act* includes the following definitions of "heritage" that are applicable to this plan:

*"heritage object" means, whether designated or not, personal property that has heritage value to British Columbia, a community or an aboriginal people*

*"heritage site" means, whether designated or not, land, including land covered by water, that has heritage value to British Columbia, a community or an aboriginal people*

*"heritage value" means the historical, cultural, aesthetic, scientific or educational worth or usefulness of a site or object*

The federal DS defines "heritage value" as *"the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations.*

Heritage resources considered in the CSMP include archaeological sites, historic sites, cultural sites (trails, historic settlements, log cabins), spiritual sites, culturally modified trees (CMTs), blazes and paleontological sites (dinosaur trackways/preserved foot prints and bones and plant fossils and shell beds and other invertebrate fossils).

The objective of the CSMP is to provide a clear process to guide the development, implementation, and monitoring of measures to address adverse effects on known and as-yet unknown heritage resources or values.

### 2.1 Qualified Person/Professional

The process for selecting the qualified person/professional to prepare the CSMP considered whether the person was eligible to hold a *Heritage Conservation Act* permit based on British Columbia (BC) Archaeology Branch requirements. The selection of the qualified person considered their training, experience and familiarity with the Project's environmental assessment.

Implementation of the CSMP will require a Professional Archaeologist authorized by the Archaeology Branch to hold *HCA* Section 12.2 and Section 12.4 Permits in the Project area. A qualified archaeologist will be retained through the life of the Project to hold the necessary *HCA* permits, oversee archaeological assessments, including monitoring, and assist with assessing potential Chance Finds. They will also be involved in on-going consultation with the Indigenous groups on matters of archaeology and cultural heritage.

### 2.2 Linkages to Other Management and Monitoring Plans

The CSMP is interconnected with three other EAC plans that relate to cultural heritage as follows:

- EAC Condition 15 (Indigenous Cultural Awareness and Recognition) requires BW Gold to consult with Aboriginal Groups to identify opportunities for cultural awareness and recognition. Such opportunities may include holding ceremonies, installing signage, executing cultural protocols, recognizing cultural heritage, or providing cultural awareness training to employees. Identifying these opportunities will help deepen BW Gold's understanding of Indigenous values and allow these values to be integrated into Project activities including cultural awareness training to employees.

- EAC Condition 16 (Aboriginal Engagement Plan) requires the development of an Aboriginal Group Engagement Plan to outline the means by which BW Gold will engage with each Aboriginal Group on the implementation of various requirements under the EAC during the life of the Project.
- EAC Condition 17 (Aboriginal Groups Monitor and Monitoring Plan) provides for an approach to identify and retain Aboriginal Monitors, the scope of Aboriginal Monitors' activities, and the terms of engagement for all Aboriginal Monitors. Aboriginal Monitor(s) responsibilities will include monitoring impacts on cultural heritage resources and cultural or historical heritage sites. Accordingly, Aboriginal Monitor(s) will allow for continued discussions with respect to Aboriginal Groups' cultural heritage throughout the Project and will ensure that groups have the opportunity to voice their values with respect to monitoring activities, including the monitoring of cultural heritage sites and resources.

The information identified in Conditions 16 and 18 may in some cases inform the practices identified in Condition 15. In many respects, Condition 17 provides the program for ensuring that Conditions 15 and 18 are appropriately implemented.

### 3. ROLES AND RESPONSIBILITIES

BW Gold has the obligation of ensuring that all commitments are met and that all relevant obligations are made known to mine personnel and site contractors during all phases of the mine life. A clear understanding of the roles, responsibilities, and level of authority that employees and contractors have when working at the mine site is essential to meet Environmental Management System (EMS) objectives.

Table 3-1 provides an overview of general environmental management responsibilities during all phases of the mine life for key positions that will be involved in environmental management. Other positions not specifically listed in Table 3.1-1 but who will provide supporting roles include independent environmental monitors, an Engineer of Record (EOR) for each tailings storage facility and dam, an Independent Tailings Review Board (ITRB), TSF qualified person, geochemistry qualified professional, and other qualified persons and QRPs.

**Table 3-1: Blackwater Roles and Responsibilities**

Position	Responsibility
Chief Executive Officer (CEO)	The CEO is responsible for overall Project governance. Reports to the Board.
Chief Operating Officer (COO)	The COO is responsible for engineering and Project development and coordinates with the Mine Manager to ensure overall Project objectives are being managed. Reports to CEO.
Vice President (VP) Environment & Social Responsibility	The VP is responsible for championing the Environmental Policy Statement and EMS, establishing environmental performance targets and overseeing permitting. Reports to COO.
General Manager (GM) Development	The GM Development is responsible for managing project permitting, the Project's administration services and external entities, and delivering systems and programs that ensure Artemis's values are embraced and supported: Putting People First, Outstanding Corporate Citizenship, High Performance Culture, Rigorous Project Management and Financial Discipline. Reports to COO.
Mine Manager	The Mine Manager, as defined in the <i>Mines Act</i> , has overall responsibility for mine operations, including the health and safety of workers and the public, EMS implementation, overall environmental performance and protection, and permit compliance. The Mine Manager may delegate some of their responsibilities to other qualified personnel. Reports to the GM.
Construction Manager (CM)	The CM is accountable for ensuring environmental and regulatory commitments/ and obligations are being met during the construction phase. Reports to the Mine Manager.
Environmental Manager (EM)	The EM is responsible for the day-to-day management of the Project's environmental programs and compliance with environmental permits, updating EMS and Management Plans. The EM or designate will be responsible for reporting non-compliance to the CM, and Engineering, Procurement and Construction Management (EPCM) contractor, other contractors, the Company and regulatory agencies, where required. The Environmental Manager informs the Environmental Monitors of current site conditions that may influence monitoring programs. Supports the CM and reports to the Mine Manager.
Departmental Managers	Departmental Managers are responsible for implementation of the EMS relevant to their areas. Report to Mine Manager.
Indigenous Relations Manager	Indigenous Relations Manager is responsible for Indigenous engagement throughout the life of mine. Also responsible for day-to-day management and communications with Indigenous groups. Reports to VP Environment & Social Responsibility.

Position	Responsibility
Community Relations Advisor	Community Relations Advisor is responsible for managing the Community Liaison Committee and Community Feedback Mechanism. Reports to Indigenous Relations Manager.
Environmental Monitors	Environmental Monitors (includes Environmental Specialists and Technicians) are responsible for tracking and reporting on environmental permit obligations through field-based monitoring programs. Report to EM.
Aboriginal Monitors	Aboriginal Monitors are required under EAC #M19-01 Condition 17 and will be responsible for monitoring for potential effects from the Project on the Indigenous interests. Aboriginal Monitors will be involved in the adaptive management and follow-up monitoring programs. Report to the EM.
Employees and Contractors	Employees are responsible for being aware of permit requirements specific to their roles and responsibilities. Report to Departmental Managers.
Qualified Professional and Qualified Persons	Qualified registered professionals and qualified persons will be retained to review objectives and conduct various aspects of environmental and social monitoring as specified in Environmental and Social Management Plans.

BW Gold will employ a qualified person as an EM who will ensure that the EMS requirements are established, implemented and maintained, and that environmental performance is reported to management for review and action. The EM is responsible for retaining the services of qualified persons or QRPs with specific scientific or engineering expertise to provide direction and management advice in their areas of specialization. The EM will be supported by a staff of Environmental Monitors that will include Environmental Specialists and Technicians and by a consulting team of subject matter experts in the fields of environmental science and engineering.

During the Construction phase, BW Gold will be entering into multiple EPC contracts, likely for the Transmission Line, Process Plant, Tailings and Reclaim System, and 25kV Power Distribution. Each engineer/contractor will have their own CM and there will be a BW Gold responsible Project Manager and/or Superintendent who ultimately reports to the GM Development. Some of the scope, such as the TSF and Water Management Structures will be self-performed by BW Gold, likely using hired equipment. Other smaller scope packages may be in the form of EPCM contracts. The EPCM contractors will report to the CMs who will ultimately be responsible for ensuring that impacts are minimized, and environmental obligations are met during the Construction phase. For non-EPCM contractors, who will perform some of the minor works on site, the same reporting structure, requirements, and responsibilities will be established as outlined above. BW Gold will maintain overall responsibility for management of the construction and operation of the mine site and will therefore be responsible for establishing employment and contract agreements, communicating environmental requirements, and conducting periodic reviews of performance against stated requirements.

The CM is accountable for ensuring that environmental and regulatory commitments/obligations are being met during the construction phase. The EM will be responsible for ensuring that construction activities are proceeding in accordance with the objectives of the EMS and associated management plans. The EM or designate will be responsible for reporting non-compliance to the CM and EPCM contractor, other contractors, and regulatory agencies, where required. The EM or designate will have the authority to stop any construction activity that is deemed to pose a risk to the environment; work will only proceed when the identified risk and concern have been addressed and rectified.

Environmental management during operation of the Project will be integrated under the direction of the EM, who will liaise closely with departmental managers and will report directly to the Mine Manager. The EM will be supported by the VP of Environment and Social Responsibility in order to provide an

effective and integrated approach to environmental management and ensure adherence to corporate environmental standards. The EM will be accountable for implementing the approved management plans and reviewing them periodically for effectiveness. Departmental area managers (e.g., mining, milling, and plant/site services) will be directly responsible for implementation of the EMS and EMPs relevant to their areas. All employees and contractors are responsible for daily implementation of the practices and policies contained in the EMS. During Closure and Post-closure staffing levels will be reduced to align with the level of activity associated with these phases. Prior to initiating closure activities, BW Gold will revisit environmental and health and safety roles and responsibilities to ensure the site is adequately resourced to meet permit monitoring and reporting requirements. The Mine Manager will have overall responsibility for Closure and Post-closure activities at the mine site.

Pursuant to Condition 19 of the EAC #M19-01, BW Gold has established an Environmental Monitoring Committee to facilitate information sharing and provide advice on the development and operation of the Project, and the implementation of EAC conditions, in a coordinated and collaborative manner. Committee members include representatives of the Environmental Assessment Office (EAO), UFN, LDN, NWFN, StFN, SFN, NFN, Ministry of Energy, Mines and Low Carbon Innovation (EMLI), Ministry of Environment and Climate Change Strategy, and BC Ministry of Forests (FOR; formerly, Ministry of Forests, Lands, Natural Resource Operations and Rural Development or FLNRORD).

Pursuant to Condition 17 of the EAC #M19-01, Aboriginal Group Monitor and Monitoring Plan, BW Gold will retain or provide funding to retain a monitor for each Indigenous nations defined in the EAC #M19-01 prior to commencing construction and through all phases of the mine life. The general scope of the monitor's activities will be related to monitoring for potential effects from the Project on Indigenous nations' interests.

## 4. COMPLIANCE OBLIGATIONS, GUIDANCE AND BEST MANAGEMENT PRACTICES

### 4.1 Legislation

Federal legislation applicable to heritage resources includes:

- *Canadian Environmental Assessment Act, 2018*; and
- *United Nations Declaration on the Rights of Indigenous Peoples Act*.

Provincial legislation and other key requirements applicable to heritage resources include:

- *Coroners Act*;
- *Cremation, Internment and Funeral Services Act*;
- *Declaration on the Rights of Indigenous Peoples Act*;
- *Environmental Assessment Act*;
- *Forest and Range Practices Act*;
- *Forest Planning and Practices Regulation*;
- *Freedom of Information and Protection of Privacy Act*;
- *Heritage Conservation Act*;
- *Land Act*;
- *Fossil Definition Regulation*;
- *Local Government Act*;
- *Mineral Tenure Act*;
- Mineral Definition Modification Regulation;
- *Mines Act*; and
- Health, Safety and Reclamation Code for Mines in British Columbia (EMLI 2021).

#### 4.1.1 Heritage Conservation Act

Section 12.1 of the *Heritage Conservation Act* provides automatic protection for artifacts, features, materials or other physical evidence of human habitation or use on or before 1846 as well as petroglyphs, petroforms, heritage wrecks, and burials regardless of age.

There is no legislation that automatically protects intangible cultural and spiritual resources, including spiritual sites, transformer stones, ceremonial sites, and areas with Indigenous place names. However, Part 1 Section 4 of the *Heritage Conservation Act* provides:

*the Province (BC) may enter into a formal agreement with Indigenous Nations for the conservation and protection of heritage sites and objects that represent the cultural heritage of the aboriginal people who are represented by that Indigenous Nation.*

An agreement under this section provides protection under section 12.1 of the Act.

Permits issued under sections 12.2 and 12.4 of the *Heritage Conservation Act* include heritage investigation and inspection permits:

- Heritage inspections under Section 12.2 of the HCA involve physical examinations and other research to identify the heritage value of a property or a portion of it, and to establish, if the property is a heritage site or heritage object, including the need for protection and conservation, or conformance with heritage protection requirements.
- Heritage investigations under Section 12.2 of the HCA involve archaeological or other systematic studies of heritage property to reveal their history, and may include the recording, removal and analysis of artifacts, features and other material necessary for the purpose of the heritage investigation.
- Site alteration under Section 12.4 of the HCA allows for impacts to an archaeological site once the heritage inspections and/ or investigations have been completed. Additional archaeological work may be required under a Site Alteration Permit including monitoring of impacts and artifact collection.

#### 4.2 Compliance with Environmental Assessment Certificate and Federal Decision Statement Conditions

The CSMP addresses the requirements in EAC Condition 18 (Cultural and Spiritual Resources Management Plan) and DS Condition 7 (Physical and Cultural Heritage and Structures, Sites or Things of Historical, Archaeological, Paleontological or Architectural Significance). Concordance tables identifying where the requirements in EAC Condition 18 and DS Condition 7 are provided in Appendix A and Appendix B, respectively.

The CSMP plan has been prepared and reviewed by qualified persons/qualified professionals. The reviewer of the plan is a registered archaeologist in BC and has 15 years of archaeology experience in BC.

#### 4.3 Existing Permits

BW Gold received *Mines Act* Permit M-246 on June 22, 2021, authorizing early construction works for the Project. Part C (Protection of Land and Watercourses) Condition 9 of the permit includes the following requirements related to archaeological resources:

*a) Prior to beginning any mechanized surface disturbance on undisturbed lands, the Permittee must conduct field surveys consistent with archaeological and cultural heritage resources management procedures consistent with the provisions of the BC Heritage Conservation Act.*

*(b) For those sites that cannot be avoided, the Permittee must contact the Archaeology Branch of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development and make arrangements to scientifically excavate and record findings.*

Archer CRM Partnership has received Heritage Inspection Permit 2021-0322, which authorizes archaeological inspections for the Blackwater mine area and transmission line.

#### 4.4 Guidelines and Best Management Practices

Guidelines and best management practices related to cultural heritage resources include:

- BC Archaeological Impact Assessment Guidelines (Archaeology Branch 1998);
- BC Fossil Management Framework (n.d.); and  
Technical Guidance for Assessing Physical and Cultural Heritage or and Structure, Site or Thing (CEA Agency 2015).

## 5. ADAPTIVE MANAGEMENT FRAMEWORK

The CSMP is a living document that will evolve over time in response to feedback from Indigenous groups, monitoring results, chance finds, and the results of archaeological impact assessments (AIAs). The plan incorporates adaptive management as follows:

### ■ Plan

- Prior to site disturbance, complete AIA(s) within or adjacent to Project components that have not been previously assessed due to changes to infrastructure footprints to identify heritage sites.
- Engage with Indigenous groups to identify cultural and spiritual sites and related mitigation measures.
- Engage with Indigenous groups to determine confidentiality of known sites.

### ■ Do

- Implement training.
- Implement protection measures for known Heritage Resources (Section 8).
- Implement Archaeology and Cultural Heritage Chance Find Procedure (Chance Find Procedure).

### ■ Monitor

- In line with the Aboriginal Group Monitor and Monitoring Plan
- Maintain records to document monitoring of heritage sites and chance finds.
- Implementation of CSMP.
- Document any contraventions of the CSMP.

### ■ Adjust

- EM review of effectiveness of protection measures (Section 8).
- In line with incorporation of input from the Aboriginal Group Monitor and Monitoring Plan.
- Update the CSMP as required (Section 12).

## 6. TRAINING

Employees and contractors will receive information related to heritage resources previously identified on site as well as cross-cultural training on the history of local Indigenous nations and training on the Chance Find Procedure on their arrival on site through an environmental on-boarding training session and prior to the start of work as part of the Site Orientation. The purpose of this training is to provide site personnel with a basic level of awareness related to heritage, spiritual and archaeological resources and an understanding of their obligations regarding compliance with plan, regulatory requirements, commitments and best practices.

Site supervisors will be provided with a copy of the CSMP and will receive additional training with respect to the Chance Find Procedure (Appendix C).

BW Gold will regularly review and update the training and awareness related to the plan based on changes in training needs and regulatory requirements. If additional No Work Zones are identified during the course of the Project, this information will be provided to employees and contractors and maps will be updated accordingly. If there is an immediate potential for impact then work in the area will stop until the No Work Zones have been provided and delineated. Information on additional No Work Zones will be communicated through the BW Gold EM to the Departmental Manager and Indigenous Relations Manager.

## 7. BASELINE HERITAGE RESOURCE INFORMATION

An AIA under *Heritage Conservation Act* Permit #2012-0295 was undertaken in fall 2012 and summer 2013, which covered the mine site footprint and Project linear infrastructure (AMEC 2017). This work was summarized in the baseline report submitted as part of the EA (AMEC 2013). Where the two documents are in disagreement the information provided in the 2017 permit report was relied upon. Known palaeontological, historic and CMTs within the mine site and 150 metres (m) of the transmission line alignment centreline are shown on Figures 7-1 and 7-2 and described below. Archaeological sites are described below but cannot be shown on public documents.

Land use and knowledge reports were also reviewed, including the following:

- *Stellat'en First Nation Land and Resource Use Study Report. Proponent Version for New Gold Incorporated* (Anderson 2014),
- *An Ethnohistory of the Lhoosk'uz Dene Nation Traditional Territory* (Dewhirst 2013),
- *Skin Tyee First Nation Traditional Land Use Study for New Gold Inc's Proposed Blackwater Project* (DMCS and Skin Tyee First Nation 2015),
- *Nadleh Whut'en First Nation: Knowledge and Use Study Non-Confidential Report, New Gold's Proposed Blackwater Gold Project* (Olson and DeRoy 2016)
- *Ulkatcho First Nation and Lhoosk'uz Dené Nation: Part C Blackwater Gold Mine Project* (Keefer Ecological Services Ltd 2019).
- *Ulkatcho First Nation Traditional Land Use and Ecological Knowledge of the proposed New Gold Inc. Blackwater Project Final Report (Public)* (DMCS and Ulkatcho First Nation 2013), and
- *Traditional Land Use and Occupancy: For the New Gold Inc. – Blackwater Project.* (Thomas 2015).

### 7.1 Known Archaeological Resources

There are five known archaeological sites located within the mine site boundary (Table 7.1-1) and 23 known archaeological sites within 150 m of the transmission line alignment centreline (Table 7.1-2).

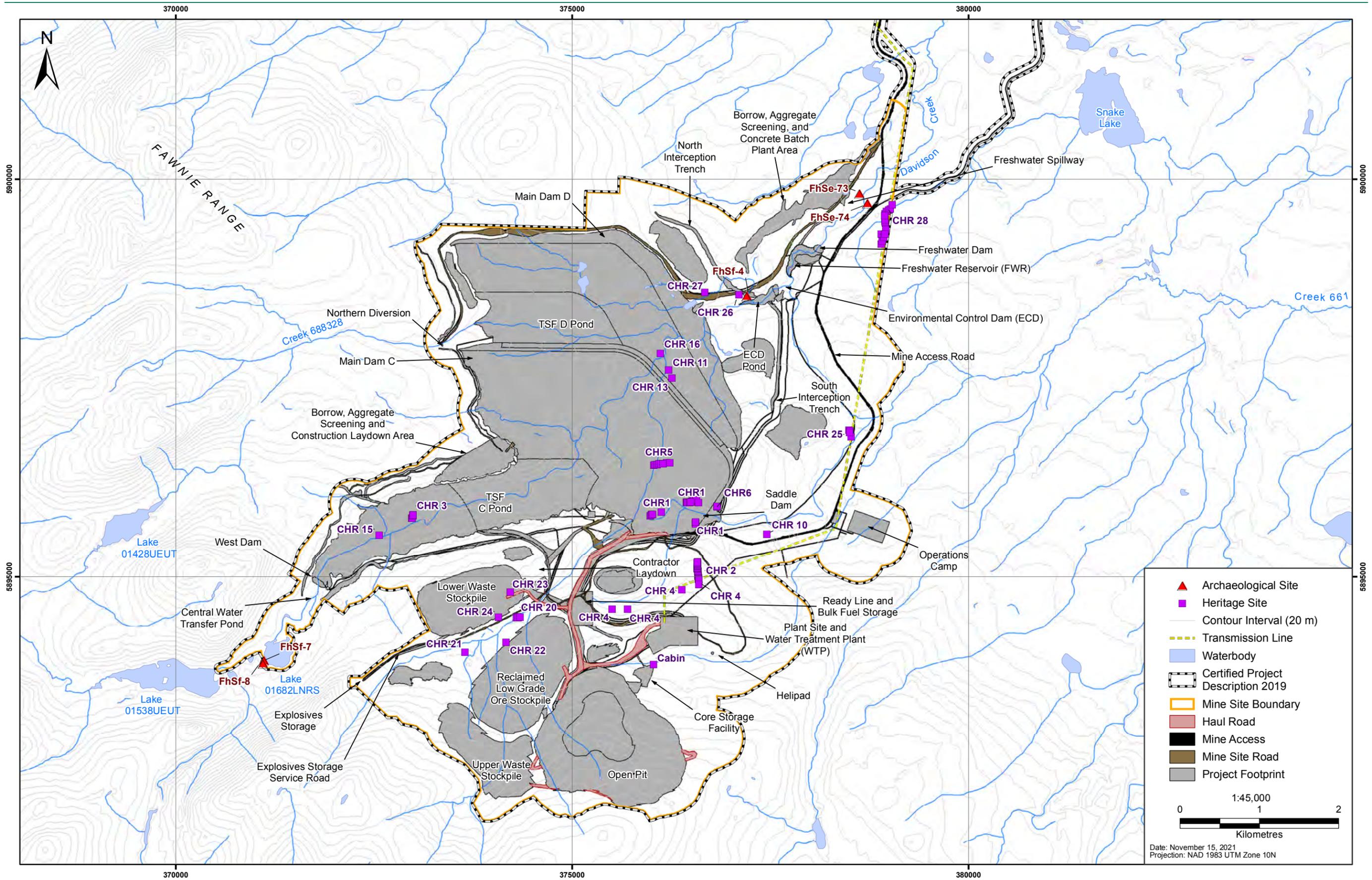
**Table 7.1-1: Known Archaeological Sites within the Mine Site**

Borden Number	Site Type	Mine Site Component	Distance from Mine Site Component (m)	Permit Number
FhSe-73	Lithic Scatter and Cultural Depression	Northern Diversion Road	125	2012-0295
FhSe-74	Lithic Scatter	Mine Access Road	65	2012-0295
FhSf-4	Lithic Scatter	North Interception Trench	0	2012-0295
FhSf-7	Lithic Scatter	Central Diversion Channel North	930	2012-0295
FhSf-8	Cache Pit	Central Diversion Channel North	970	2012-0295

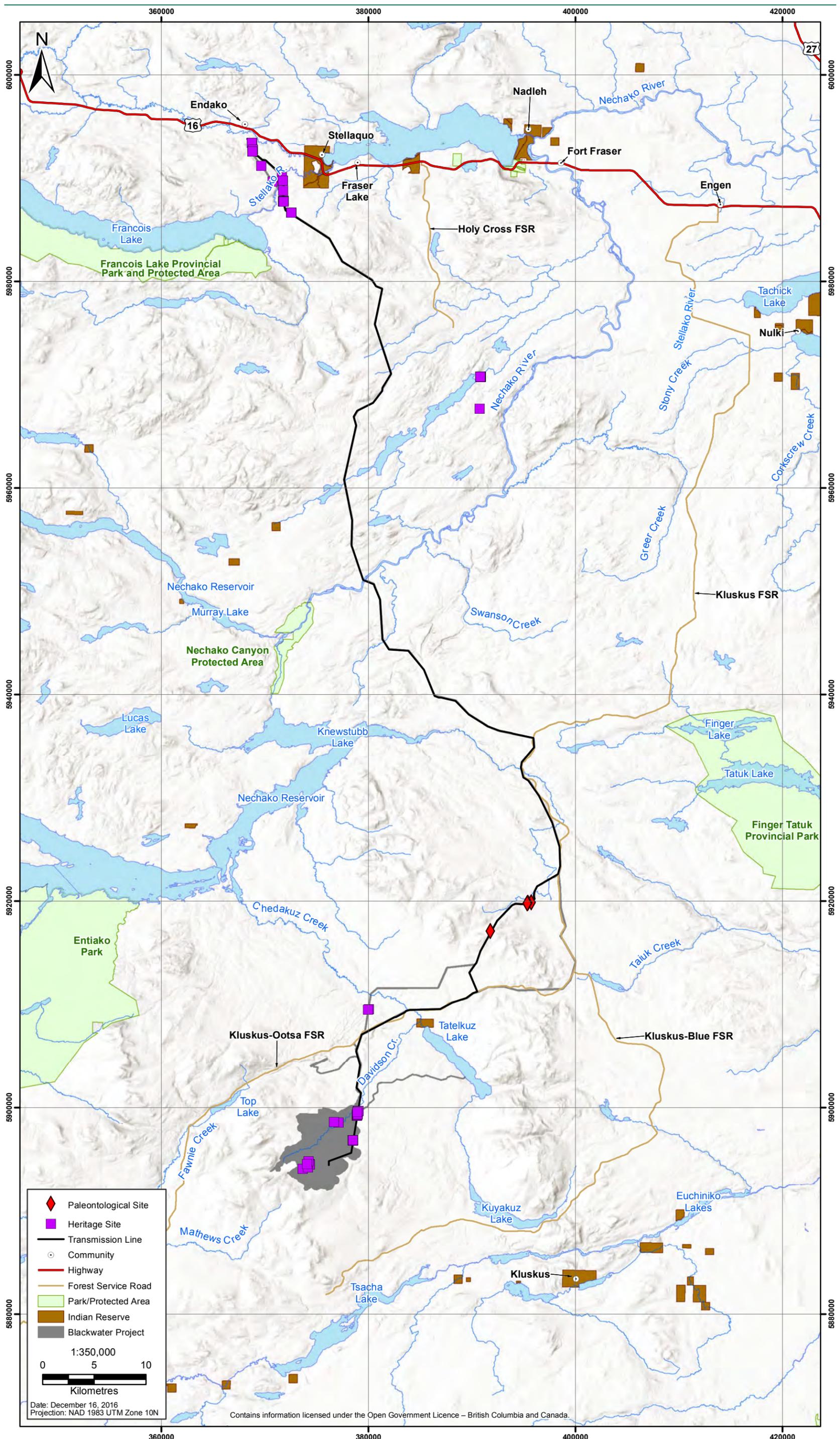
**Table 7.1-2: Known Archaeological Sites within 150 m of the Transmission Line Alignment Centreline**

Borden Number	Site Type	Distance from Transmission Line Centreline (m)	Permit Number
FhSe-43	Messue Trail	0	2000-0129, 2001-0171
FhSe-60	Lithic Scatter and Cache Pit	11	2002-0104
FhSe-76	Lithic Scatter	16	2021-0322
FhSe-77	Lithic Scatter	14	2021-0322
FhSe-78	Lithic Scatter	1	2021-0322
FhSe-79	Lithic Scatter	1	2021-0322
FjSd-16	Lithic Scatter	0	2021-0322
FjSd-17	Lithic Scatter	29	2021-0322
FjSd-18	Lithic Scatter	18	2021-0322
FjSe-17	Lithic Scatter	0	2021-0322
FjSe-18	Cache Pit; Lithic Scatter	0	2021-0322
FjSe-19	Lithic Scatter	20	2021-0322
FjSe-20	Cache Pit; Lithic Scatter	55	2021-0322
FjSe-21	Trail	0	2021-0322
FjSe-22	Lithic Scatter	0	2021-0322
FkSe-70	Lithic Scatter	8	2021-0322
FkSe-71	Lithic Scatter; Faunal; Hearth	0	2021-0322
FkSf-35	Cheslatta Trail	0	2009-0106
FkSf-45	Lithic Scatter	92	2011-0076
FkSf-47	Lithic Scatter	36	2021-0322
FkSf-48	Lithic Scatter	3	2021-0322
FISe-20	Lithic Scatter	38	2021-0322

Borden Number	Site Type	Distance from Transmission Line Centreline (m)	Permit Number
GaSf-6	Lithic Scatter	121	1982-0030
GaSf-43	Cache Pit	0	2012-0295
GaSf-44	Cache Pit	0	2012-0296
GaSf-45	Cache Pit	55	2012-0295
GaSf-46	Cache Pit	61	2012-0295
GaSf-62	Cache Pit; Lithic Scatter	0	2021-0322
GaSf-63	Cache Pit; Lithic Scatter	10	2021-0322
GaSf-64	Cache Pit	39	2021-0322
GaSf-65	Cache Pit	15	2021-0322
GaSf-66	Cache Pit; Lithic Scatter	21	2021-0322
GaSf-67	Cache Pit	71	2021-0322
GaSf-68	Lithic Scatter	35	2021-0322
GaSf-71	Cache Pit	28	2021-0322
GaSf-72	Lithic Scatter	46	2021-0322
GaSf-73	Cache Pit	8	2021-0322
GaSf-14576-T1*	Cache Pit	86	2021-0322
GaSg-2	Cemetery	99	1982-0030
GaSg-17	Lithic Scatter	0	2021-0322
GaSg-18	Cache Pit; Lithic Scatter	12	2021-0322



**Figure 7-1: Known Archaeological Sites and Cultural Heritage Resources**



**Figure 7-2: Known Cultural Heritage Resources within Transmission Line Alignment**

## 7.2 Known Cultural Heritage Resources

There are 20 CMTs and one historic cabin within the mine site (Table 7.2-1; Figure 7-1). There are 17 CMTs within 150 m of the transmission line alignment centreline outside the mine site (Table 7.2-2; Figure 7-2). No pre-1846 CMTs were located within 150 m of known infrastructure.

**Table 7.2-1: Historic Cultural Heritage Resources (CHRs) within the Mine Site**

CHR#	Type <sup>1</sup>	Year <sup>2,3</sup>	Description	Distance to Infrastructure	Infrastructure
1	BSO	Unknown	21 blazes on two NE/SW trending terraces. Likely from mineral exploration	0	TSF
2	BSO	Unknown	19 N/S trending blazes. Likely from mineral exploration	3	Transmission Line
3	BSO	Unknown	5 historic blazes trending NW/SE for 50 m towards Davidson Creek	0	TSF
4	BSO	Unknown	4 blazed trees trending N/S over 1.1 km	48	Transmission Line
5	BSO/BSD	Unknown	8 blazed trees trending E/W over 200 m	0	TSF
6	BSL	1897/1907 (+/- 10 years)	Two standing dead trees	0	TSF
10	Bound	Unknown	Single "bound" CMT	75 m north	Access Road
11	Bound	Unknown	Single "bound" CMT	0	TSF
13	Bound	Unknown	Bound CMT	0	TSF
15	BSO	Unknown	Advanced state of decay. Unable to date.	0	TSF
16	BSL	Unknown	Advanced state of decay. Unable to date.	0	TSF
20	BLO	Unknown	4 blazed trees in linear alignment suggesting association with mineral exploration.	101 m northeast	Low Grade Ore Stockpile
21	BLO	<30	2 blazed trees in linear alignment suggesting association with mineral exploration	173 m southeast	Mine Site Road
22	BLO	<20	3 chainsaw cut blazed trees in linear alignment suggesting association with mineral exploration	0	Low Grade Ore Stockpile
23	BLO	<20	1 chainsaw cut blazed tree located on a game trail.	0	Lower Waste Stockpile
24	BLO	Unknown	6 blazed trees in linear alignment suggesting association with mineral exploration	70 m north	Low Grade Ore Stockpile
25	N/A	Unknown	11 blazed trees in linear alignment suggesting association with mineral exploration	0	Transmission Line

CHR#	Type <sup>1</sup>	Year <sup>2,3</sup>	Description	Distance to Infrastructure	Infrastructure
26	Shaped	Post 1935	1 CMT sampled	10 m south	Mine Site Road
27	Shaped	Post 1993	1 CMT sampled	36 m north	Mine Site Road
28	BSO	1936-1993	Trees along a well used trail	0	Transmission Line
Cabin	Cabin	1940-1980	Log cabin foundation and kitchen wares	17 m north	Core Storage Facility

<sup>1</sup> BSO: Barked Stripped Oval, BSD: Bark Stripped Diamond, BSL: Bark Stripped Lenticular, BLO: Blaze Oval.

<sup>2</sup> The CMTs referenced in the table were identified in the EA submission as post-1846. The Year Modified is noted as 'Unknown' if the tree was not cored during the AIA and therefore the date is unknown. In these instances, professional judgement may have been used to determine if the tree pre-dated 1846.

<sup>3</sup> It is difficult to determine the exact date of the CMT if the tree is too rotten or if in the professional opinion of archaeologist, the scar obviously post-dates 1846. This determination is often made based on the age of the tree or the nature of the modification.

**Table 7.2-2: Historic Cultural Heritage Resources (CHRs) within 150 m of the Transmission Line Alignment Centreline**

CHR#	Type <sup>1</sup>	Year Modified <sup>2,3</sup>	Description	Distance from Transmission Line Centreline (m)
32	BSR/BS/BSO	Unknown	1 cambium-stripped standing lodgepole pine, with a rectangular scar and two oval blazes. 1 standing tree in a previously harvested forestry cutblock; blazes on east and west sides of tree.	1
33	BSO	Unknown	1 standing lodgepole pine with two oval blazes. 2 more blazed trees outside proposed transmission line; approximately linear alignment suggests association with forestry practice.	16
38	BSL	Unknown	3 bark- stripped lodgepole pine. Approximate linear alignment suggests association with forestry practice.	112
40	Unknown	Unknown	1 box trap. Recent trap, located on tree; lure (fish) still on wire inside trap.	50
42	Unknown	Post 1978	1 shaped spruce. Increment core indicates modification date after 1978.	26
43	BSL	Unknown	1 lodgepole pine with lenticular barkstrip scarring. Located at base of a steep slope; advanced state of decay precluded dating.	18
44	BS/BSL/BSO	Unknown	8 standing and 1 fallen dead barkstripped lodgepole pine. Advanced state of decay precluded dating.	0

CHR#	Type <sup>1</sup>	Year Modified <sup>2,3</sup>	Description	Distance from Transmission Line Centreline (m)
45	BST	1945	2 spruce trees with triangular barkstrip scars. Two trees within 5 m of each other; 1 with 2 scar faces. Attempts were made to date both trees; one tree yielded a modification date of 1945.	34
Blazes	BL	Unknown	Two modern blazes, N-S orientation	50
13576-CMT	BS	1879	Four bark stripped lodgepole pine, three standing one on ground in small cluster. Three standing were fully recorded, two cored, only one core was countable and returned a scar date of 1879.	0
CMT22 Unknown	BS	Post-1846	Bark stripped lodgepole pine.	4
CMT22-2	BS	Post-1846	Bark stripped lodgepole pine.	45
CMT22-3	BS	Post-1846	Bark stripped lodgepole pine.	5
CMT22-4	BS	Post-1846	Bark stripped lodgepole pine.	1
CMT22-5	BS	Post-1846	Bark stripped lodgepole pine.	3
CMT22-6	BS	Post-1846	Bark stripped lodgepole pine.	2
Trap	N/A	Unknown		47

<sup>1</sup> BSO: Barked Stripped Oval, BSD: Bark Stripped Diamond, BSL: Bark Stripped Lenticular, BLO: Blaze Oval.

### 7.3 Known Spiritual Sites

Subject to further consultation with Indigenous groups, there are three known spiritual resources near the Project area with cultural importance and spiritual properties. Indigenous representatives and/or Indigenous Knowledge Holders from the affected Indigenous groups will be also be invited to identify any impacts to these spiritual resources that by the Project. If potential impacts are identified the cultural importance and spiritual properties of these resources will be acknowledged through ceremony or appropriate cultural protocols and preserved to the extent possible. If sites are confidential they will be represented, including an appropriate buffer, by only by the “No Work Zone” designation on Project maps and documents.

#### 7.3.1 Mount Davidson and Tsacha Mountain

The following information is from Keefer Ecological Services (2019):

*“Mount Davidson is highly respected by our communities for the food it provides and the healing ceremonies that occur at the mountain. Members of the Baptiste family (with rights to the BaptisteCassam keyoh; Figure 4) recount times when an Elder would guide them to a place on the mountain to sit for 3-4 days under a ts’oo (spruce) tree to fast. There is concern within our communities that the protocols for visiting these sacred places will not be followed by newcomers (personal communication, community meeting notes, March, 2017). Mount Davidson is also an important gathering area for certain higher-elevation medicinal plants (personal communication, community meeting notes, April 2017). Mount Davidson and Tsacha Mountain, which is found just south of Mount*

*Davidson, are collectively referred to as Ts'oodenla; meaning "sounds like two mountains together" or "something piled up like a mountain" as there is not a separate traditional name for each individual mountain (personal communication, LDN Band member, May, 2017; Dewhirst, 1995). An LDN community member recounts times when his family would camp at Mount Davidson to hunt and gather food and medicinal plants. When asked about the potential environmental effects of the mine, he indicated that his family is unlikely to return to Mount Davidson, Salmon House Falls, Takia Creek, or Dean River to participate in these traditional practices following the development of the Project (LDN Band member, personal communication, May, 2017). Another member of the Baptiste family has recounted stories of her family hunting whudzih (caribou) at Mount Davidson, describing a rock feature that was intentionally built to aid in the corralling of whudzih (caribou), as part of her family's hunting strategy. Her mother's knowledge of the location of this significant cultural feature within their keyoh (the Baptiste-Cassam keyoh; Figure 4) puts it close to the proposed pit location for the Project."*

### **7.3.2 Tatelkuz Lake**

Tatelkuz Lake was used by Indigenous groups for ceremonial purposes and the cremation of family members. Cremated remains were carried by relatives for a year and then scattered in this area. Berries and medicinal plants are also collected on the south and south-east sides of the Lake (ERM 2016). There are no known heritage sites within 150 m of the freshwater supply system where it enters Tatelkuz Lake.

### **7.3.3 Kuyakuz Mountain and Kuyakuz Lake**

The following information is from Part C of the EAO Assessment Report (EAO 2019a):

*"K'ai k'uz (Kuyakuz Mountain), just east of the proposed mine site, is a sacred crematory mountain for LDN and is a "no-go" zone with respect to industrial development and other public land use. Along the south and eastern flanks of K'ai k'uz (Kuyakuz Mountain) lies Kuyakuz Lake, where a number of sacred sites and burials, in addition to a historical fishing site and a fish weir, exist along the shore (Dewhirst, 1995; Tobias, 2012). There are a number of other "very powerful" sacred sites along the Grease Trail and throughout our traditional territories. These sites range from absolutely do not enter, to ones that you can enter, but only after a set of protocols have been followed. The sites also have limitations on what can occur on them. For instance, there are sites where you can enter and sleep within the areas as long as the respectful protocol was followed before entering. There are other sites where you can cross over the area after the respective protocol was followed, but you are not allowed to sleep on the site (personal communication, LDN community members, April, 2013; Dewhirst, 1995).*

## 7.4 Known Paleontological Sites

There are no known paleontological sites within the mine site and four known paleontological sites within 150 m of the transmission line alignment centreline (Table 7.4-1).

**Table 7.4-1: Paleontological Sites within 150 m of the Centreline of the Transmission Line Alignment**

Paleontological Resources	Fossil Type	Distance from Transmission Line Centreline (m)
C-056986	Bivalves, belemnites	101
C-143722	Ammonids, bivalves, gastropods, ichnofossil	10
C-177438	Ichthyoliths, gastropod, bivalves	7
C-203467	Bivalves, plant	64

## 8. PROTECTION MEASURES

Avoidance of cultural heritage sites is always the preferred option. Impact of the Project on cultural heritage sites will be minimized through the implementation of the protection measures discussed below. Protection measures including avoidance and mitigation measures to address adverse effects on known and as-yet unknown heritage resources or values. Protection measures include both measures for site avoidance and mitigation measures to be implemented if avoidance is not feasible. If known archaeological sites protected under the *Heritage Conservation Act* are impacted without mitigation measures carried out in advance under a *Heritage Conservation Act* permit then penalties may be levied in accordance with applicable law.

### 8.1 Known Sites

#### 8.1.1 Archaeological Sites

There are known archaeological sites within the mine site and 150 m of the transmission line alignment (Section 7.1). Beyond 150 m from the Transmission Line alignment no direct or indirect effect are anticipated. The following measures will be undertaken for Project activities located within 0 to 50 m of a known site:

- Flag or delineate an area of at least 50 m around the site and mark as a “No Work Zone” from the site boundary to align with Archaeology Branch’s Remote Access to Archaeological Data areas of high archaeological potential.
- Construction monitoring (Section 8.1.1) in the buffer around the site.

Within the mine site impacts are currently anticipated at FhSf-4 located within the North Interception Trench.

If the impacts to the site will occur then mitigation must be conducted prior to impact. Procedures to record, analyse and mitigate effects on a site will be determined in consultation with the BC Archaeology Branch and affected Indigenous groups as per the *Heritage Conservation Act* permit and carried out by an archaeologist under a *Heritage Conservation Act* (Section 12.2 heritage investigation and/or Section 12.4 site alteration permits).

- Exact mitigation measures will be dependent on the specifics of the archaeological site and the levels of impact. Investigations of archaeological sites under Section 12.2 of the HCA generally involve detailed mapping, photography, and systematic data recovery through surface collection and controlled excavations of 1x1 m units if subsurface deposits are present.
- Site Alteration Permits issued under Section 12.4 of the HCA may include additional requirements such as artifact collection and monitoring of impacts.
- Any artifacts collected during archaeological assessment will be sent to the Exploration Place Museum and Science Centre in Prince George, BC or another approved repository identified in the relevant Section 12.2 or 12.4 permit under the *Heritage Conservation Act*.

The following measures will be taken for Project activities located within 50 and 150 m of a known site:

- Flag or delineate an area of at least 50 m around the site boundary and mark as a “No Work Zone”.
- Annual monitoring (Section 10.2.2) of the known sites.

### **8.1.2 Historic Site**

There is one documented historic cabin site within the mine site (Section 7.2; Figure 7-1). If avoidance is determined to be not possible through final design and permitting, and artifacts or features associated with this site will be impacted, Indigenous groups and the local museum will be consulted and given the opportunity to collect/preserve artifacts associated with this site.

### **8.1.3 Culturally Modified Tree Sites**

There are known post-1846 CMT sites within the mine site and within 150 m of the transmission line alignment centreline that may be impacted by Project infrastructure (Section 7.2; Figure 7-1). Prior to alteration to post-1846 CMTs, the relevant/affected Indigenous groups will be consulted to determine the preferred mitigation measures. Common mitigation measures for post-1846 CMTs with cultural significance include: detailed measurements and photography, removing and preserving the modified portion of the tree, or removing a cross-section (cookie) of the modified portion of the tree. These measures allow for the preservation of some or all of the information about the modification(s) made to the tree.

### **8.1.4 Trails**

There are known trails located along the proposed transmission line routes. Prior to the alteration of a trail, the relevant/affected Indigenous communities will be consulted to determine the preferred mitigation measures. Possible mitigation measures for recording trails include photography and detailed mapping of the route and surrounding features.

### **8.1.5 Paleontological Sites**

There are no known paleontological sites located within the mine site and four palaeontological sites within 150 m of the proposed transmission line routes (Section 7.3; Figure 7-2). A preliminary Fossil Impact Assessment will be conducted prior to construction to determine if additional studies are required. If paleontological materials are recovered the BC Fossil Management Office will be consulted to determine an appropriate repository.

## **8.2 As-yet Unknown Sites**

Prior and current archaeological impact assessments have been undertaken for all currently planned developments. If future revisions to the footprint are necessary that fall outside the assessed area archaeological assessments will be conducted in those areas prior to construction. Indigenous representatives and/or Indigenous Knowledge Holders from the affected Indigenous groups will be invited to be involved, and/or, identify representatives who will be involved, in the assessment.

- Additional consultation with Indigenous groups specifically relating to the location and identification of cultural and spiritual resources within the Project footprint will be conducted prior to any further disturbance. Indigenous representatives and/or Indigenous Knowledge Holders from the affected Indigenous groups will be invited to identify an as-yet unknown cultural or spiritual resources that may be impacted by the Project (Section 9). If resources are identified the cultural importance and spiritual properties of these resources will be acknowledged through ceremony or appropriate cultural protocols and preserved to the extent possible. Information received from Indigenous groups on handling and storage of finds in consideration of any laws, customs or protocols; and recommendations for any changes to the protective measures will be taken into consideration.

An Archaeological and Cultural Heritage Chance Find Procedure and reporting form is provided in Appendix C. Agreements respecting Indigenous customs and protocols respecting the discovery, handling, recognition, recording, transferring and safekeeping of unknown sites and confidentiality will be developed and in place prior to the commencement of Project construction.

### 8.3 Confidentiality

BW Gold will consult Indigenous groups on the manner by which to protect the confidentiality of a discovery, consistent with provincial laws. Confidentiality will be assessed in consultation with Indigenous groups on a case-by-case basis, and contents of discoveries will be treated as confidential among BW Gold, the Indigenous group(s) within whose traditional territory the find is made, the Archaeology Branch and the archaeologist until agreed otherwise. BW Gold understands that Indigenous groups retain rights to their knowledge, practices, and traditions, and how it is shared with others. Therefore, Indigenous Knowledge information will be gathered under confidentiality agreements which address the following:

- the roles and responsibilities of each party;
- conditions on sharing confidential Indigenous knowledge with other parties;
- limitations on who can access the Indigenous knowledge provided;
- how, where, and by whom the Indigenous knowledge would be stored, and for how long;
- any disposal procedures, including timing considerations for disposal;
- whether a non-confidential summary or redacted version of the Indigenous knowledge could be created and shared with the public;
- how the Indigenous knowledge should be reflected in reporting; and
- whether and how Indigenous knowledge could be used in monitoring and follow-up programs.

If a cultural or spiritual site is identified as confidential by Indigenous groups, an area of at least 50 m around the site from the site boundary will be flagged and depicted on Project maps and marked as a “No Work Zone”.

## 9. PROCESS FOR IDENTIFICATION OF CULTURAL AND SPIRITUAL AREAS OF IMPORTANCE

BW Gold consulted with Indigenous groups regarding spiritual sites and other areas of cultural importance during the EA. Known sites identified to BW Gold during and subsequent to the project's environmental assessment as described in Section 7.3 will form the basis of the discussion. Cultural or spiritual resources identified during consultation as part of Condition 15 will be considered in the implementation of this plan as appropriate.

BW Gold will continue to engage with Indigenous groups on implementation of this plan. As part of plan implementation, BW Gold will communicate to Indigenous groups on any new construction areas proposed for the year. This communication may be aligned with other required processes. As part of this annual engagement, BW Gold will:

- Use maps to describe the new construction areas, including the location of infrastructure and activities, any known cultural or spiritual sites and anticipated effects.
- Ask Indigenous groups if they are aware of any additional cultural or heritage sites that could be affected by the annual construction program.
- If additional cultural or spiritual sites are identified as potentially affected by the annual construction program, ask the Indigenous groups to:
  - identify and describe the cultural or spiritual site;
  - locate the resource on a map and include an appropriate buffer (at least 50 m);
  - if impacted by the Project, discuss mitigation(s); and
  - provide opportunities for Indigenous Knowledge Holders to communicate on the site(s) and potential mitigation, if requested by the Indigenous group.
- After this information has been gathered and mapped:
  - the Indigenous group will be asked to verify that the information has been correctly understood;
  - review the potential effects of the Project on the site and mitigations; and
  - discuss measures to keep information on the sites confidential if requested by Indigenous group.
- With the consent of the respective Indigenous Group and participation of Indigenous Knowledge Holders, BW Gold will seek to be informed about required ceremony or appropriate cultural protocols prior to visiting any cultural or spiritual sites and what protocols and procedures will take place when visiting the site.
- If consent to visit a site is not approved then BW Gold will work with the Indigenous groups to identify a resolution or work together to develop mitigation measure that can be implemented.
- BW Gold will provide a summary report to the appropriate Indigenous group to confirm measures to keep the site location and site information confidential.

## 10. IMPLEMENTATION

Known and as-yet unknown sites (as identified by the chance find procedure) potentially affected by Project activities will be monitored as described in Section 10.2. Monitoring records will be maintained and reporting will be conducted as described in Section 11. Indigenous group representatives and/or Indigenous Knowledge Holders will be invited to be involved, and/or, identify representatives who will be involved, in the implementation of the CSMP. The CSMP will be provided to the EAO, IAAC, EMLI, ENV, Indigenous groups and MOF prior to commencement of construction.

BW Gold will undertake monitoring during the Construction and Operations phases (infrastructure expansions to support increases to mill throughput) and annually. Monitoring will assess the effectiveness of the protection measures for known resources and the implementation of the Chance Find Procedure. If unforeseen impacts to heritage sites occur they will be immediately reported to the Project archaeologist and Indigenous groups and reviewed. Unforeseen impacts to heritage sites will be indicative of a lack of effectiveness of the protection measures. Based on the review, protection measures will be modified within 4 weeks. The CSMP will be updated to reflect the changes and communicated as per Section 12. Monitoring identified in Section 10.2.1 and 10.2.2 will be used to determine if altered or new mitigation measures are effectively mitigating effects or avoiding potential effects.

### 10.1 Transmission Line Archaeological Impact Assessment

Pursuant to Heritage Inspection Permit 2021-0322, an AIA was completed in the fall of 2021 over many area of the transmission line alignment that had not been surveyed due to changes made to the alignment during the environmental assessment in response to Indigenous concerns. The Aboriginal Groups were consulted on the proposed AIA and invited to participate in the AIA. The AIA will take into account BC's Archaeological Impact Assessment Guidelines (Archaeology Branch 1998).

Areas not covered by the 2021 AIA will be completed in 2022, including footprints of the final transmission line alignment and associated poles, roads and towers, which will inform final placement of these features.

Measures identified in Section 9 of this plan will be implemented to protect heritage resources identified within the footprint of the final transmission line alignment and associated facilities. This plan will be updated to incorporate the 2021 and 2022 AIA results. Any artifacts collected during the assessment will be sent to the Exploration Place Museum and Science Centre in Prince George, BC.

### 10.2 Monitoring

Heritage sites within 150 m of the Project footprint will be marked on Project site maps as a "No Work Zone" and an area of 50 m flagged or delineated around the site boundary (Section 8.1). Project activities within 50 m sites of will be subject to construction monitoring and sites located 50 to 150 m will be subject to annual monitoring. If sites are confidential they will be represented, including an appropriate buffer, developed in consultation with the Indigenous groups and the Project Archaeologist, by only the "No Work Zone" designation on Project maps and documents.

#### 10.2.1 Construction Monitoring

Archaeological and CHR sites within 150 m of the Project footprint will be marked on archeological and CHR constraint maps (Section 7). Beyond 150 m from the Transmission Line alignment no direct or indirect effect are anticipated. Sites within 50 m of Project activities will be flagged as "No Work Zones" on the ground and monitored by the BW Gold EM and Aboriginal Monitors during construction in the vicinity of the site, including construction during the phased increases to the mill nameplate throughput. The intent of monitoring is to aid in preservation of sites. If required, monitoring of impacts to an

archaeological site will be detailed under the relevant permit under Sections 12.2 or 12.4 of the HCA. Should impacts be anticipated, or found within 50 m of a site, Indigenous groups and the Project Archaeologist will be contacted immediately to determine if additional mitigation measures are required prior further work in the area. The BW Gold EM will be engaged on the proposed mitigation measures.

Sites that are identified by Indigenous groups as confidential will be depicted as polygons, including an area of at least 50 m around the site, on Project maps and marked as a “No Work Zones” around the site but will not be delineated on the ground. These sites will be monitored by the Aboriginal Monitors during construction in the vicinity of the site, including construction during the phased increases to the mill nameplate throughput.

### **10.2.2 Annual Monitoring**

For the life of the Project the BW Gold EM and Aboriginal Monitors will, on an annual basis, verify that known heritage sites remain intact and are not impacted by the Project and check the condition of site protection (i.e., flagging or fencing). Should impacts to the vegetation or ground surface since the previous observation be observed at sites, the Project Archaeologist and the Archaeology Branch will be contacted to determine mitigation measures. Should impacts be observed at heritage sites, the BW Gold EM will contact Indigenous Knowledge Holder(s) to discuss mitigation measures.

## **10.3 Site Access for Cultural and Spiritual Purposes**

Access will be provided to Indigenous groups during all phases of the Project to the mine site for cultural purposes or for exercising Aboriginal rights, to the extent that such access and exercise of rights are safe.

In accordance with DS Condition 7.3, access will be provided within 24 hours of an access request being received by the Indigenous Relations Manager, unless access is not possible for safety reasons, BW Gold will respond to all requests for access within 12 hours of receipt. Access requests must be provided to BW Gold in writing, and must include the date and time of requested access, location(s) to be visited, support requested while on site, duration of requested access, number of people accessing the site and any other information that would support BW in determining whether access can be safely provided. BW Gold may be unable to provide access within 24 hours where incomplete access requests are received. Providing BW Gold with advanced warning of access requests (i.e., 7 days) will allow BW Gold to consider the request, plan, and increase the likelihood that access can be granted.

### **BW Gold Contacts:**

Travis Desormeaux: Environmental Manager, 250-278-7788, [tdesormeaux@artemisgoldinc.com](mailto:tdesormeaux@artemisgoldinc.com)

Don Thelston: Health and Safety Manager, [dethelston@artemisgoldinc.com](mailto:dethelston@artemisgoldinc.com)

## **10.4 Implementation Schedule**

The CSMP will be implemented throughout the following phases:

- Construction phase: Year -2 to Year -1;
- Operations phase: Year +1 to Year +23; and
- Closure phase: Year +24 to Year +45.

BW Gold is of the view that an annual review of the CSMP provides adequate time to monitor the plan's implementation.

## 11. REPORTING AND RECORD KEEPING

Reporting is required under the *Heritage Conservation Act*, DS Condition 2.11-2.14, and EAC Conditions 5 and 18h. In addition, reporting will be completed in accordance with the Aboriginal Group Engagement Plan and Aboriginal Group Monitor and Monitoring Plan.

### 11.1 Reporting

Reporting will comply with *Heritage Conservation Act* permitting conditions and the Archaeological and Cultural Heritage Chance Find Procedure (Appendix C). Final permit reporting required under the Act will be submitted to the Archaeology Branch and Indigenous groups by the Project Archaeologist on, or before, the permit expiry. Site forms will be submitted by the Project Archaeologist within six weeks of the completion of site investigations. Interim reports will be submitted to the Archaeology Branch on an as required basis to provide management recommendations. The process for reporting information related to archaeological and cultural heritage resources to impacted Indigenous communities will be informed by agreements with Indigenous groups, where they are in place.

Reports will be provided in electronic format (MS Word or PDF) and via email. The following procedure will be followed for written reports:

- A written notice will be provided that:
  - includes a copy of the plan, program or other document including a summary written in plain language;
  - invites the party to provide its views on the content of such plan, program or other document; and indicates if there is a timeframe (no less than 15 days) for providing their views so that the party may provide such views to the Holder within such time frame;
  - undertakes a full and impartial consideration of any views and other information provided by a party.
- Following receipt of views or comment on the provided document a response will be prepared to:
  - provide a written explanation of how the views and information provided have been considered and addressed in a revised version of the plan, program or other document; or why the views and/or information provided have not been addressed in a revised version of the plan, program, or other document. Where views diverge, BW Gold will strive to reach consensus with Indigenous groups on implementation of the plan. The written explanation will be provided within 15 days unless otherwise agreed between BW Gold and the Indigenous groups;
  - maintain a record of consultation with each such party regarding the plan, program, or other document; and
  - provide a copy of consultation record to the EAO, IAAC and the relevant party, or both, promptly upon written request. The copy of such consultation record will be provided to the EAO, relevant party, or both, no later than 15 days after the Holder receives the request for a copy of the consultation record, unless otherwise authorized by the EAO.

#### 11.1.1 Federal Decision Statement Annual Reporting

DS Conditions 2.11, 2.12 and 2.13 set out annual reporting requirements related to the implementation of conditions in the DS. Condition 2.14 sets out information sharing requirements related to the annual reports. Reporting will commence when BW Gold begins to implement the conditions set out in the DS. Requirements in DS Conditions 2.11 – 2.14 are presented below.

DS Condition 2.11 requires:

*“The Proponent [BW Gold] shall, commencing in the reporting year during which the Proponent begins the implementation of the conditions set out in this Decision Statement, prepare an annual report that sets out:*

- 2.11.1 the activities undertaken by the Proponent in the reporting year to comply with each of the conditions set out in this Decision Statement;*
- 2.11.2 how the Proponent complied with condition 2.1;*
- 2.11.3 for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent considered any views and information that the Proponent received during or as a result of the consultation, including a rationale for how the views have, or have not, been integrated;*
- 2.11.4 the information referred to in conditions 2.5 and 2.6 for each follow-up program;*
- 2.11.5 the results of the follow-up program requirements identified in conditions 3.14, 3.15, 3.16, 4.5, 5.5, 6.11, 6.12, 6.13, 6.14, 8.18.6, 8.20.5, 8.21, and 8.22 if required;*
- 2.11.6 any update made to any follow-up program in the reporting year;*
- 2.11.7 any modified or additional mitigation measures implemented or proposed to be implemented by the Proponent, as determined under condition 2.9 and rationale for why mitigation measures were selected pursuant to condition 2.5.4; and*
- 2.11.8 any change(s) to the Designated Project in the reporting year.”*

DS Condition 2.12 requires:

*“The Proponent [BW Gold] will provide the draft annual report to Indigenous groups, no later than June 30 following the reporting year to which the annual report applies. BW Gold will consult Indigenous groups on the content and findings in the draft annual report.”*

DS Condition 2.13 requires:

*“The Proponent [BW Gold], in consideration of any comments received from Indigenous groups pursuant to condition 2.12 shall revise and submit to the Agency [Impact Assessment Agency of Canada] and Indigenous groups a final annual report, including an executive summary in both official languages, no later than September 30 following the reporting year to which the annual report applies.”*

DS Condition 2.14 requires:

*“The Proponent [BW Gold] shall publish on the Internet, or any medium which is publicly available, the annual reports and the executive summaries referred to in conditions 2.11 and 2.13.*

*The Proponent shall keep these documents publicly available for 25 years following the end of decommissioning of the Designated Project. The Proponent shall notify the Agency and Indigenous groups of the availability of these documents within 48 hours of their publication.”*

DS Condition 2.15 requires:

*“When the development of any plan is a requirement of a condition set out in this Decision Statement, the Proponent [BW Gold] shall submit the plan to the Agency and to Indigenous groups prior to construction, unless otherwise required through the condition.”*

### 11.1.2 Environmental Assessment Certificate

The procedure for providing written reports to Aboriginal Groups in accordance with the requirements of Condition 18(h) (implementation of the CSMP) is outlined below.

Condition 5 of the EAC sets out compliance self-reporting requirements. BW Gold will submit a report to the attention of the EAO and Aboriginal Groups on the status of compliance with the EAC at the following times:

- a. at least 30 days prior to the start of Construction;
- b. on or before March 31 in each year after the start of Construction;
- c. at least 30 days prior to the start of Operations;
- d. on or before March 31 in each year after the start of Operations;
- e. at least 30 days prior to the start of Closure;
- f. on or before March 31 in each year after the start of Closure until the end of Closure;
- g. at least 30 days prior to the start of Post-Closure; and
- h. on or before March 31 in each year after the start of Post-Closure until the end of Post-Closure.

BW Gold will submit reports to the EAO and Aboriginal Groups within the timelines specified in Condition 5 of the EAC #M19-01. The reports will report on status of compliance with the Project's EAC.

### 11.1.3 Annual Monitoring Report

A record of monitoring activities will be kept and the information will be summarized in an annual monitoring report. This report will include the monitoring results from the preceding year, any new sites identified, incidents where mitigation measures failed to protect heritage sites, and any resulting actions or mitigations undertaken and the results of those actions or mitigations. This report will be provided to the Project Archaeologist and Indigenous groups. The relevant information including chance finds will also be provided to the Archaeology Branch in reports required under Sections 12.2 and/or 12.4 of the *Heritage Conservation Act*. The EM, Project Archaeologist and/or Aboriginal Monitors will document by means of photographs and field notes, the type of construction and disturbance occurring near a site, weather conditions, personnel present, and/or other details. It is imperative that the following data be collected during construction and annual monitoring as information gathered may be required for inclusion in compliance reports:

- site photographs;
- coordinates for any disturbances;
- extent and type of disturbances;
- details of any actions taken to protect the sites;
- information received from Indigenous groups on handling and storage of finds in consideration of any laws, customs or protocols; and
- recommendations for any changes to the protective measures, if required.

## 11.2 Record Keeping

The BW Gold EM is responsible for data management and reporting related to heritage resources. The data management system will include the results from monitoring activities (Section 10.2), including chance finds, AIAs, No Work Zones that were established, and records documenting consultation with

Indigenous groups related to cultural heritage. The data management system will also record when monitoring results were provided to relevant parties as required by EAC and DS conditions. The EM will also report chance finds to the Project Archaeologist and Indigenous groups within 24 hours of a discovery. The Project Archaeologist will report chance finds to the BC Archaeology Branch.

Monitoring data will be entered into an electronic database and have quality control checks completed upon receipt of results. Data will be entered into a standard format that allows for data reporting and analyses. Data and data comparisons will be stored in a single file format for each type of survey or monitoring activity. Monitoring data will be stored for the life of the mine and will be made available for review upon request.

## 12. PLAN REVISION

The CSMP is a living document that will evolve over time in response to subsequent permitting, monitoring results, chance finds, and the results of AIAs. Comments provided by Indigenous groups, EMLI, ENV, and MOF on the CSMP will also be considered for inclusion and incorporation and addressed in future versions of the CSMP as they become available. BW Gold will provide revised drafts of the CSMP to Indigenous groups, EMPR, ENV, and MOF for review and comment a minimum of 30 days prior to submitting the revised CSMP to the EAO and IAAC. Revised copies of the plan will be provided to Indigenous groups, EMLI, ENV, and MOF.

### 13. QUALIFIED PERSON OR QUALIFIED PROFESSIONAL

The process for selecting the qualified person to prepare the CSMP considered their training, experience and familiarity with the Project's environmental assessment. This management plan has been prepared and reviewed by the following qualified persons:

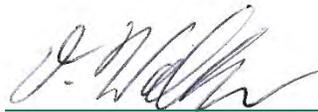
Prepared by:



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David Le Beau, MA  
Archaeologist  
Consultant II, ERM

Reviewed by:



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Dan Walker,  
Consulting Archaeologist  
Principal Consultant, ERM

## 14. REFERENCES

Definitions of the acronyms and abbreviations used in this reference list can be found in the Acronyms and Abbreviations section.

### Legislation

- Coroners Act*, SBC 2007, c 15.
- Cremation, Interment and Funeral Services Act*, SBC 2004, c 35
- Declaration on the Rights of Indigenous Peoples Act*, SBC 2019, c 44.
- Environmental Assessment Act*, SBC 2018, c 51.
- Forest and Range Practices Act*, SBC 2002, c 69.
- Forest Planning and Practices Regulation*, BC Reg 14/2004.
- Freedom of Information and Protection of Privacy Act*, RSBC 1996, c 165.
- Fossil Definition Regulation*, BC Reg 214/2011
- Heritage Conservation Act*, RSBC 1996, c 187.
- Impact Assessment Act*, SC 2019, c 28.
- Land Act*, RSBC 1996, c 245.
- Local Government Act*, RSBC 1996, c 323.
- Mineral Tenure Act*, RSBC 1996, c 292.
- Mineral Definition Modification Regulation*, BC Reg 5/2005.
- Mines Act*, RSBC 1996, c 293.
- United Nations Declaration on the Rights of Indigenous Peoples Act*, SC 2021, c 14.
- Wildlife Act*, SBC 1996, c 31.

### Secondary Sources

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- AMEC Environment & Infrastructure (AMEC). 2013. *Blackwater Gold Project 2013 Baseline Report Archaeology*. Prepared for New Gold Inc. by AMEC Environment & Infrastructure. Burnaby, British Columbia, Canada.
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- Anderson, B. 2014. *Stellat'en First Nation Land and Resource Use Study Report. Proponent Version for New Gold Incorporated*. Prepared for Stellat'en First Nation.
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- BC EAO. 2019a. *Assessment Report for Blackwater Gold Mine Project (Blackwater) With respect to the Application by New Gold Inc. for an Environmental Assessment Certificate pursuant to the*

- Environmental Assessment Act, S.B.C. 2002, c.43. Prepared by the Environmental Assessment Office. May 17, 2019.
- BC EAO. 2019b. *Summary Assessment Report for Blackwater Gold Mine Project (Blackwater) With respect to the application by New Gold Inc. for an Environmental Assessment Certificate pursuant to the Environmental Assessment Act, S.B.C. 2002, c. 43.*
- BC EAO. 2019c. *In the matter of the Environmental Assessment Act S.B.C. 2002, c. 43 (the Act) and in the matter of an Application for an Environmental Assessment Certificate (Application) by New Gold Inc. (Proponent) for the Blackwater Gold Project Environmental Assessment Certificate #M19-01.*
- CEA Agency. 2015. Technical Guidance for Assessing Physical and Cultural Heritage or any Structure, Site or Thing. Government of Canada.
- CEA Agency. 2019. *Decision Statement Issued under Section 54 of the Canadian Environmental Assessment Act, 2012 to New Gold Inc. c/o Ryan Todd, Director, Blackwater Project Sunlife Plaza Suite 610, 1100 Melville Street Vancouver, British Columbia V6E 4A6 for the Blackwater Gold Project.*
- Dewhirst, J. 2013. *An Ethnohistory of the Lhoosk'uz Dene Nation Traditional Territory.* Prepared for Lhoosk'uz Dene Nation. Victoria, BC.
- DMCS and Skin Tye First Nation. 2015. *Skin Tye First Nation Traditional Land Use Study for New Gold Inc's Proposed Blackwater Project.* Prepared for New Gold Inc.
- DMCS and Ulkatcho First Nation. 2013. *Ulkatcho First Nation Traditional Land Use and Ecological Knowledge of the proposed New Gold Inc. Blackwater Project Final Report (Public).* Prepared for New Gold Inc.
- EMLI. 2021. *Health, Safety and Reclamation Code for Mines in British Columbia.*
- ERM. 2016. *Blackwater Gold Project: Further Assessment of Potential Effects on Current Aboriginal Use.* Prepared for New Gold Inc. by ERM Consultants Canada Ltd.: Vancouver, BC.
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**APPENDIX A      CONCORDANCE WITH ENVIRONMENTAL ASSESSMENT  
CERTIFICATE #M19-01 (JUNE 21, 2019)**

**Table A-1: Environmental Assessment Certificate #M19-01 Conditions and Location in the Cultural and Spiritual Resources Management Plan**

Condition #	Requirement	Location in Plan
2 (Plan Development)	Where a condition of this Certificate requires the Holder to develop a plan, program or other document, any such plan, program or other document must, at a minimum, include the following information: a) purpose and objectives of the plan, program or other document;	Section 2
	b) roles and responsibilities of the Holder and Employees;	Section 3, Table 3-1
	c) names and, if applicable, professional certifications and professional stamps/seals, of those responsible for the preparation of the plan, program, or other document;	Section 13
	d) schedule for implementing the plan, program or other document throughout the relevant Project phases;	Section 10.4
	e) means by which the effectiveness of the mitigation measures will be evaluated including the schedule for evaluating effectiveness;	Section 10
	g) schedules and methods for the submission of reporting to specific agencies, Aboriginal Groups and the public and the required form and content of those reports; and process and timing for updating and revising the plan, program or other document, including any consultation with agencies and Aboriginal Groups that would occur in connection with such updates and revisions.	Section 11
3 (Adaptive Management)	Where a condition of this Certificate requires the Holder to develop a plan, program or other document that includes monitoring, including monitoring of mitigation measures or monitoring to determine the effectiveness of the mitigation measures, the Holder must include adaptive management in that plan. The objective of the adaptive management is to address the circumstances that will require the Holder to implement alternate or additional mitigation measures to address effects of the Project if the monitoring shows that those effects: a) are not mitigated to the extent contemplated in the Application; b) are not predicted in the Application; or c) have exceeded the triggers identified in paragraph g) of this condition.	Sections 5, 13
	The adaptive management in the plan must include at least the following: d) the monitoring program that will be used including methods, location, frequency, timing and duration of the monitoring;	Sections 11.1.1 and 11.1.2
	e) the baseline information that will be used, or collected where existing baseline information is insufficient, to support the monitoring program;	Section 8 and 9
	f) the scope, content and frequency of reporting of the monitoring results;	Section 12
	g) the identification of qualitative and quantitative triggers, which, when observed through monitoring required under paragraph d), will require the Holder to alter existing, or develop new, mitigation measures to avoid, reduce, and/or remediate effects;	Section 13
	h) the methods that will be applied to detect when a numeric trigger, or type or level of change referred to in paragraph g), has occurred;	Section 13
	i) a description of the process for and timing to alter existing mitigation measures or develop new mitigation measures to reduce or avoid effects;	Section 13

Condition #	Requirement	Location in Plan
	j) identification of the new and/or altered mitigation measures that will be applied when any of the changes identified in paragraphs a) to c) occur, or the process by which those will be established and updated over the relevant timeframe for the specific condition;	Section 13
	k) the monitoring program that will be used to determine if the altered or new mitigation measures and/or remediation activities are effectively mitigating or remediating the effects and or avoiding potential effects; and	Section 13
	l) the scope, content and frequency of reporting on the implementation of altered or new mitigation measures.	Section 12 and 13
	If there are any requirements or mitigation measures required in the plan, program or other document for which adaptive management, or elements of adaptive management listed in paragraphs d) to l) are assessed to be not appropriate or applicable, the plan must include identification of those requirements and measures, and the rationale for that assessment.	Noted
4 (Consultation)	<p>Where a condition of this Certificate requires the Holder consult a particular party or parties regarding the content of a plan, program or other document, the Holder must, to the satisfaction of the EAO:</p> <p>a) provide written notice to each such party that:</p> <ul style="list-style-type: none"> <li>i) includes a copy of the plan, program or other document;</li> <li>ii) invites the party to provide its views on the content of such plan, program or other document; and</li> <li>iii) indicates: i. if a timeframe for providing such views to the Holder is specified in the relevant condition of this Certificate, that the party may provide such views to the Holder within such time frame; or ii. if a timeframe for providing such views to the Holder is not specified in the relevant condition of this Certificate, specifies a reasonable period during which the party may submit such views to the Holder;</li> </ul> <p>b) undertake a full and impartial consideration of any views and other information provided by a party in accordance with the timelines specified in a notice given pursuant to paragraph (a);</p> <p>c) provide a written explanation to each such party that provided comments in accordance with a notice given pursuant to paragraph (a) as to: i) how the views and information provided by such party to the Holder have been considered and addressed in a revised version of the plan, program or other document; or ii) why such views and information have not been addressed in a revised version of the plan, program or other document;</p> <p>d) maintain a record of consultation with each such party regarding the plan, program or other document; and</p> <p>e) provide a copy of such consultation record to the EAO, the relevant party, or both, promptly upon the written request of the EAO or such party. The copy of such consultation record must be provided to the EAO, relevant party, or both, no later than 15 days after the Holder receives the request for a copy of the consultation record, unless otherwise authorized by the EAO.</p>	Drafts of the CSMP were provided to Indigenous groups for review and comment, taking into account the requirements in Condition 4.
15 (Indigenous Cultural Awareness and Recognition)	At least 90 days prior to commencing Construction in an Aboriginal Group's asserted or established traditional territory, the Holder must commence consultation with the Aboriginal Group to identify opportunities for cultural awareness and recognition.	Section 9

Condition #	Requirement	Location in Plan
	The Holder must offer opportunities to Aboriginal Groups that include, but are not limited to, holding ceremonies, installing signage, executing cultural protocols, recognizing cultural heritage, and providing cultural awareness training to Employees.	Sections 9 and 10.3
	If specific opportunities for cultural awareness and recognition are requested by an Aboriginal Group, the Holder must determine the scope and content of the cultural awareness and recognition opportunity and associated activities, in consultation with the Aboriginal Group and must support or conduct such activities, or must provide a rationale to the Aboriginal Groups explaining why a specific request or activity is not practicable, to the satisfaction of the EAO.	Section 6

Condition #	Requirement	Location in Plan
18 (Cultural and Spiritual Resources Management Plan)	<p>The Holder must retain a Qualified Person to develop a Cultural and Spiritual Resources Management Plan for the Construction, Operations and Closure phases. The plan must be developed in consultation with Aboriginal Groups, EMPR, ENV and FLNRORD.</p> <p>The plan must include at least the following:</p> <p>a) the types of historic, cultural and spiritual resources that will be addressed by the plan, including resources that are of cultural or spiritual significance to the Aboriginal Groups who may have cultural and/or spiritual resources in the Project Area;</p>	Section 2.1 and 7
	b) the process by which a Qualified Person is selected;	Section 2.1
	c) how the Holder will consult and work with Aboriginal Groups to identify areas of cultural or spiritual importance that may be affected by the Project, and to determine whether the areas can be protected from impacts, or whether relocation of features of importance or activities under Condition 15 (Indigenous Cultural Awareness and Recognition) are needed to address effects;	Section 9
	<p>d) chance find procedure that must include:</p> <p>i) mitigation measures to avoid or reduce adverse effects to chance finds;</p> <p>ii) training for Employees;</p> <p>iii) means and protocols for notifying Aboriginal Groups of finds, including maintenance of up to date contact lists for Aboriginal Groups;</p> <p>iv) means and protocols for involving Aboriginal Groups in the assessment of finds; and</p> <p>v) the means by which the Holder will document and make available to the relevant authorities any information the Holder has received from Aboriginal Groups on handling and storage of finds in consideration of any laws, customs or protocols identified by the Aboriginal Groups;</p>	Section 8.2, Appendix C
	e) the means by which the Holder will keep confidential any sensitive cultural, spiritual and/or site-specific information that the Aboriginal Groups have advised the Holder is considered confidential;	Section 8.3
	f) the means by which the Holder will document the consultation in paragraph (c) with Aboriginal Groups and identify and implement measures in a manner that does not reveal confidential information on sites identified in paragraph e);	Sections 8.3, 9
	g) the means by which representatives and/or traditional knowledge holders from Aboriginal Groups will be involved in the implementation of the plan; and	Sections 8.2, 10
	h) a procedure for providing written reports to Aboriginal Groups on the implementation of this plan, including provision of a summary written in plain language.	Section 11
	The Holder must provide the draft plan that was developed in consultation with EMPR, FLNRORD, ENV and Aboriginal Groups to EMPR, FLNRORD, ENV, Aboriginal Groups and the EAO for review a minimum of 90 days prior to the planned commencement of Construction, or as listed in the Document Submission Plan required by Condition 10 of this Certificate.	Submitted by December 31, 2021
	The Holder must not commence Construction until the plan has been approved by the EAO, unless otherwise authorized by the EAO.	Noted

**APPENDIX B      CONCORDANCE WITH FEDERAL DECISION STATEMENT  
(APRIL 15, 2019)**

**Table B-1: Federal Environmental Assessment Decision Statement Conditions and Location in the Cultural and Spiritual Resources Management Plan**

Condition	Requirement	Location in Plan
2.3 (General Conditions)	<p>The Proponent shall, where consultation is a requirement of a condition set out in this Decision Statement:</p> <p>2.3.1 provide a written notice of the opportunity for the party or parties being consulted to present their views and information on the subject of the consultation;</p> <p>2.3.2 provide all information available and relevant on the scope and the subject matter of the consultation and a period of time agreed upon with the party or parties being consulted, not less than 15 days, to prepare their views and information;</p> <p>2.3.3 undertake a full and impartial consideration of all views and information presented by the party or parties being consulted on the subject matter of the consultation;</p> <p>2.3.4 strive to reach consensus with Indigenous groups; and</p> <p>2.3.5 advise the party or parties being consulted on how the views and information received have been considered by the Proponent including a rationale for why the views have, or have not, been integrated. The Proponent shall advise the party or parties in a time period that does not exceed the period of time taken in 2.3.2.</p>	Drafts of the CSMP were provided to Indigenous groups for review and comment, taking into account the requirements in Condition 2.3 and 2.4.
2.4 (Consultation)	<p>The Proponent shall, where consultation with Indigenous groups is a requirement of a condition set out in this Decision Statement, determine and strive to reach consensus with each Indigenous group regarding the manner by which to satisfy the consultation requirements referred to in condition 2.3, including:</p> <p>2.4.1 the methods of notification;</p> <p>2.4.2 the type of information and the period of time to be provided when seeking input;</p> <p>2.4.3 the process to be used by the Proponent to undertake impartial consideration of all views and information presented on the subject of the consultation; and</p> <p>2.4.4 the period of time and the means by which to advise Indigenous groups of how their views and information were considered by the Proponent.</p>	Drafts of the CSMP were provided to Indigenous groups for review and comment, taking into account the requirements in Condition 2.3 and 2.4.
2.11 (Annual Reporting)	<p>The Proponent shall, commencing in the reporting year during which the Proponent begins the implementation of the conditions set out in this Decision Statement, prepare an annual report that sets out:</p> <p>2.11.1 the activities undertaken by the Proponent in the reporting year to comply with each of the conditions set out in this Decision Statement;</p> <p>2.11.2 how the Proponent complied with condition 2.1;</p> <p>2.11.3 for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent considered any views and information that the Proponent received during or as a result of the consultation, including a rationale for how the views have, or have not, been integrated;</p> <p>2.11.4 the information referred to in conditions 2.5 and 2.6 for each follow-up program;</p> <p>2.11.5 the results of the follow-up program requirements identified in conditions 3.14, 3.15, 3.16, 4.5, 5.5, 6.11, 6.12, 6.13, 6.14, 8.18.6, 8.20.5, 8.21, and 8.22 if required;</p> <p>2.11.4 any update made to any follow-up program in the reporting year;</p>	Section 11.1.1

Condition	Requirement	Location in Plan
	<p>2.11.7 any modified or additional mitigation measures implemented or proposed to be implemented by the Proponent, as determined under condition 2.9 and rationale for why mitigation measures were selected pursuant to condition 2.5.4; and</p> <p>2.11.8 any change(s) to the Designated Project in the reporting year.</p>	
2.12 (Annual Reporting)	The Proponent shall provide a draft annual report referred to in condition 2.11 to Indigenous groups, no later than June 30 following the reporting year to which the annual report applies. The Proponent shall consult Indigenous groups on the content and findings in the draft annual report.	Section 11.1.1
2.13 (Annual Reporting)	The Proponent, in consideration of any comments received from Indigenous groups pursuant to condition, 2.12 shall revise and submit to the Agency and Indigenous groups a final annual report, including an executive summary in both official languages, no later than September 30 following the reporting year to which the annual report applies.	Section 11.1.1
2.15 (Information Sharing)	When the development of any plan is a requirement of a condition set out in this Decision Statement, the Proponent shall submit the plan to the Agency and to Indigenous groups prior to construction, unless otherwise required through the condition.	Section 11.1.1
7.1	The Proponent shall develop, prior to construction and in consultation with Indigenous groups, and implement an archaeological impact assessment of the footprints of the final transmission line alignment and associated poles, roads and towers to help inform final placement of these features. The Proponent shall take into account British Columbia's Archaeological Impact Assessment Guidelines when developing and implementing the archaeological impact assessment. The Proponent shall apply the archaeological and heritage management plan pursuant to condition 7.2 to structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources discovered within the footprint of the final transmission line alignment.	Section 10.1
7.2	<p>The Proponent shall have a Qualified Professional develop, prior to construction and in consultation with Indigenous groups and relevant authorities, and implement, during construction, operation and decommissioning, an archaeological and heritage management plan for any structures, sites, or things of historical, archaeological, paleontological, or architectural significance or physical or cultural heritage resources within the Designated Project area. The archaeological resources and heritage management plan shall include:</p> <p>7.2.1 protocols to respect the discovery, handling, recognition, recording, transferring and safekeeping of structures, sites or things of historical, archaeological, paleontological or architectural significance;</p>	Sections 8.2 and 11.1.3
	7.2.2 procedures to record, analyze, and mitigate the effects on cultural heritage resources and historic heritage sites, cultural sites previously identified through the heritage effects assessments conducted by the Proponent during the environmental assessment and, if applicable, the archaeological impact assessment completed for the final transmission line alignment;	Sections 8, 9.1, 11
	7.2.3 a process for reporting information about physical and cultural heritage features and structures, sites or things of historical, archaeological, paleontological or architectural significance to Indigenous groups;	Section 11

Condition	Requirement	Location in Plan
	7.2.4 a process for informing workers of sensitive cultural areas; and	Section 6
	7.2.5 a chance find procedure to apply in the event that previously unidentified physical or cultural heritage features or structures, sites or things of historical, archaeological, paleontological or architectural significance are discovered by the Proponent. As part of the chance find procedure the Proponent shall:	Section 8.2, Appendix C
	7.2.5.1 immediately halt work at the location of the discovery, except work required to be undertaken to protect the integrity of the discovery;	Appendix C
	7.2.5.2 delineate an area of at least 30 metres around the discovery as a no-work zone;	Appendix C
	7.2.5.3 conduct an assessment at the location of the discovery taking into account British Columbia's Archaeological Impact Assessment Guidelines;	Appendix C
	7.2.5.4 inform the Agency and Indigenous groups within 24 hours of the discovery, and allow Indigenous groups to monitor any work related to this discovery; and	Appendix C
	7.2.5.5 consult with Indigenous groups and relevant authorities on the manner by which to comply with all applicable legal requirements and associated regulations, customs and protocols respecting the discovery, handling, recognition, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance; and	Section 8.2, Appendix C
	7.2.5.6 consult Indigenous groups on the manner by which to protect the confidentiality of the discovery. The Proponent shall protect the confidentiality of the discovery in a manner that is consistent with provincial laws.	Sections 8.2, 8.3, Appendix C
7.3	The Proponent shall provide access, during all phases of the Designated Project and within 24 hours of an access request being received, to Indigenous groups to the mine site for cultural purposes or for exercising Aboriginal rights, to the extent that such access and exercise of rights are safe. The Proponent shall notify Indigenous groups in a timely manner if access to the mine site, or any part thereof, must be prohibited for safety reasons.	Section 10.3

## **APPENDIX C      ARCHAEOLOGICAL AND CULTURAL HERITAGE CHANCE FIND PROCEDURE**



## **Blackwater Gold Project: Archaeological and Cultural Heritage Chance Find Procedure**

### **APPLICATION**

This procedure applies to previously unidentified physical or cultural heritage features or structures, sites, or things of historical, archaeological, paleontological, or architectural significance and provides mitigation measure to avoid or reduce adverse effects.

### **PROCEDURE**

**All those responsible for the management, implementation, and operation of any aspect of this procedure will be adequately trained for their role.**

Employees and contractors will receive information related to heritage resources previously identified on site as well as cross-cultural training on the history of local Indigenous nations and training on the Chance Find Procedure on their arrival on site through an environmental on-boarding training session and prior to the start of work as part of the Site Orientation. The purpose of this training is to provide site personnel with a basic level of awareness related to heritage, spiritual and archaeological resources and an understanding of their obligations regarding compliance with plan, regulatory requirements, commitments and best practices.

Site supervisors will be provided with a copy of the CSMP and will receive additional training with respect to the Chance Find Procedure.

BW Gold will regularly review and update the training and awareness related to the plan based on changes in training needs and regulatory requirements.

**Prior to the commencement of Project work, all workers will:**

1. Have received training on the use of this procedure;
2. Have been provided information on typical identifiers for archaeological and cultural use sites;
3. Have reviewed and be aware of the requirements of this procedure;
4. Have reviewed and understood information pertaining to Chance Find Procedures appropriate for the work activity being undertaken.

**If in the course of your work you discover what you suspect may be a possible archaeological, historic, cultural, spiritual and/or paleontological site, the following procedures apply:**

#### **Upon Discovery**

1. Immediately halt work at the location of the discovery, except work required to be undertaken to protect the integrity of the discovery.
2. Delineate an area of at least 50 metres around the discovery as a 'no work' zone.
3. Note the location (GPS coordinates) and take photographs.
4. Inform your supervisory, Environmental Manager (EM) or Mine Manager immediately.
5. Prepare an initial Chance Find Form (attached).

## Post-Discovery

- Within 24 hours of the discovery, the EM contacts the Project archaeologist and informs Indigenous groups and the Impact Assessment Agency (Table 1 provides key contact information).
- The EM invites Indigenous groups to monitor any work related to the discovery.
- The Project archaeologist conducts an assessment at the location of the discovery subject to BC's Archaeological Impact Assessment Guidelines and protocols that are in place with Indigenous groups respecting the discovery, handling, recognition, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance and the confidentiality of a discovery.
  - If the discovery is an archaeological site, the Project archaeologist contacts the BC Archaeology Branch.
    - The Project archaeologist, in consultation with the Archaeology Branch, develops a plan for the site, and provides updates to the Archaeology Branch and Indigenous groups on the progress of the plan.
    - The Project Archaeologist works with the EM and Indigenous groups to prepare Site Report, which includes instruction to allow work to recommence work in the area.
    - The Site Report is submitted to the EM, Indigenous groups and the Archaeology Branch.
    - If the Site Report recommends additional Inspection or Investigation under Section 12.2 of the HCA it will be undertaken and approved by the Archaeology Branch.
    - Following completion and acceptance by the Archaeology Branch of necessary reports any additional impacts to the site will require a Site Alteration Permit.
  - If the discovery is a historic site, the Project archaeologist contacts Indigenous groups and local communities to determine site significance.
  - If the discovery is a cultural or spiritual site, the Project archaeologist contacts Indigenous groups to determine site significance.
  - If the discovery is a paleontological site, the Project archaeologist contacts BC's Fossil Management Office.
- Subject to protocols with Indigenous groups, any material discovered on the Project site is stored in a secure location with limited access as follows:
  - If the material is archaeological, the artifact is held by the Project archaeologist until the *Heritage Conservation Act* (HCA) Section 12 permit has expired and the artifact(s) is submitted to the repository designated in the permit.
  - If the material is historical, the repository is determined in consultation with Indigenous nations and local communities.
  - If the material is cultural and/or spiritual, the repository is determined by Indigenous nations.
  - If the material is paleontological, the repository is determined by the Fossil Management Office.
- The handling and storage of material, apart from material outlined in the HCA Section 12 permit, is determined in consultation with Indigenous Nations.

## Suspected Human Remains Discovery

**If in the course of your work you discover what you suspect may be human remains, the following procedures apply:**

- Immediately halt work in the area of the discovery.
- Do not disturb or move the possible human remains.
- Note the location (GPS coordinates) and take photographs.
- Report your discovery to your supervisor, EM or Mine Manager.
- If you are unable to contact a BW Gold representative, and the suspected human remains appear to be current, contact the Vanderhoof RCMP.

**The following steps will generally be followed.**

- The Coroners Service (Northern Region) in Prince George and Vanderhoof RCMP will be notified and the Coroners Service will determine whether the matter is of contemporary forensic concern.
- If the remains are not of forensic concern, the Archaeology Branch will attempt to facilitate disposition of the remains.

- If a cultural affiliation for the remains can be determined, the Archaeology Branch will contact an organization representing that cultural group. If the remains are of Indigenous ancestry, the Branch will contact the relevant Indigenous communities.
- If remains are buried and under no immediate threat of further disturbance, they will not be excavated or removed. If the remains are partially buried or uncovered, the Archaeology Branch will facilitate disposition.

**Table 1: Key Contacts**

Name	Email	Phone Number
Archaeology Branch	<a href="mailto:Archaeology@gov.bc.ca">Archaeology@gov.bc.ca</a>	1 (250) 953-3334
Blackwater Gold	<a href="mailto:office.blackwater@artemisgoldinc.com">office.blackwater@artemisgoldinc.com</a>	1 (250) 567-3276
Fossil Management Office	<a href="mailto:Fossil.Management@gov.bc.ca">Fossil.Management@gov.bc.ca</a>	1 (250) 356-7506
Ulkatcho First Nation	<a href="mailto:chief@ulkatcho.ca">chief@ulkatcho.ca</a>	1 (250) 742-3260
Lhoosk'uz Dené Nation	<a href="mailto:admin@lhooskuz.com">admin@lhooskuz.com</a>	1 (250) 992-3290
Nadleh Whut'en First Nation	TBC	1 (250) 690-7211
Stellat'en First Nation	TBC	1 (250) 699-8747
Saik'uz First Nation	TBC	1 (250) 567-9293
Nazko First Nation	TBC	1 (250) 992-7982
Skin Tyee Nation	TBC	1 (250) 694-3517
Tsilhqot'in Nation	TBC	1 (778) 799-2145 or (250) 392-3918
Métis Nation British Columbia	<a href="mailto:Communications@mnbc.ca">Communications@mnbc.ca</a>	1 (604) 557-5851
Cheslatta Carrier Nation	TBC	(250) 694-3334
Yekooche First Nation	TBC	(250) 562-0592
Nee-Tahi-Buhn Band	TBC	1 (250) 694-3494
Impact Assessment Agency	<a href="mailto:iaac.vancouver.aeic@canada.ca">iaac.vancouver.aeic@canada.ca</a>	1 (604) 666-2431
BC Coroners Service Northern Region (Prince George)	N/A	1 (888) 991-2111 (toll free) 1 (250) 861 7429
Vanderhoof RCMP	N/A	1 (250) 567-2222
Prince George RCMP	N/A	1 (250) 562-3300

# Cultural Heritage Chance Find Report Form

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Recorder's Name/Affiliation: \_\_\_\_\_

Date: \_\_\_\_\_

Location of chance find (Location description, UTM coordinates, development, depth below surface): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Description of find: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Method used to mark and protect find: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Distribution:

BW Gold

Site Archaeologist

Indigenous  
Nations

Archaeology  
Branch

Fossil  
Management  
Office

Sketch Map	Photo
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## **APPENDIX D      TRANSMISSION LINE ARCHAEOLOGICAL AND CULTURAL HERITAGE RESOUC E MANAGEMENT PLAN**



# Blackwater Mine



## Transmission Line Archaeological and Cultural Heritage Resource Management Plan



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# Work Instructions

## Transmission Line Archaeological and Cultural Heritage Resource Management Plan

<b>Version</b>	D.1
<b>Replaces</b>	C.1
<b>Creation Date</b>	08/14/2023
<b>Scheduled Review Date</b>	
<b>Review Date</b>	
<b>Document Team Members</b>	
<b>Document Owner:</b>	
<b>Document Approver:</b>	
<b>Related Documents:</b>	
<b>Key Contacts:</b>	
<b>Change Requests:</b>	

## Context Statement

The Blackwater Gold Project (Project) received Environmental Assessment Certificate #M19-01 (EAC) on June 21, 2019, under the 2002 *Environmental Assessment Act* and a Decision Statement (DS) on April 15, 2019, under the *Canadian Environmental Assessment Act, 2012*, approving the Project with conditions. Blackwater is an open pit gold and silver mine with associated ore processing facilities located 110 km southwest of Vanderhoof in central British Columbia (BC). The EAC and DS includes activities associated with the construction and operation of an electrical transmission line (TL) that is required to provide the energy requirements for the Project. A number of provincial permits and authorizations will be required to construct and operate the TL. The primary permits include the following: Licence of Occupation (LOO) for Crown Land, an Occupant Licence to Cut, Road and Road Use Permits, and Junction Permits for critical road intersections.

The Archaeological and Cultural Heritage Resource Management Plan (ACHRMP) is required by section 9.11 of the *Joint Information Requirements for Mines Act / Environmental Management Act Permits* (Ministry of Energy, Mines and Petroleum Resources and Ministry of Environment and Climate Change Strategy 2019). The TL ACHRMP takes into consideration the comments received from Indigenous Groups during the preparation and screening review of the *Mines Act / Environmental Management Act* permits application for BW Gold's Major Works. Concordance with section 9.11. The section 9.11 requirements are identified in a Table of Concordance below.

BW Gold is providing this draft version of the Archaeological and Cultural Heritage Resource Management Plan for review and comment. BW Gold welcomes comments on the draft Plan.

### Concordance with Section 9.11 of the 2019 Joint Application Information Requirements

Requirement Description	Location in Plan
The plan addresses:	
<ul style="list-style-type: none"> <li>Archaeological and cultural heritage resources awareness training</li> </ul>	Section 6 (Training)
<ul style="list-style-type: none"> <li>Training for archaeological monitoring</li> </ul>	Section 11 (Monitoring)
<ul style="list-style-type: none"> <li>Detailed chance-find procedures, including obtaining required permits</li> </ul>	Appendix A (Archaeological and Cultural Heritage Chance Find Procedure)
<ul style="list-style-type: none"> <li>Applicable legislation, regulations, and guidelines</li> </ul>	Section 4.1 (Legislation)
<ul style="list-style-type: none"> <li>Heritage Inspection and Alteration Permits</li> </ul>	Section 7 and 8 (Baseline Heritage Resource Information and Protection Measures)
<ul style="list-style-type: none"> <li>Protection of existing sites</li> </ul>	Section 8 (Protection Measures)

## Acronyms and Abbreviations

ACHRMP	Archaeological and Cultural Heritage Resource Management Plan
AIA	Archaeological Impact Assessment
Artemis	Artemis Gold Inc.
BC	British Columbia
Blackwater or Project	Blackwater Gold Project
BMP	Best Management Practice
BW Gold	BW Gold LTD.
CCN	Cheslatta Carrier Nation
CEO	Chief Executive Officer
CHRs	Cultural Heritage Resources
CM	Construction Manager
CMT	Culturally modified tree
Code	Health, Safety and Reclamation Code for Mines in British Columbia
COO	Chief Operating Officer
CSFN	Carrier Sekani First Nations
DS	Blackwater Decision Statement issued under Section 54 of the <i>Canadian Environmental Assessment Act, 2012</i>
EAC	Blackwater Environmental Assessment Certificate #M019-01 issued under the BC <i>Environmental Assessment Act</i> (2002)
EAO	Environmental Assessment Office
EM	Environmental Manager
EMLI	BC Ministry of Energy, Mines and Low Carbon Innovation
EMPs	Environmental Management Plans
EMPR	Ministry of Energy, Mines, and Petroleum Resources
EMS	Environmental Management System
ENV	BC Ministry of Environment and Climate Change Strategy
EPC	Engineering, Construction and Management
FOR	BC Ministry of Forests
FLNRORD	BC Ministry of Forests, Lands, Natural Resource Operations and Rural Development
FSR	Forest Service Road
GM	General Manager - Development
HCA	<i>Heritage Conservation Act</i>
IAAC	Impact Assessment Agency of Canada

Indigenous Groups	Lhoosk'uz Dené Nation, Ulkatcho First Nation, Nadleh Whut'en First Nation, Saik'uz First Nation, Stelat'en First Nation, Nazko First Nation, Skin Tyee Nation, T̓silhqot'in Nation, Métis Nation British Columbia, and Nee-Tahi-Buhn Band as defined in the federal Decision Statement (April 15, 2019).
Indigenous Nations	Lhoosk'uz Dené Nation, Ulkatcho First Nation, Nadleh Whut'en First Nation, Saik'uz First Nation, Stelat'en First Nation and Nazko First Nation as defined in the EAC (June 21, 2019)
JAIR or Joint MA/EMA Application	Joint Application Information Requirements for <i>Mines Act</i> and <i>Environmental Management Act</i> Permits
km	Kilometre
kV	Kilovolt
LDN	Lhoosk'uz Dené Nation
M	Metre
MAR	Mine Access Road
MP	Management Plan
Mtpa	Million tonnes per annum
n.d.	No date
New Gold	New Gold Inc.
NFN	Nazko First Nation
NWFN	Nadleh Whut'en First Nation
ROW	Right-of-way
Project	Blackwater Gold Project
Qualified Person	A person who has training, experience and expertise in a discipline relevant to the field of practice set out in the condition.
Qualified Professional	Qualified Professional means a person who has training, experience and expertise in a discipline relevant to the field of practice set out in the condition, and who is registered with the appropriate professional organization in British Columbia, is acting under that organization's code of ethics and is subject to disciplinary action by that organization.
SFN	Saik'uz First Nation
StFN	Stelat'en First Nation
t/d	Tonnes per day
TL	Transmission Line
TL ACHRMP	Transmission Line Archaeological and Cultural Heritage Resource Management Plan
TL IDWMP	Transmission Line Industrial and Domestic Waste Management Plan
TN	T̓silhqot'in Nation
TSF	Tailings Storage Facility
UFN	Ulkatcho First Nation
VP	Vice President

## 1.0 Project Overview

The Blackwater Gold Project (the Project) is a gold and silver open pit mine located in central British Columbia (BC), approximately 112 kilometres (km) southwest of Vanderhoof, 160 km southwest of Prince George, and 446 km northeast of Vancouver. The Project site is presently accessed via the Kluskus Forest Service Road (FSR), the Kluskus-Ootsa FSR and an exploration access road, which connects to the Kluskus-Ootsa FSR at km 142. Electrical power for the Project will be supplied by a new approximately 135 km, 230 kilovolt overland transmission line (TL) that will connect to the BC Hydro grid at the Glenannan substation located near the Endako mine, 65 km west of Vanderhoof. A brief description of the proposed TL is as follows:

- From the Glenannan substation to the mine site permit area, the transmission line will be permitted by way of Licence of Occupation (statutory right-of-way; ROW);
- The TL will be constructed within a cleared right of way (ROW) of 40 metre (m) width for standard spans, but up to 50 m width for longer spans in select areas. The TL ROW area is approximately 515 ha;
- Existing permitted and non-status roads will be used for the purpose of accessing the ROW. New access trails and stream crossings will be located only within the TL cleared ROW;
- Equipment and material laydown areas will also lie within the cleared ROW; and
- The construction workforce will be housed at the Project camp or other independent commercial accommodations in the area.

Overall Project construction is anticipated to take two years. The TL is anticipated to take approximately 14 months to construct. Post-construction, most of the temporary access trails used for construction on the TL ROW will be deactivated and/or decommissioned within 3 years with the exception of those required for maintenance. During operation of the TL there will be periodic inspections and maintenance as well as occasional unscheduled power supply interruptions that will require inspection and maintenance/repair activities.

Once commissioned, the TL will be required to support mine development throughout the Project's 23-year mine life. There may be some ongoing requirements for the TL following mine closure and into post-closure, pending post-closure electrical load evaluation. The TL will be decommissioned 46 years (or more) after construction, during the Project's post-closure phase.

The Blackwater mine site is located within the traditional territories of Lhoosk'uz Dené Nation (LDN), Uikatcho First Nation (UFN), Skin Tyee Nation and Tsilhqot'in Nation. The Kluskus and Kluskus-Ootsa Forest Service Roads (FSR) and Project TL cross the traditional territories of Nadleh Whut'en First Nation (NWFN), Saik'uz First Nation (SFN), and Stellat'en First Nation (StFN; collectively, the Carrier Sekani Tribal Council) as well as the traditional territories of the Nazko First Nation (NFN), Nee Tahi Buhn Band, Metis Nation of BC, Cheslatta Carrier Nation and Yekooche First Nation (EAO 2019a and 2019b).

Additional details on transmission line components and activities are presented in Section 3.2 of the Transmission Line Initial Project Description (BW Gold 2022).

## 2.0 Purpose and Objectives

The purpose of the Transmission Line Archaeological and Cultural Heritage Resource Management Plan (TL ACHRMP) is to provide direction and guidance regarding the protection and management of tangible cultural heritage resources located within the transmission line right of way. Tangible cultural heritage includes archaeological sites and other cultural heritage resources (CHRs) such as historic, traditional

use, and paleontological sites. The scope of the plan includes an object, site or location of a traditional societal practice that is of historical, cultural, or archaeological significance to BC, a community, or an Aboriginal people. The TL ACHRMP includes procedures for inadvertent discovery or chance finds and applies to the transmission line's construction, operation, closure, and post-closure phases.

The objectives of the TL ACHRMP are to:

- minimize adverse effects to known and as-yet unknown tangible archaeological sites and CHRs;
- identify applicable legislation, regulations, and guidelines, as well as permit obligations;
- define training requirements pertaining to archaeological and CHR awareness and monitoring; and
- provide a Chance Find Procedure.

This plan addresses the requirements of Section 9.11 (Archaeological Management and Impact Mitigation Plan) of the *Joint Application Information Requirements for Mines Act and Environmental Management Act Permits* (Joint Application Information Requirements; EMPR & ENV 2019). This plan has been developed to meet the requirements of DS Condition 7 (Physical and Cultural Heritage and Structures, Sites or Things of Historical, Archaeological, Paleontological or Architectural Significance), as well as associated conditions of each authorization. The federal DS defines "heritage value" as *"the aesthetic, historic, scientific, cultural, social or spiritual importance or significance for past, present or future generations."*

As per Environmental Assessment Certificate M#19-01 (EAC) Condition 18, a Cultural and Spiritual Resources Management Plan will be developed in consultation with Lhoosk'uz Dene Nation, Ulkatcho First Nation, Stellat'en First Nation, Saik'uz First Nation, Nadleh Whut'en First Nation and Nazko First Nation (hereafter collectively referred to as the Indigenous Nations).

The BC *Heritage Conservation Act* includes the following definitions of "heritage" that are applicable to this plan:

*"heritage object" means, whether designated or not, personal property that has heritage value to British Columbia, a community or an aboriginal people;*

*"heritage site" means, whether designated or not, land, including land covered by water, that has heritage value to British Columbia, a community or an aboriginal people;*

*"heritage value" means the historical, cultural, aesthetic, scientific or educational worth or usefulness of a site or object;*

Heritage resources considered in the TL ACHRMP include archaeological sites, historic sites, cultural sites (trails, historic settlements, log cabins, culturally modified trees (CMTs), and blazes) and paleontological sites (dinosaur trackways/preserved footprints, bones and plant fossils, shell beds, and other invertebrate fossils).

The objective of the TL ACHRMP is to provide a clear process to guide the development, implementation, and monitoring of measures to address adverse effects on known and as-yet unknown heritage resources or values.

## 2.1 Qualified Person/Professional

The process for selecting the qualified person/professional to prepare the TL ACHRMP considered whether the person was eligible to hold a *Heritage Conservation Act* (HCA) permit based on BC Archaeology Branch requirements. The selection of the qualified person considered their training, experience, and familiarity with the Project's environmental assessment.

Implementation of the TL ACHRMP will require a Professional Archaeologist authorized by the Archaeology Branch to hold HCA Section 12.2 and Section 12.4 Permits in the Project area. A qualified archaeologist will be retained through the life of the Project to hold the necessary HCA permits, oversee archaeological assessments, including monitoring, and assist with assessing potential Chance Finds. They will also be involved in on-going consultation with the Indigenous groups on matters of archaeology and cultural heritage.

### 3.0 Roles and Responsibilities

BW Gold roles and responsibilities relating to environmental management and protection are identified in Table 3-1.

**Table 3-1: BW Gold Roles and Responsibilities**

Position	Responsibility
Chief Executive Officer (CEO)	The CEO is responsible for overall Project governance. Reports to the Board.
Chief Operating Officer (COO)	The COO is responsible for engineering and Project development and coordinates with the Mine Manager to ensure overall Project objectives are being managed. Reports to CEO.
General Manager (GM) Development	The GM is responsible for managing project permitting, the Project's administration services and external entities, and delivering systems and programs that ensure Artemis's values are embraced and supported: Putting People First, Outstanding Corporate Citizenship, High Performance Culture, Rigorous Project Management and Financial Discipline. Reports to COO.
Vice President (VP) Environment & Social Responsibility	The VP is responsible for championing the Environmental Policy Statement and EMS, establishing environmental performance targets and overseeing permitting. Reports to COO.
Mine Manager	The Mine Manager, as defined in the <i>Mines Act</i> , has overall responsibility for mine operations, including the health and safety of workers and the public, Environmental Management System (EMS) implementation, overall environmental performance and protection, and permit compliance. The Mine Manager may delegate their responsibilities to qualified personnel. Reports to GM.
Construction Manager (CM)	The CM is accountable for ensuring environmental, archaeological, cultural heritage and regulatory commitments/ and obligations are being met during the construction phase. Reports to GM.
Environmental Manager (EM)	The EM is responsible for the day-to-day management of the Project's environmental programs and compliance with environmental permits, updating EMS and MPs. The EM or designate will be responsible for reporting non-compliance to the CM, and Engineering, Procurement and Construction contractor (EPC) contractor, other contractors, the Company and regulatory agencies, where required. Supports the CM and reports to Mine Manager.
Departmental Managers	Departmental Managers are responsible for implementation of the EMS relevant to their areas. Report to Mine Manager.

<b>Position</b>	<b>Responsibility</b>
Indigenous Relations Manager	The Indigenous Relations Manager is responsible for Indigenous engagement throughout the life of mine. Also responsible for day-to-day management and communications with Indigenous groups. Reports to VP, Environment & Social Responsibility.
Community Relations Advisor	The Community Relations Advisor is responsible for managing the Community Liaison Committee and Community Feedback Mechanism. Reports to Indigenous Relations Manager.
Environmental Monitors	Environmental Monitors (includes Environmental Specialists and Technicians) are responsible for tracking and reporting on environmental permit obligations through field-based monitoring programs. Report to EM.
Aboriginal Monitors	Aboriginal Monitors are required by EAC #M19-01 Condition 17 and will be responsible for monitoring the Project's potential effects on Aboriginal interests. Aboriginal Monitors will be involved in adaptive management and follow-up monitoring programs. Report to EM.
Qualified Professional and Qualified Persons	Qualified professionals and qualified persons will be retained to review objectives and conduct various aspects of environmental and social monitoring as specified in EMPs and social management plans (MPs).

Transmission Line construction contractor roles and responsibilities relating to environmental management and protection are identified in Table 3-2.

**Table 3-2: Transmission Line Construction Contractor Roles and Responsibilities**

<b>Role</b>	<b>Responsibility</b>
Contractor Construction Manager (CCM)	The Construction Manager has ultimate responsibility for construction proceedings, including worker and public health and safety, archaeological and cultural heritage protection, and environmental protection. The Construction Manager will ensure the proper implementation of training programs as well as support the Blackwater Gold Environmental Policy and TL ACHRMP. The Construction Manager will ensure that adequate support and resources are made available for the implementation and maintenance of the EMS, including management plan implementation and review. The Construction Manager may delegate their responsibilities to Qualified Professional.
Construction Superintendents	Construction Superintendents have an administrative responsibility and requirement to act upon the directions, guidance, and support of the CCM. They are resources to their Manager and have the following responsibilities: <ul style="list-style-type: none"> <li>• Support implementation of the Blackwater Gold Environmental Policy and TL ACHRMP;</li> <li>• Ensure that archaeology and cultural heritage are given consideration in pre-planning of construction activities, budgets, training, and operations; and</li> <li>• Ensure that workers under their supervision are made aware of known, or reasonably foreseeable, archaeological and cultural heritage aspects where they work.</li> </ul>

Role	Responsibility
Construction Employees, Contractors, and Sub-Contractors	<p>Employees have general responsibilities for environmental protection, and general responsibilities include:</p> <ul style="list-style-type: none"> <li>• Supporting the Blackwater Gold Environmental Policy;</li> <li>• Supporting implementation of TL ACHRMP;</li> <li>• Cooperating with the Blackwater Environment Committee representative;</li> <li>• Learning and following environmental best practices and procedures relevant to their work;</li> <li>• Following instructions and directives given by supervisors;</li> <li>• Operating equipment in an environmentally responsible manner to avoid environmental impacts;</li> <li>• If training another worker, ensuring that they are properly completing all required tasks and responsibilities in accordance with environmental best practices procedures;</li> <li>• Reporting all environmental incidents immediately to their supervisor, who will expedite a response to address the incident;</li> <li>• Participating in mitigating or minimizing harm to the environment should an environmental incident occur; and</li> <li>• Asking for help or information when unsure how to perform a task without compromising social, cultural, archaeological, or environmental values.</li> </ul>

## 4.0 Compliance Obligations, Guidance, and Best Management Practices

### 4.1 Legislation

Federal legislation applicable to heritage resources includes:

- Canadian Environmental Assessment Act, 2018; and
- United Nations Declaration on the Rights of Indigenous Peoples Act.

Provincial legislation and other key requirements applicable to heritage resources include:

- Coroners Act;
- Cremation, Internment and Funeral Services Act;
- Declaration on the Rights of Indigenous Peoples Act;
- Environmental Assessment Act;
- Forest and Range Practices Act;
- Forest Planning and Practices Regulation;
- Freedom of Information and Protection of Privacy Act;

- Heritage Conservation Act;
- Land Act;
- Fossil Definition Regulation;
- Local Government Act;
- Mineral Tenure Act;
- Mineral Definition Modification Regulation;
- Mines Act; and
- Health, Safety and Reclamation Code for Mines in British Columbia (EMLI 2021).

## 4.2 Heritage Conservation Act

Section 12.1 of the HCA provides automatic protection for artifacts, features, materials or other physical evidence of human habitation or use on or before 1846 as well as petroglyphs, petroforms, heritage wrecks, and burials regardless of age.

There is no legislation that automatically protects intangible cultural and spiritual resources, including spiritual sites, transformer stones, ceremonial sites, and areas with Indigenous place names. Part 1 Section 4 of the HCA provides:

*the Province (BC) may enter into a formal agreement with Indigenous Nations for the conservation and protection of heritage sites and objects that represent the cultural heritage of the aboriginal people who are represented by that Indigenous Nation.*

An agreement under this section provides protection under section 12.1 of the Act.

Permits issued under Section 12.2 of the HCA include heritage investigation and inspection permits:

- Heritage inspections involve physical examinations and other research to identify the heritage value of a property or a portion of it, and to establish, if the property is a heritage site or heritage object, including the need for protection and conservation, or conformance with heritage protection requirements.
- Heritage investigations involve archaeological or other systematic studies of heritage property to reveal their history, and may include the recording, removal and analysis of artifacts, features and other material necessary for the purpose of the heritage investigation.

## 4.3 Environmental Assessment Certificate and Federal Decision Statement Conditions

BW Gold received a federal DS on April 15, 2019, and EAC #M19-01 on June 21, 2019. This plan is designed to address DS Condition 7 (Physical and Cultural Heritage and Structures, Sites or Things of Historical, Archaeological, Paleontological or Architectural Significance) within the Transmission Line corridor. As required by EAC Condition 18, a separate Cultural and Spiritual Resources Management Plan is being developed in consultation with Indigenous Nations, and the ministries of Forests, Lands, Natural Resources Operations and Rural Development, Environment and Climate Change Strategy and Energy, Mines and Low Carbon Innovation. Construction cannot commence until this plan has been approved by the Environmental Assessment Office (EAO), unless otherwise authorized by the EAO.

The TL ACHRMP plan has been prepared and reviewed by qualified persons/qualified professionals. The reviewer of the plan is a registered archaeologist in BC and has 28 years of archaeology experience in BC.

## 4.4 Permit Requirements

BW Gold received *Mines Act* Permit M-246 on June 22, 2021, authorizing early construction works for the Project. Part C (Protection of Land and Watercourses) Condition 9 of the permit includes the following requirements related to archaeological resources:

- a) Prior to beginning any mechanized surface disturbance on undisturbed lands, the Permittee must conduct field surveys consistent with archaeological and cultural heritage resources management procedures consistent with the provisions of the BC Heritage Conservation Act.*
- (b) For those sites that cannot be avoided, the Permittee must contact the Archaeology Branch of the Ministry of Forests, Lands, Natural Resource Operations and Rural Development and make arrangements to scientifically excavate and record findings.*

Archer Cultural Resource Management Corp. has received Heritage Inspection Permit 2021-0322, which authorizes archaeological inspections for the Blackwater mine area and TL.

## 4.5 Guidelines and Best Management Practices

Guidelines and best management practices related to cultural heritage resources include:

- BC Archaeological Impact Assessment Guidelines (Archaeology Branch 1998);
- BC Fossil Management Framework (n.d.); and
- Technical Guidance for Assessing Physical and Cultural Heritage or and Structure, Site or Thing (CEA Agency 2015).

## 5.0 Adaptive Management Framework

The TL ACHRMP is a living document that will evolve over time in response to feedback from Indigenous groups, monitoring results, chance finds, and the results of archaeological impact assessments (AIAs). The plan incorporates adaptive management as follows:

- Plan
  - Prior to site disturbance, complete AIA(s) within or adjacent to Project components that have not been previously assessed due to changes to infrastructure footprints to identify heritage sites.
  - Engage with Indigenous groups to identify cultural sites and related mitigation measures.
  - Engage with Indigenous groups to determine confidentiality of known sites.
- Do
  - Implement training.
  - Implement mitigation measures for known Heritage Resources.
  - Implement Archaeology and Cultural Heritage Chance Find Procedure (Chance Find Procedure).

- Monitor
  - In line with the Aboriginal Group Monitor and Monitoring Plan
  - Maintain records to document monitoring of heritage sites and chance finds.
  - Implementation of TL ACHRMP.
  - Document any contraventions of the TL ACHRMP.
- Adjust
  - EM review of effectiveness of prevention measures.
  - In line with incorporation of input from the Aboriginal Group Monitor and Monitoring Plan.
  - Update the TL ACHRMP as required (Section 14).

## 6.0 Training

Employees and contractors will receive information related to heritage resources previously identified on site as well as cross-cultural training on the history of local Indigenous nations and training on the Chance Find Procedure on their arrival on site through an environmental on-boarding training session and prior to the start of work as part of the Site Orientation. The purpose of this training is to provide personnel with a basic level of awareness related to heritage, spiritual and archaeological resources, and an understanding of their obligations regarding compliance with plan, regulatory requirements, commitments and best practices.

Construction Supervisors) will be provided with a copy of the TL ACHRMP and will receive additional training with respect to the Chance Find Procedure (Appendix A).

BW Gold will regularly review and update the training and awareness related to the plan based on changes in training needs and regulatory requirements.

If additional No Work Zones are identified during the course of the Project, this information will be provided to employees and contractors and maps will be updated accordingly. If there is an immediate potential for impact, then work in the area will stop until the No Work Zones have been provided and delineated. Information on additional No Work Zones will be communicated through the BW Gold EM to the Departmental Manager and Indigenous Relations Manager and will be provided to the Construction Contractor by a person designated by the Departmental Manager.

## 7.0 Baseline Heritage Resource Information

### 7.1 Known Archaeological Sites within the Transmission Line

An Archaeological Impact Assessment (AIA) under HCA Permit #2012-0295 was undertaken in fall 2012 and summer 2013, which covered the mine site footprint and Project linear infrastructure including the Transmission Line (AMEC 2013). The Transmission Line routing has changed since 2013 and a further AIA of the transmission line construction area has been conducted in 2021, 2022 and 2023 under HCA Permit 2021-0322, See Appendix D for preliminary findings of the 2022 field work. See Appendix E for preliminary findings of 2023 field work.

There are 40 known archaeological sites within 150 m of the Transmission Line alignment centreline (Table 7.1-1).

**Table 7.1-1: Known Archaeological Sites within 150 m of the Transmission Line Alignment Centreline**

Borden Number	Site Type	Distance from Transmission Line Centreline (m)	Permit Number
FhSe-43	Messue Trail	0	2000-0129, 2001-0171
FhSe-60	Lithic Scatter and Cache Pit	11	2002-0104
FhSe-76	Lithic Scatter	16	2021-0322
FhSe-77	Lithic Scatter	14	2021-0322
FhSe-78	Lithic Scatter	1	2021-0322
FhSe-79	Lithic Scatter	1	2021-0322
FjSd-16	Lithic Scatter	0	2021-0322
FjSd-17	Lithic Scatter	29	2021-0322
FjSd-18	Lithic Scatter	18	2021-0322
FjSe-17	Lithic Scatter	0	2021-0322
FjSe-18	Cache Pit; Lithic Scatter	0	2021-0322
FjSe-19	Lithic Scatter	20	2021-0322
FjSe-20	Cache Pit; Lithic Scatter	55	2021-0322
FjSe-21	Trail	0	2021-0322
FjSe-22	Lithic Scatter	0	2021-0322
FkSe-70	Lithic Scatter	8	2021-0322
FkSe-71	Lithic Scatter; Faunal; Hearth	0	2021-0322
FkSf-35	Cheslatta Trail	0	2009-0106
FkSf-45	Lithic Scatter	92	2011-0076
FkSf-47	Lithic Scatter	36	2021-0322
FkSf-48	Lithic Scatter	3	2021-0322
FISe-20	Lithic Scatter	38	2021-0322
GaSf-6	Lithic Scatter	121	1982-0030
GaSf-43	Cache Pit	0	2012-0295
GaSf-44	Cache Pit	0	2012-0296
GaSf-45	Cache Pit	55	2012-0295
GaSf-46	Cache Pit	61	2012-0295

Borden Number	Site Type	Distance from Transmission Line Centreline (m)	Permit Number
GaSf-62	Cache Pit; Lithic Scatter	0	2021-0322
GaSf-63	Cache Pit; Lithic Scatter	10	2021-0322
GaSf-64	Cache Pit	39	2021-0322
GaSf-65	Cache Pit	15	2021-0322
GaSf-66	Cache Pit; Lithic Scatter	21	2021-0322
GaSf-67	Cache Pit	71	2021-0322
GaSf-68	Lithic Scatter	35	2021-0322
GaSf-71	Cache Pit	28	2021-0322
GaSf-72	Lithic Scatter	46	2021-0322
GaSf-73	Cache Pit	8	2021-0322
GaSf-14576-T1*	Cache Pit	86	2021-0322
GaSg-2	Cemetery	99	1982-0030
GaSg-17	Lithic Scatter	0	2021-0322
GaSg-18	Cache Pit; Lithic Scatter	12	2021-0322

\* Temporary Numbers will be updated to Borden Numbers once received from Archaeology Branch.

## 7.2 Known Historic Cultural Heritage Resources

There are 20 known CMT sites and one trap site within 150 m of the transmission line alignment centreline and 9 of these are within the 40 to 50 m wide final transmission line right of way (Table 7.2-1; Appendix D). Assessments were carried out previously (AMEC 2013) though the transmission line routing has changed since then. An Archaeological Impact Assessment (AIA) of the transmission line final right of way alignment (construction area) was conducted during 2021 and 2022. The CMTs referenced in the table were identified in the EA submission and/or the AIAs as post-1846. If it is too difficult to determine the exact date of the CMT (the tree is dead or too rotten) or, if in the professional opinion of archaeologist, the scar obviously post-dates 1846 based on the age of the tree or the nature of the modification, the Year Modified is noted as 'Unknown'. In these instances, professional judgement may have been used to determine that the scar post-dated 1846.

**Table 7.2-1: Historic Cultural Heritage Resources (CHRs) within 150 m of the Transmission Line Alignment Centreline**

CHR#	Type <sup>1</sup>	Year Modified	Description	Distance from Transmission Line Centreline (m)
2	BL	Unknown	19 blazed trees in linear alignment suggesting association with mineral exploration.	3
4	BL	Unknown	4 blazed trees in linear alignment suggesting association with mineral exploration.	48
25	BL	Unknown	11 blazed trees in linear alignment suggesting association with mineral exploration.	0
28	BSO	1936-1993	Trees along a well used trail.	0
32	BSR/BS/BSO	Unknown	1 cambium-stripped standing lodgepole pine, with a rectangular scar and two oval blazes. 1 standing tree in a previously harvested forestry cutblock; blazes on east and west sides of tree.	1
33	BSO	Unknown	1 standing lodgepole pine with two oval blazes. 2 more blazed trees outside proposed transmission line; approximately linear alignment suggests association with forestry practice.	16
38	BSL	Unknown	3 bark stripped lodgepole pine. Approximate linear alignment suggests association with forestry practice.	112
40	Unknown	Unknown	1 box trap. Recent trap, located on tree; lure (fish) still on wire inside trap.	50
42	Unknown	Post 1978	1 shaped spruce. Increment core indicates modification date after 1978.	26
43	BSL	Unknown	1 lodgepole pine with lenticular barkstrip scarring. Located at base of a steep slope; advanced state of decay precluded dating.	18
44	BS/BSL/BSO	Unknown	8 standing and 1 fallen dead barkstripped lodgepole pine. Advanced state of decay precluded dating.	0

CHR#	Type <sup>1</sup>	Year Modified	Description	Distance from Transmission Line Centreline (m)
45	BST	1945	2 spruce trees with triangular barkstrip scars. Two trees within 5 m of each other; 1 with 2 scar faces. Attempts were made to date both trees; one tree yielded a modification date of 1945.	34
Blazes	BL	Unknown	Two modern blazes, N-S orientation	50
13576-CMT	BS	1879	Four bark stripped lodgepole pine, three standing one on ground in small cluster. Three standing were fully recorded, two cored, only one core was countable and returned a scar date of 1879.	0
CMT22 Unknown	BS	Post-1846	Bark stripped lodgepole pine.	4
CMT22-2	BS	Post-1846	Bark stripped lodgepole pine.	45
CMT22-3	BS	Post-1846	Bark stripped lodgepole pine.	5
CMT22-4	BS	Post-1846	Bark stripped lodgepole pine.	1
CMT22-5	BS	Post-1846	Bark stripped lodgepole pine.	3
CMT22-6	BS	Post-1846	Bark stripped lodgepole pine.	2
Trap	N/A	Unknown		47

<sup>1</sup> BS = Bark Stripped, BSO = Barked Stripped Oval, BSD = Bark Stripped Diamond, BL = Blaze, BSL = Bark Stripped Lenticular, BLO = Blaze Oval

## 7.3 Known Spiritual Sites

This section is provided fully in Section 7.3 of the Cultural and Spiritual Resources Management Plan (April 2022) and not discussed further.

## 7.4 Known Paleontological Sites

Desk and field assessments were conducted for the Blackwater Project in 2013 and summarized in Appendix 8.1 of the EA (AMEC 2013). As per communications with BC Fossil Management Office in April 2022, an Addendum to the 2013 Baseline Palaeontology Section (Reichel-Bodner 2022) was prepared along with a Palaeontological Chance Find Procedure (Appendices B and C). There are four known paleontological sites within 150 m of the transmission line alignment centreline and two of these are within the Transmission Line right of way alignment (Table 7.4-1).

**Table 7.4-1: Paleontological Sites within 150 m of the Centreline of the Transmission Line Alignment**

Paleontological Resources	Fossil Type	Distance from Transmission Line Centreline (m)
C-056986	Bivalves, belemnites	101
C-143722	Ammonids, bivalves, gastropods, ichnofossil	10
C-177438	Ichthyoliths, gastropod, bivalves	7
C-203467	Bivalves, plant	64

## 8.0 Protection Measures

### 8.1 Archaeological Sites

For new sites, or sites for which site-specific recommendations are not provided in Section 8.2 the following procedures will be followed.

Known archaeological sites within 150 m of the transmission line centreline but beyond the Transmission Line Permitted Construction Zone will be avoided where feasible (Section 7.1). Any impact on archaeological sites, if non-permitted, will be an infraction of the HCA which will be investigated by the [Natural Resource Compliance and Enforcement](#) branch. All work in the area will be halted pending the results of their investigation.

The following measures will be taken for known sites located within 50 m of the Transmission Line Permitted Construction Zone:

- All identified sites within 50 m of the Transmission Line will be buffered by Management Zones.
- Within the Transmission Line Permitted Construction Zone Management Zones will be identified on Project Maps and the Special Management Areas will be flagged in the field.
- Construction monitoring (Section 11.1) within the Management Zones.
- Annual monitoring (Section 11.2) of the sites.
- Where impacts to the site are unavoidable, then mitigation must be conducted prior to impact. Procedures to record, analyse and mitigate effects on a site will be determined in consultation with the BC Archaeology Branch and affected Indigenous groups as per the HCA permit and carried out by an archaeologist under HCA Section 12.2 heritage investigation and/or Section 12.4 site alteration permits. Mitigation measures will be dependent on the specifics of the archaeological site and the levels of impact. Mitigations generally involve detailed mapping, photography, and systematic data recovery through surface collection and controlled excavations of evaluative units if subsurface deposits are present.
  - Any artifacts collected during archaeological assessment will be sent to the Exploration Place Museum and Science Centre in Prince George, BC or another approved repository identified in the relevant Section 12.2 or 12.4 permit under the *Heritage Conservation Act*.

The following measures will be implemented when Project activities are located 50 m from a known site identified in Section 7:

- “Management Zone” is a 50 m buffer around a site. Ground disturbance activities may occur within the Management Zone with an Environmental Monitor (Section 11.1) present. Protected sites will follow the procedures below.
- “Special Management Zone” is a flagged 10 m buffer around the site boundary. Ground disturbance within this zone will be avoided. Prescriptions for work inside the 10 m buffer are dependent upon each site recommendation for management and may include hand falling or limited machine access. An Environmental Monitor (Section 11.1) will be required during work within this zone.
- Protected Archaeological Site (Site) is located inside a Special Management Zone and are flagged as a “No Work Zone”. If the site is subsurface and the activities will be limited to tree removal then the following may occur with an Environmental Monitor present:
  - handfelling in a direction away from the site;
  - reaching in;
  - cherry picking; and
  - stubbing all trees to 1 m.
- Should impacts to the ground surface be observed within the “No Work Zone” the Project Archaeologist and the Archaeology Branch will be contacted to determine if additional mitigation measures are required to protect the site.

## 8.2 Known Archaeological Sites within Transmission Line Right of Way

The following site-specific mitigation measures are provided as options for the known sites within the Transmission Line right of way. Prior to the implementation of site-specific mitigations, archaeological site boundaries will be buffered by 50 m Management Zone and a 10 m Special Management Zone and shown on maps (Appendix D). A final decision on the appropriate mitigation measure will be determined following discussion with the Project Archaeologist, Archaeology Branch, and affected Indigenous groups. Following completion of the mitigations below, prescriptions within the 50 m Management Zone may be amended. Sites identified through field work conducted in 2023 will be included in future versions of this management plan.

### 8.2.1 FhSe-43 and FkSf-35 (Messue and Cheslatta Trails)

These sites cross through the Transmission Line right of way. The sites represent sections of the documented Messue and Cheslatta Aboriginal trails and are protected under the *HCA*. The following mitigations will be discussed with the Archaeology Branch and Indigenous Groups and implemented based on those discussions:

- A minimum 5 m avoidance buffer around the site area be implemented where no ground disturbing activities are to proceed (i.e., pole placements, access roads/trails etc.).
- For all standing trees within the site area that need to be stubbed to ensure vegetation growth does not impede future power lines:
  - Tree stems within the site boundaries must be stubbed to no less than 1 m to prevent wind fall and to remain as a site indicator for future development activities.
  - During stubbing no trees can be felled, yarded, or skidded within the site boundaries.

- The trees or related debris must be lifted outside of the site area (cherry picked).
- This activity will be monitored by an approved individual who is fully aware of procedures regarding protected archaeological sites.

During project construction previously built access corridors which cross the trail site areas will be utilized when available.

- **Acquisition of an HCA Section 12.4 Permit.** If avoidance is not feasible the project proponent will acquire an HCA Section 12.4 Site Alteration Permit prior to construction.
  - Issuance of this permit is warranted due to the extensive surface and subsurface assessment and evaluation of the site areas which did not result in the recovery of additional cultural remains.

### 8.2.2 FhSe-60, FjSd-16, FjSd-18, FjSe-19, FkSe-70, FkSf-48, GaSf-43, GaSf-45, GaSf-46, GaSf-62, GaSf-63, GaSf-64, GaSf-65, GaSf-66, GaSf-67, GaSf-68, GaSf-71, GaSf-73, GaSg-2, GaSg-17 and GaSg-18

All or part of these sites are located within the assessed 40 m transmission line right of way. The following mitigations will be discussed with the Archaeology Branch and Indigenous Groups and implemented based on those discussions:

- A minimum 5 m avoidance buffer on the site area be implemented where no ground disturbing activities are to proceed (i.e., pole placements, access roads/trails etc.).
- For the portions of the sites areas that fall inside the proposed 40 m transmission line right of way, it is recommended that all standing trees within the site area be stubbed to ensure vegetation growth does not impede future power lines.
  - Tree stems within the site boundaries must be stubbed to no less than 1 m to prevent wind fall and to remain as a site indicator for future development activities.
  - During stubbing no trees can be felled, yarded, or skidded within the site boundaries. The trees or related debris must be lifted outside of the site area (cherry picked).
  - This activity should be monitored by an approved individual who is fully aware of procedures regarding protected archaeological sites.
- **Mitigation through further work:** If construction of the proposed transmission line cannot avoid ground surface impacts within the area of a site, further assessment and evaluation of the site is required by the Project archaeologist. The results of the assessment will determine the nature of additional mitigation that may be recommended. These may include:
  - archaeological excavation under an HCA 12.2 Permit if remains at the site are determined to warrant additional investigation, and/or
  - the acquisition of an HCA Section 12.4 Permit if a representative sample of cultural material has been recovered during work conducted under an HCA 12.2 Permit.

### 8.2.3 FkSe-71, FjSe-17, FjSe-18, and FjSe-21

While portions of these sites fall outside the proposed right of way and within the assessed study area buffer, a western portion of FkSe-71, the western half of the untested high archaeological potential associated with FjSe-17, and the majority of FjSe-18 and FjSe-21 are within the proposed 40 m transmission line right of way.

Work at these locations occurred as part of the 2022 field season and preliminary findings are summarized in Appendix D.

### 8.3 Culturally Modified Tree Sites

There are known post-1846 CMT sites within Transmission Line Permitted Construction Zone that may be impacted by Project infrastructure (Section 7.2; Appendix D). Prior to alteration to post-1846 CMTs, the relevant/affected Indigenous groups will be consulted to determine the preferred mitigation measures. Common mitigation measures for post-1846 CMTs with cultural significance include: detailed measurements and photography, removing and preserving the modified portion of the tree, or removing a cross-section (cookie) of the modified portion of the tree. These measures allow for the preservation of some or all of the information about the modification(s) made to the tree. Prior to the implementation of specific mitigations CMTs will be buffered by 50 m and shown on maps as a Management Zone (Appendix D). The management strategy will be determined in discussion between BW Gold and Indigenous Nations.

### 8.4 Trails

There are known trails located within the Transmission Line Permitted Construction Zone. Prior to the alteration of a trail, the relevant/affected Indigenous communities will be consulted to determine the preferred mitigation measures. Potential mitigation measures for recording trails include photography and detailed mapping of the route and surrounding features. If the trail is an archaeological site protected under the HCA, the protection measure identified in Section 8.2.1 for the Cheslatta and Messue trails will be in effect.

### 8.5 Paleontological Sites

There are known palaeontological sites within the Transmission Line right of way alignment (Section 7.4; Appendix D). Prior to the implementation of specific mitigations palaeontological sites will be buffered by 50 m and shown on maps as No Work Zones (Appendix D). Following completion of the mitigation, as determined in cooperation with the BC Fossil Management Office, including a determination that no mitigations is required, the 50 m No Work Zone may be removed or reduced as appropriate based on the results of the mitigation. If paleontological materials are recovered, the Palaeontological Chance Find Procedure (Appendix C) will be followed and the BC Fossil Management Office will be consulted to determine an appropriate repository.

### 8.6 As-yet Unknown Sites

Archaeological impact assessments will be conducted in areas within the Transmission Line Permitted Construction Zone that fall outside of areas covered by AIAs prior to construction in these areas. An AIA may also occur if a previously assessed area requires further work as per permit recommendations or is required to address data gaps. Indigenous representatives and/or Indigenous Knowledge Holders from the affected Indigenous groups will be invited to be involved, and/or, identify representatives who will be involved, in the assessment.

Additional consultation with Indigenous groups specifically relating to the location and identification of cultural resources within the Project footprint will be conducted prior to any further disturbance. If resources are identified the cultural importance of these resources will be acknowledged and preserved to the extent feasible.

There is Ashman Formation bedrock within the TL that contain known palaeontological sites and therefore that potential for additional as-yet unknown palaeontological sites.

An Archaeological and Cultural Heritage Chance Find Procedure, a Palaeontological Chance Find Procedure, and reporting form is provided in Appendices A and C. Agreements respecting Indigenous customs and protocols respecting the discovery, handling, recognition, recording, transferring and safekeeping of unknown sites and confidentiality will be developed and in place prior to the commencement of Project construction.

## 9.0 Support

### 9.1 Training and Awareness

All those responsible for the management, implementation, and operation of any aspect of this plan will be adequately trained for their role.

All staff will attend site orientation where the contents, requirements and commitments made in this plan will be communicated. Staff will be adequately trained for their roles to implement this plan and will be aware of BW Gold's commitments to uphold this plan. Prior to the commencement of transmission line construction, all workers will:

- Have reviewed and be aware of the requirements of this plan;
- Have reviewed and understood information pertaining to Chance Find Procedures (Appendices A and C) appropriate for the work activity being undertaken; and
- Be provided with maps indicating the locations of archaeological sites and CHRs and No Work Zone buffers around sites.

### 9.2 Supporting Documentation

Documentation supporting the protection of archaeological, historical, and paleontological sites and CHRs in, but is not limited to, the following:

- Maps indicating the locations of the 'No Work Zones' around archaeological and CHR sites;
- Training information for BW Gold staff and on-site personnel (including contractors);
- Archaeological and Cultural Heritage Chance Find Procedure (Appendix A);
- Monitoring and compliance reports including the AIA, site alteration, paleontological, historical, and cultural site reports.

### 9.3 Internal and External Communication

Observations of archaeological, historical, and paleontological sites and CHRs will be:

- Reported by Construction staff to their supervisors;
- Documented using the Archaeological and Cultural Heritage Chance Find Procedure or the Palaeontological Chance Find Procedure (Appendices A and C);
- Documented in an Archaeological and Cultural Heritage Chance Find Logbook; and

- Reported monthly by the Construction Manger to the BW Gold EM on the content of the Archaeological and Cultural Heritage Chance Find Logbook.

## 10.0 Confidentiality

Archaeological sites are confidential. Therefore, archaeological sites and cultural heritage resources identified as confidential by Indigenous Nations will be depicted on site maps as a polygon that includes the site boundary with a 50 m buffer applied and marked as Management Zone.

BW Gold will consult Indigenous Nations on how to protect the confidentiality of a discovery, consistent with provincial laws. The Archaeological and Cultural Heritage Chance Find Procedure will be revised to incorporate confidentiality provisions.

## 11.0 Monitoring

Within the Transmission Line Permitted Construction Zone archaeological and cultural heritage sites will be marked on Project maps as a “Management Zone” of 50 m. Within the Management Zone a 10 m Special Management Zone will be flagged “No Work Zone” in the field and will have no ground disturbance (Section 8). If cultural sites are confidential, they will be represented, including an appropriate buffer, developed in consultation with the Indigenous groups and the Project Archaeologist, by only the “No Work Zone” designation on Project maps and documents.

### 11.1 Construction Monitoring

Sites within 50 m of the Transmission Line Permitted Construction Zone will be identified as Management Zones within the Project Maps. Project activities within the Management Zone will be subject to construction monitoring, by the Aboriginal Group Monitors under the direction of the Blackwater EM, during active construction to identify cultural heritage materials and features, if present, and prevent unauthorized activity with the 10 m Special Management Zone. Should unanticipated impacts be found within the 10 m Special Management Zone (No Work Zone), Indigenous groups and the Project Archaeologist will be contacted immediately to determine if additional mitigation measures are required prior to further work in the area. The BW Gold EM will be engaged on the proposed mitigation measures.

### 11.2 Annual Monitoring

For the life of the Project the BW Gold EM and Aboriginal Monitors will, on an annual basis, verify that Management Zones within the Transmission Line Permitted Construction Zone remain intact and are not impacted by the Project and, where relevant, check the condition of site protection (i.e., flagging or fencing). Should impacts to the ground surface within Special Management Zones since the previous site visit be observed, the Project Archaeologist and the Archaeology Branch will be contacted to determine next steps. Should impacts be observed at a heritage sites, the BW Gold EM will contact relevant Indigenous nations to discuss mitigation measures.

## 12.0 Reporting

Reporting is required under the *Heritage Conservation Act*. In addition, reporting will be completed in accordance with the requirements of the Aboriginal Group Monitor and Monitoring Plan, as the Aboriginal Group monitors are expected to have a key role in implementing the monitoring program.

## 12.1 Reporting<sup>1</sup>

Reporting will comply with *Heritage Conservation Act* permitting conditions and the Archaeological and Cultural Heritage Chance Find Procedure (Appendix A) or the Palaeontological Chance Find Procedure (Appendix C). Final permit reporting required under the Act will be submitted to the Archaeology Branch and Indigenous groups by the Project Archaeologist on, or before, the permit expiry. Site forms will be submitted by the Project Archaeologist within six (6) weeks of the completion of site investigations. Interim reports will be submitted to the Archaeology Branch on an as required basis to provide management recommendations. The process for reporting information related to archaeological and cultural heritage resources to impacted Indigenous communities will be informed by agreements with Indigenous groups, where they are in place.

A record of monitoring activities will be kept, and the information will be summarized in an annual monitoring report. This report will include the monitoring results from the preceding year, any new sites identified, incidents where mitigation measures failed to protect heritage sites, and any resulting actions or mitigations undertaken and the results of those actions or mitigations. This report will be provided to the Project Archaeologist and Indigenous groups. The relevant information including chance finds will also be provided to the Archaeology Branch in reports required under Sections 12.2 and/or 12.4 of the HCA. The EM, Project Archaeologist and/or Aboriginal Monitors will document by means of photographs and field notes, the type of construction and disturbance occurring near a site, weather conditions, personnel present, date and time, and/or other pertinent details. The following data will be collected during construction and annual monitoring as information gathered may be required for inclusion in compliance reports:

- site photographs;
- coordinates for any disturbances;
- extent and type of disturbances;
- details of any actions taken to protect the sites;
- information received from Indigenous groups on handling and storage of finds in consideration of any laws, customs or protocols; and
- recommendations for any changes to the protective measures, if required.

## 12.2 Record Keeping

The BW Gold EM is responsible for data management and reporting related to heritage resources. The data management system will include the results from monitoring activities, including chance finds, AIAs, No Work Zones that were established, and records documenting consultation with Indigenous groups related to cultural heritage. The EM will report chance finds to the Project Archaeologist and Indigenous groups within 24 hours of a discovery. The Project Archaeologist will report chance finds to the BC Archaeology Branch.

Monitoring data will be entered into an electronic database and have quality control checks completed upon receipt of results. Data will be entered into a standard format that allows for data reporting and analyses. Data and data comparisons will be stored in a single file format for each type of survey or monitoring activity. Monitoring data will be stored for the life of the mine and will be made available for review upon request.

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<sup>1</sup> Reporting information relevant to the Federal Decision Statement and EAC are detailed in the Cultural and Spiritual Resources Management Plan submitted *Joint Mines Act/Environmental Management Act* Permits Application.

## 13.0 Plan Revision

The TL ACHRMP is a living document that will evolve over time in response to subsequent permitting, monitoring results, chance finds, and the results of AIAs. Comments provided by Indigenous groups, EMLI, ENV and Ministry of Forests (FOR) on the TL ACHRMP will also be considered for inclusion and incorporation and addressed in future versions of the TL ACHRMP as they become available. If the TL ACHRMP is updated, BW Gold will provide the revised drafts to Indigenous groups for review and comment a minimum of 30 days prior to implementation.

TL ACHRMP is updated, BW Gold will provide the revised drafts to Indigenous groups for review and comment a minimum of 30 days prior to implementation.

## 14.0 Qualified Persons

This management plan has been prepared and reviewed by the following qualified persons:

Prepared by:

Reviewed by:



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Daniel Walker

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Frank Craig

## 15.0 References

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# **Appendix A Archaeological and Cultural Heritage Chance Find Procedure**



## **Blackwater Gold Project: Archaeological and Cultural Heritage Chance Find Procedure**

### **APPLICATION**

This procedure applies to previously unidentified physical or cultural heritage features or structures, sites, or things of historical, archaeological, paleontological, or architectural significance and provides mitigation measure to avoid or reduce adverse effects.

### **PROCEDURE**

**All those responsible for the management, implementation, and operation of any aspect of this procedure will be adequately trained for their role.**

Employees and contractors will receive information related to heritage resources previously identified on site as well as cross-cultural training on the history of local Indigenous nations and training on the Chance Find Procedure on their arrival on site through an environmental on-boarding training session and prior to the start of work as part of the Site Orientation. The purpose of this training is to provide site personnel with a basic level of awareness related to heritage, spiritual and archaeological resources and an understanding of their obligations regarding compliance with plan, regulatory requirements, commitments and best practices.

Site supervisors will be provided with a copy of the CSMP and will receive additional training with respect to the Chance Find Procedure.

BW Gold will regularly review and update the training and awareness related to the plan based on changes in training needs and regulatory requirements.

**Prior to the commencement of Project work, all workers will:**

1. Have received training on the use of this procedure;
2. Have been provided information on typical identifiers for archaeological and cultural use sites;
3. Have reviewed and be aware of the requirements of this procedure;
4. Have reviewed and understood information pertaining to Chance Find Procedures appropriate for the work activity being undertaken.

**If in the course of your work you discover what you suspect may be a possible archaeological, historic, cultural, spiritual and/or paleontological site, the following procedures apply:**

#### **Upon Discovery**

1. Immediately halt work at the location of the discovery, except work required to be undertaken to protect the integrity of the discovery.
2. Delineate an area of at least 50 metres around the discovery as a 'no work' zone.
3. Note the location (GPS coordinates) and take photographs.
4. Inform your supervisory, Environmental Manager (EM) or Mine Manager immediately.
5. Prepare an initial Chance Find Form (attached).

## Post-Discovery

- Within 24 hours of the discovery, the EM contacts the Project archaeologist and informs Indigenous groups and the Impact Assessment Agency (Table 1 provides key contact information).
- The EM invites Indigenous groups to monitor any work related to the discovery.
- The Project archaeologist conducts an assessment at the location of the discovery subject to BC's Archaeological Impact Assessment Guidelines and protocols that are in place with Indigenous groups respecting the discovery, handling, recognition, recording, transferring and safekeeping of previously unidentified structures, sites or things of historical, archaeological, paleontological or architectural significance and the confidentiality of a discovery.
  - If the discovery is an archaeological site, the Project archaeologist contacts the BC Archaeology Branch.
    - The Project archaeologist, in consultation with the Archaeology Branch, develops a plan for the site, and provides updates to the Archaeology Branch and Indigenous groups on the progress of the plan.
    - The Project Archaeologist works with the EM and Indigenous groups to prepare Site Report, which includes instruction to allow work to recommence work in the area.
    - The Site Report is submitted to the EM, Indigenous groups and the Archaeology Branch.
    - If the Site Report recommends additional Inspection or Investigation under Section 12.2 of the HCA it will be undertaken and approved by the Archaeology Branch.
    - Following completion and acceptance by the Archaeology Branch of necessary reports any additional impacts to the site will require a Site Alteration Permit.
  - If the discovery is a historic site, the Project archaeologist contacts Indigenous groups and local communities to determine site significance.
  - If the discovery is a cultural or spiritual site, the Project archaeologist contacts Indigenous groups to determine site significance.
  - If the discovery is a paleontological site, the Project archaeologist contacts BC's Fossil Management Office.
- Subject to protocols with Indigenous groups, any material discovered on the Project site is stored in a secure location with limited access as follows:
  - If the material is archaeological, the artifact is held by the Project archaeologist until the *Heritage Conservation Act* (HCA) Section 12 permit has expired and the artifact(s) is submitted to the repository designated in the permit.
  - If the material is historical, the repository is determined in consultation with Indigenous nations and local communities.
  - If the material is cultural and/or spiritual, the repository is determined by Indigenous nations.
  - If the material is paleontological, the repository is determined by the Fossil Management Office.
- The handling and storage of material, apart from material outlined in the HCA Section 12 permit, is determined in consultation with Indigenous Nations.

## Suspected Human Remains Discovery

**If in the course of your work you discover what you suspect may be human remains, the following procedures apply:**

- Immediately halt work in the area of the discovery.
- Do not disturb or move the possible human remains.
- Note the location (GPS coordinates) and take photographs.
- Report your discovery to your supervisor, EM or Mine Manager.
- If you are unable to contact a BW Gold representative, and the suspected human remains appear to be current, contact the Vanderhoof RCMP.

**The following steps will generally be followed.**

- The Coroners Service (Northern Region) in Prince George and Vanderhoof RCMP will be notified and the Coroners Service will determine whether the matter is of contemporary forensic concern.
- If the remains are not of forensic concern, the Archaeology Branch will attempt to facilitate disposition of the remains.

- If a cultural affiliation for the remains can be determined, the Archaeology Branch will contact an organization representing that cultural group. If the remains are of Indigenous ancestry, the Branch will contact the relevant Indigenous communities.
- If remains are buried and under no immediate threat of further disturbance, they will not be excavated or removed. If the remains are partially buried or uncovered, the Archaeology Branch will facilitate disposition.

**Table 1: Key Contacts**

Name	Email	Phone Number
Archaeology Branch	<a href="mailto:Archaeology@gov.bc.ca">Archaeology@gov.bc.ca</a>	1 (250) 953-3334
Blackwater Gold	<a href="mailto:office.blackwater@artemisgoldinc.com">office.blackwater@artemisgoldinc.com</a>	1 (250) 567-3276
Fossil Management Office	<a href="mailto:Fossil.Management@gov.bc.ca">Fossil.Management@gov.bc.ca</a>	1 (250) 356-7506
Ulkatcho First Nation	<a href="mailto:chief@ulkatcho.ca">chief@ulkatcho.ca</a>	1 (250) 742-3260
Lhoosk'uz Dené Nation	<a href="mailto:admin@lhooskuz.com">admin@lhooskuz.com</a>	1 (250) 992-3290
Nadleh Whut'en First Nation	TBC	1 (250) 690-7211
Stellat'en First Nation	TBC	1 (250) 699-8747
Saik'uz First Nation	TBC	1 (250) 567-9293
Nazko First Nation	TBC	1 (250) 992-7982
Skin Tyee Nation	TBC	1 (250) 694-3517
Tsilhqot'in Nation	TBC	1 (778) 799-2145 or (250) 392-3918
Métis Nation British Columbia	<a href="mailto:Communications@mnbc.ca">Communications@mnbc.ca</a>	1 (604) 557-5851
Cheslatta Carrier Nation	TBC	(250) 694-3334
Yekooche First Nation	TBC	(250) 562-0592
Nee-Tahi-Buhn Band	TBC	1 (250) 694-3494
Impact Assessment Agency	<a href="mailto:iaac.vancouver.aeic@canada.ca">iaac.vancouver.aeic@canada.ca</a>	1 (604) 666-2431
BC Coroners Service Northern Region (Prince George)	N/A	1 (888) 991-2111 (toll free) 1 (250) 861 7429
Vanderhoof RCMP	N/A	1 (250) 567-2222
Prince George RCMP	N/A	1 (250) 562-3300

# Cultural Heritage Chance Find Report Form

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Recorder's Name/Affiliation: \_\_\_\_\_

Date: \_\_\_\_\_

Location of chance find (Location description, UTM coordinates, development, depth below surface): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Description of find: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Method used to mark and protect find: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Distribution:

BW Gold

Site Archaeologist

Indigenous  
Nations

Archaeology  
Branch

Fossil  
Management  
Office

Sketch Map	Photo
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# **Appendix B Paleontology Addendum to 2013 Baseline Report Archaeology (Lifeways of Canada 2022)**

**BLACKWATER GOLD PROJECT  
ADDENDUM TO  
PALAEOLOGY SECTION OF  
2013 BASELINE REPORT  
ARCHAEOLOGY**

**Prepared for:**

**ERM Consultants Canada Ltd.  
1111 West Hastings Street, 15<sup>th</sup> Floor  
Vancouver, B.C. V6E 2J3**

**Prepared by:**

**Miriam Reichel-Bodner,  
Senior Project Palaeontologist  
LIFEWAYS OF CANADA LIMITED  
105, 809 Manning Rd. NE  
Calgary, Alberta T2E 7M9**

## EXECUTIVE SUMMARY

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An Archaeology Baseline Report completed in 2013 for the Blackwater Gold Project (AMEC 2013), as part of the Environmental Impact Statement (Assessment of Potential Heritage Effects) for an Environmental Assessment Certificate included a section about Palaeontology potential in the Project area.

Recent communication with the BC Fossil Management Office determined that an addendum to the Palaeontology Section of the original 2013 Baseline Report is required to provide an adequate overview of additional fossiliferous sites discovered since and to provide enough scope for an updated assessment of the palaeontological potential of the Project area.

The original 2013 report determined that the fossil occurrences documented within Project development areas were not significant due to their fragmentary nature or to being unidentifiable, and therefore of poor scientific value (AMEC 2013).

This Addendum identifies additional fossil occurrences that have been documented within the Project Area (focusing on the final routing decision for the Transmission Line) and within a 1 km buffer from all Project boundaries since the original 2013 report (AMEC 2013), including previously proposed alternative routes. The additional fossils also consist of fragmentary and common macrofossils, as well as microfossils observed within drill cores, and were also determined as not significant.

The deposits underlying the Project Area consist of Quaternary till, volcanic, intrusive, and sedimentary rocks. It is important to note that the sedimentary deposits (Ashman Formation) underlying the Project area were described in the 2013 field survey as consisting of conglomerate and thin bedded, often fissile shale (which holds low potential for well-preserved fossil materials).

**According to the Fossil Resource Potential (based on underlying sediments) and Risk Assessment (based on proximity to significant fossil sites) tables, all project areas fall into “Low Potential” and “Low Risk” categories, respectively.**

**Because of the low potential of Project activities to impact significant fossil resources, it is recommended that a Chance Find Protocol be implemented as a mitigative action, should any significant fossils be observed during development activities.**

## ACKNOWLEDGEMENTS

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### Research

Senior Project Palaeontologist

Miriam Reichel-Bodner, Ph.D.

### Analysis and Reporting

Report Author

Miriam Reichel-Bodner, Ph.D.

Report Editing

Claire Bourges, M.A.

Maps and Figures

Miriam Reichel-Bodner, Ph.D.

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## 1. INTRODUCTION

---

### 1.1 Project Description and Location

An Archaeological Baseline Report completed in 2013 for the Blackwater Gold Project as part of the Environmental Impact Statement (Assessment of Potential Heritage Effects) for an Environmental Assessment Certificate included a section about Palaeontology potential in the Project area (AMEC 2013).

This original report described the regional geological setting in detail and provided an extensive review of known fossiliferous sites up to 2013. In addition, a field survey provided additional scope for an analysis of known sites and the quality and significance of local fossil materials (AMEC 2013).

Recent communication with the BC Fossil Management Office determined that an addendum to the Palaeontology Section of the original 2013 Baseline Report is required to provide an adequate overview of additional fossiliferous sites discovered since and to provide enough scope for an updated assessment of the palaeontological potential of the Project area, focusing especially on the final route and new footprint for the 134.3 km Transmission Line (Map 1), although the previously proposed re-routes are also shown for reference.

The objective of this addendum is to present current and up-to-date data on known fossil occurrences within Project areas, create a Risk Matrix including fossil occurrences and their potential to be impacted by development activities, and make recommendations for mitigative actions to be taken during development activities. Previous finds and the local geology of the Project area will not be discussed in detail here as they remain unchanged since the 2013 report.

The Project is within the Nechako Plateau, about 160 km southwest of Prince George, BC, following a road south of Fraser Lake, BC (Map 1). Proposed development areas include the mine site and associated infrastructure, including access roads, a landing strip, as well as water and transmission lines. To help visualize fossil occurrences and their proximity relative to the proposed Project areas, a buffer of 1 km is shown on Maps 2-7.

### 1.2 Methodology

The fossil occurrence data (Appendix A) was obtained from the BC Fossil Management Office. This updated list was compared to the data provided in the 2013 report, and Maps 2-7 show their detailed locations in relation to Project boundaries and within a geological context. Geological data for the maps was obtained directly from the BC Geological Survey (Cui et al. 2017; Fulton 1995).

Because this Project already had an extensive and detailed report completed in 2013 (including a field survey) (AMEC 2013), the information in this addendum is intended as a means to further assess the potential for Project activities to impact significant fossil resources. What determines whether a fossil resource is significant may vary from one site to the next. Generally, macrofossils

that are either rare or showing exceptional preservation (or both) are considered significant. Additionally, macro- or microfossils that serve as markers (such as taxa that are exclusive to a certain time period or environment) can also be considered significant. The density of fossils in any given area can also mean that area is significant as a whole, even if the individual fossils within are not exceptional on their own.

Because there is no universal standard for determining the significance of a fossil, the objective of this Addendum is to supplement the original report with additional documented fossil occurrences, their locations in relation to Project activities, as well as the geology relevant to these fossil locales. Based on this data and preliminary analysis, the likelihood of Project activities to directly impact fossil resources is determined.

According to the Fossil Impact Assessment (FIA) guidelines published by the British Columbia Heritage Branch (BCHB 2022), “the preliminary assessment of the risk to fossils is based on two factors: the underlying deposits or rock types affected by development activity and the proximity of development activity to known fossils”. Tables 1 and 2 are provided to help determine Palaeontological Resource Potential.

Table 1 provides the criteria for assessing fossil resource potential based on rock deposit type, and Table 2 is also known as a Risk Matrix, providing a risk assessment based on development proximity to fossils. For Table 2 an additional breakdown of risk level definitions is provided by BCHB (2022) as follows:

- A location is considered of “**high risk**” if a fossiliferous sedimentary deposit with known significant fossil resources occurs within the proposed development or locally (< 1 km from proposed development site);
- “**medium risk**” if a fossiliferous sedimentary deposit with known significant fossil resources occurs regionally (> 1 km from proposed development site);
- “**low risk**” if it is occasionally fossiliferous or has poorly understood geology with no local and few regional fossil resources;
- “**very low risk**” if it is composed of non-fossiliferous formations (including metamorphic or igneous) with no known regional fossil resources.

These tables are to be used as a reference point for the Addendum and recommendations made here will directly reflect how a project location and its proposed activities fall within the categories described in these tables. According to BCHB guidelines, if potential based on rock type is very low to low, and the risk to fossil resources based on proximity to known fossils is very low to low, this will result in the conclusion that the project activities will have low impact on fossil resources, and a Chance Find Protocol may be employed as an adequate mitigative measure. However, if the project activities fall into the “medium” or “high” potential categories for either Table 1 or Table 2, then additional mitigative measures may be recommended.

### 1.3 Geology and Palaeontological Potential Review

The original 2013 report (AMEC 2013) identified the presence of 35 fossil sites within the Local Study Area (LSA) and Regional Study Area (RSA) of the Project. However, only ten of these were located close to the Proposed development area and were limited to a specific area of the Transmission Line. These fossils consist of moulds and shell fragments from marine invertebrates, as well as crinoids, brachiopods, possible fish scales, and plant materials from the Late Jurassic sedimentary deposits of the Bowser Lake Group (Ashman Formation).

Most of these sites were subsequently revisited by the 2013 field survey. The survey confirmed that these deposits are predominantly from the Ashman Formation, although some Quaternary gravels were also identified. The sedimentary deposits were described as thick intervals of bedded chert pebble conglomerate with associated layers of sandstones, siltstones, and shale. The thin bedded, often fissile, shale holds low potential for well-preserved fossil materials. The fossils observed during the survey were described as fragmentary or indeterminate. Along with the previously described data, these fossils are not considered significant.

## 2. PALAEOLOGICAL RESOURCE POTENTIAL, ADDITIONAL FINDS, AND RECOMMENDATIONS

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### 2.1 Quaternary Paleontological Potential

The presence of documented Quaternary sediments within the Project Area, with mostly till deposits distributed throughout the Project area (Map 2) (Fulton 1995) indicates that the potential for Quaternary palaeontological resources to be impacted by Project activities is low, as these deposits are not typically fossiliferous. This was also confirmed during the 2013 field survey, in which Quaternary gravels were identified but did not yield any fossils. Additionally, no Quaternary fossils have been documented within the Project area to date. Therefore, according to BCHB guidelines outlined in Tables 1 and 2, **the concern for any Quaternary fossils in the Project Development Area is low.**

### 2.2 Pre-Quaternary Palaeontological Potential

No significant macrofossils were documented in the 2013 report. However, additional fossil occurrences are documented in this Addendum. The additional macrofossil sites were documented nearby the previously documented ones (Maps 2-4, 6). On the Final Transmission Line they are concentrated on sedimentary rocks of the Ashman Formation, whereas some of the locations near the previously proposed re-routes are recorded as being on the volcanic rocks of the Naglico Formation.

However, as noted by the 2013 field survey, some of the formation boundaries in this region are not an exact match to the geological maps (AMEC 2013). Additionally, the survey also noted that some of the recorded location data for the fossil sites is not exact, so it is possible that all these fossil localities are in fact within Ashman Formation deposits. The additional documented fossil occurrences largely consist of ammonoids including the species *Dactylioceras kanense*; *Dactylioceras sp.*; *Tiltoniceras antiquum*; *Lioceratoides (Paciferas) propinquum*; and *Lioceratoides (Paciferas) anginous*. Some of these species (for example the genus *Dactylioceras*) are also common to Russia (Kutygin and Knyazev 2000). All the recorded macrofossil occurrences along the final Transmission Line are located between pole markers 515 and 585 (Map 6).

The mine site also had additional fossil occurrences recorded in 2014 during studies of drill holes (Maps 2, 3, 5, 7) (Sweet 2014; McNeil 2014). The depth of these fossil horizons varied from 31 to 483.1 m from the ground surface. These microfossils consist largely of spores, algae, wood, and organic detritus as well as acritarchs (a palynological term for microorganisms of unknown biological affinity).

No micro or macrofossils have been documented on the superficial layers of the mine site. The bedrock in that area is volcanic in origin and includes both Ootsa Lake (Eocene to Oligocene) and Entiako Formation (Lower to Middle Jurassic) deposits (Map 5).

The pre-Quaternary deposits underlying the Project area are of volcanic, intrusive, and

sedimentary origin (Map 2). The sedimentary deposits described for the Project area during the 2013 field survey consist of conglomerate and thin bedded, often fissile shale which holds low potential for well-preserved fossil materials.

### 3. CONCLUSIONS AND RECOMMENDATIONS

Based on the criteria established by BCHB (Tables 1 and 2), the following conclusions are reached:

According to Table 1, **the prevalence of Quaternary till, volcanic and sedimentary (dense with conglomerate and lacking significant fossils) deposits in the Project Area indicates that there is a low potential for significant fossils to be uncovered by development activities.**

Additionally, according to Table 2, the proximity of Project development activities to known fossil **sites of significance** must also be considered to determine the risk of Project activities impacting significant fossils. Although fossil occurrences are documented within the Project Area (macrofossils along final Transmission Line between pole markers 515 and 585, and microfossils in core samples from the mine site) and within a 1 km buffer, **it has been determined that these fossils are not significant, and therefore, the risk is considered low.**

Therefore, following BCHB guidelines (2022), **the preparation of an FIA with a field survey is not considered productive as a pre-impact assessment for this Project. Instead, a Chance Find Protocol may be provided as a mitigative action to be executed by on-site crews as development progresses.**

**Note:** When a developer encounters a fossil during ground disturbing activities, it is required that the finds be reported to the BC Heritage Branch. Fossils are qualified under the *Heritage Conservation Act* (HCA) as items having “heritage value” because of their scientific and educational worth. The HCA provides protection and regulation for fossils or fossil sites when they are designated as Provincial Heritage Objects or Sites under the HCA. Thus, under Section 12.1 of the HCA, a person must not “damage, desecrate or alter a Provincial heritage site or a Provincial heritage object or remove from a Provincial heritage site or Provincial heritage object any heritage object or material that constitutes part of the site or object”.

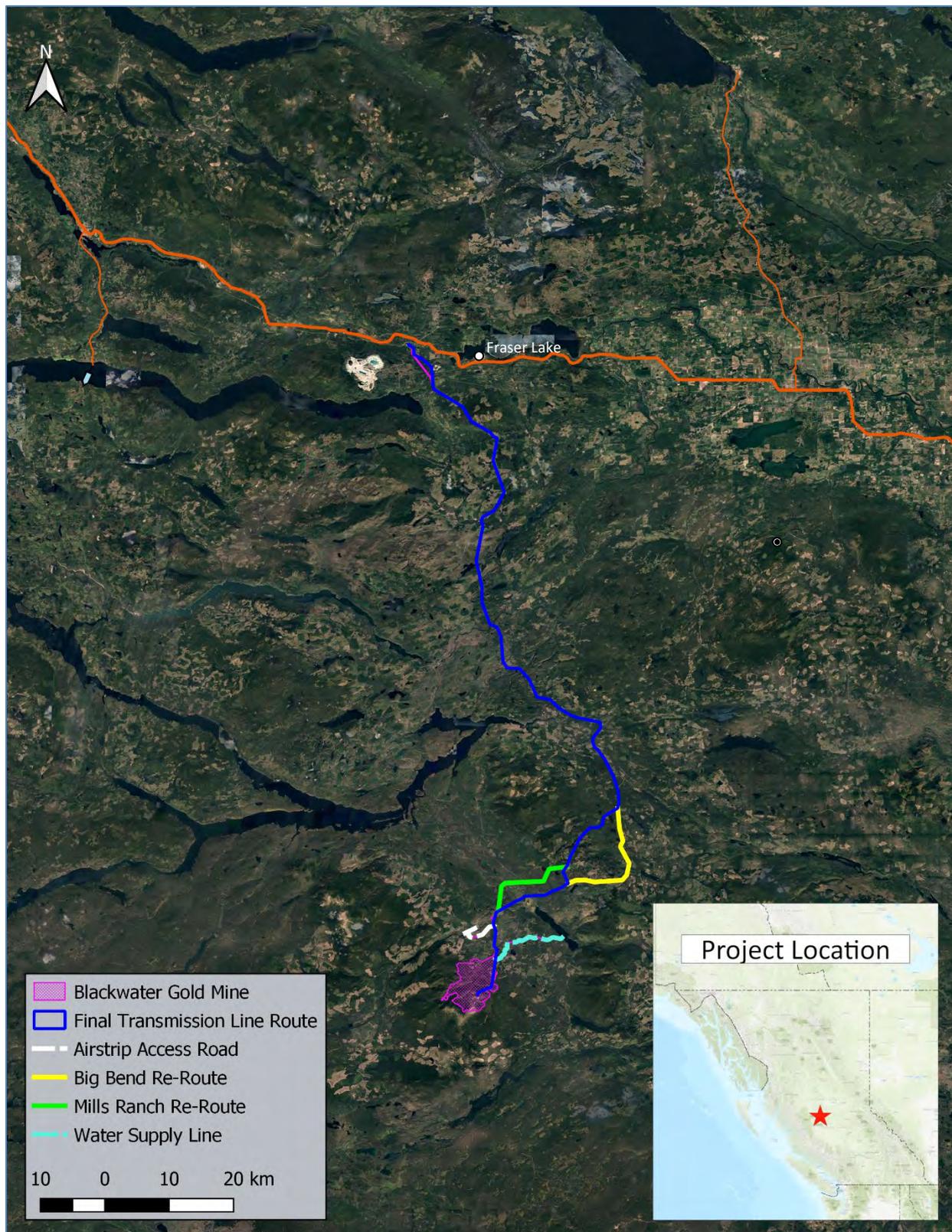
**All recommendations herein are subject to review by the BCHB and BC Fossil Management Office.**

#### 4. REFERENCES

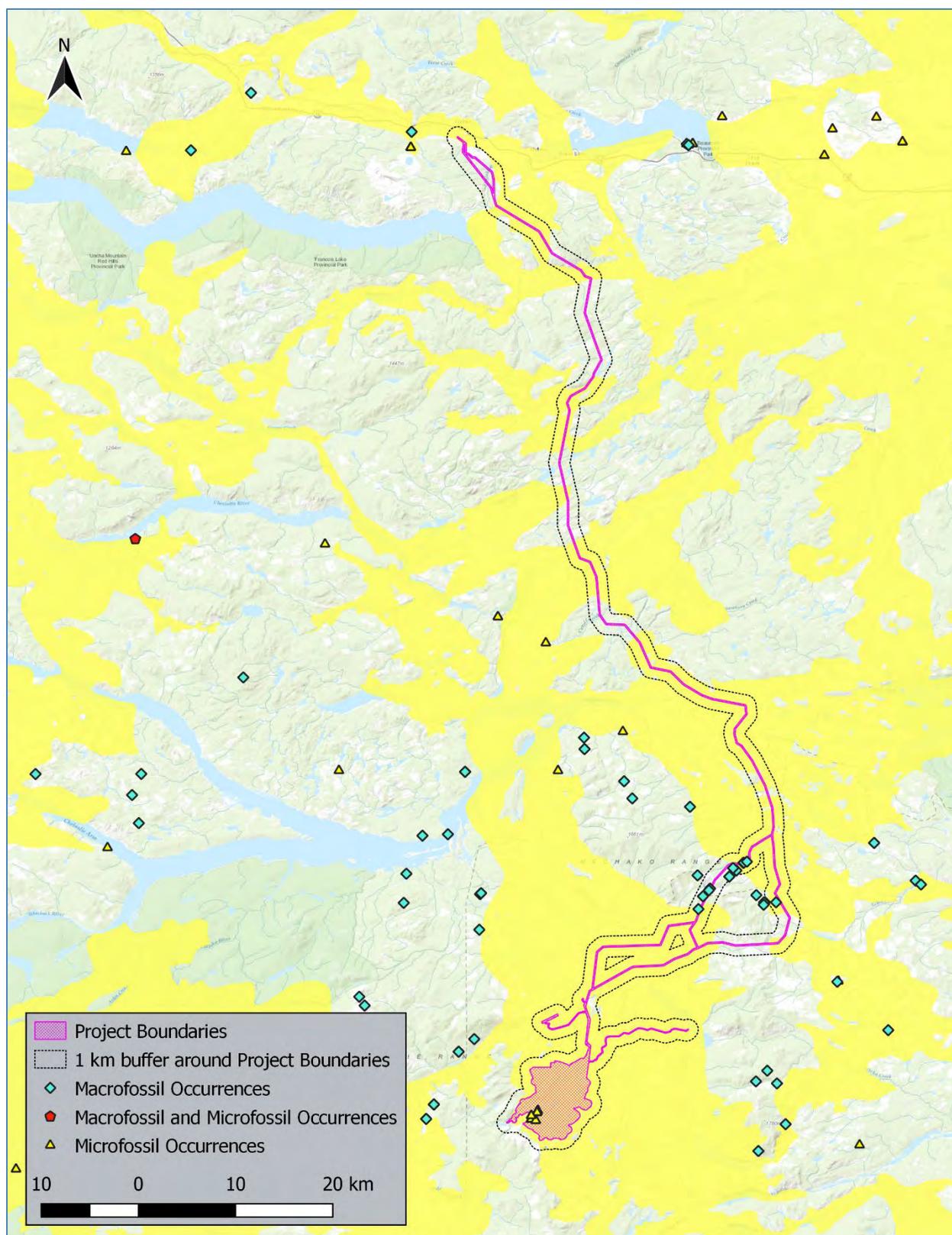
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- McNeil, D.H. 2014. Micropaleontology Report on 3 Core Samples from the Jurassic of South-Central British Columbia (Nechako Plateau; NTS 93-F-02).

## 5. MAPS

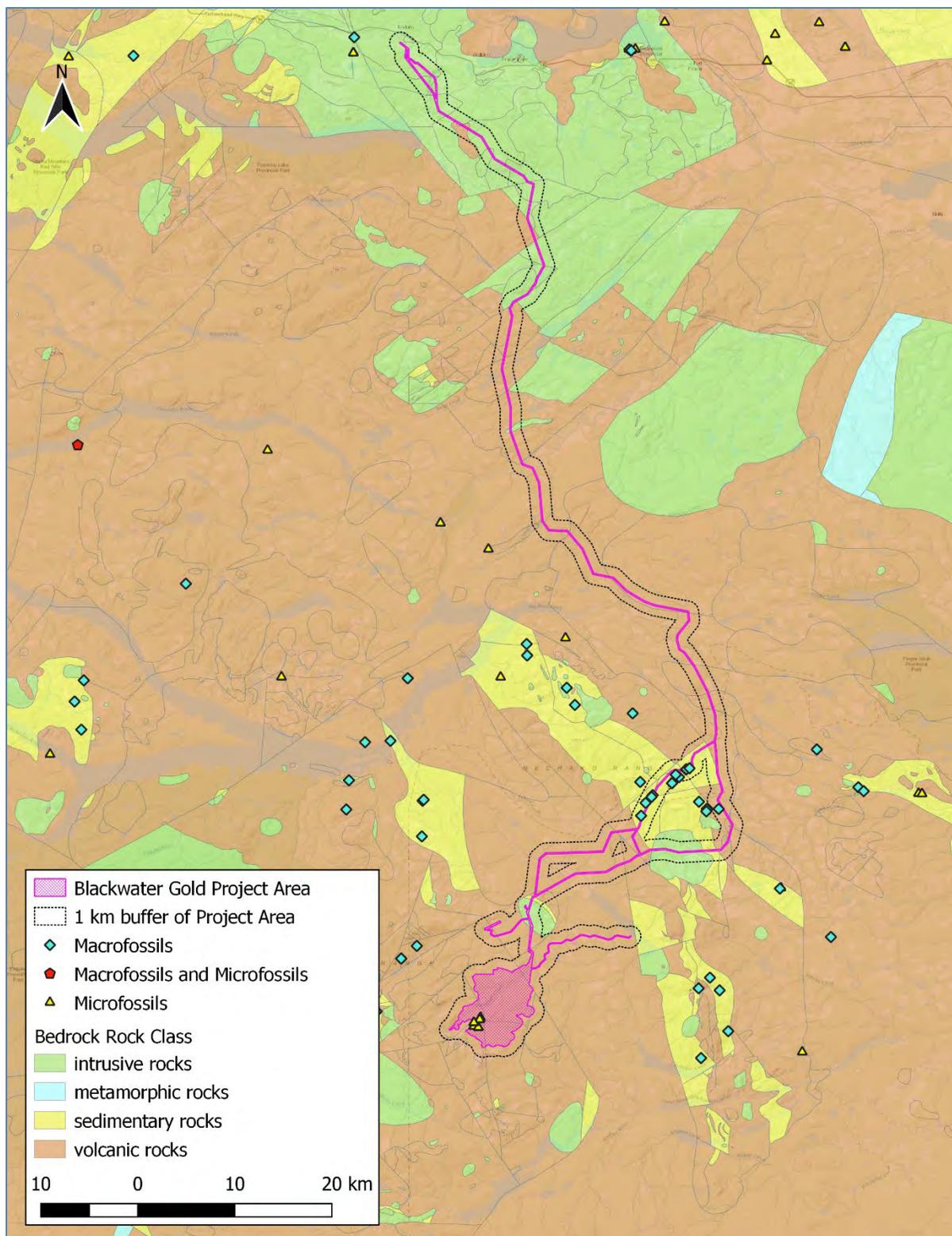
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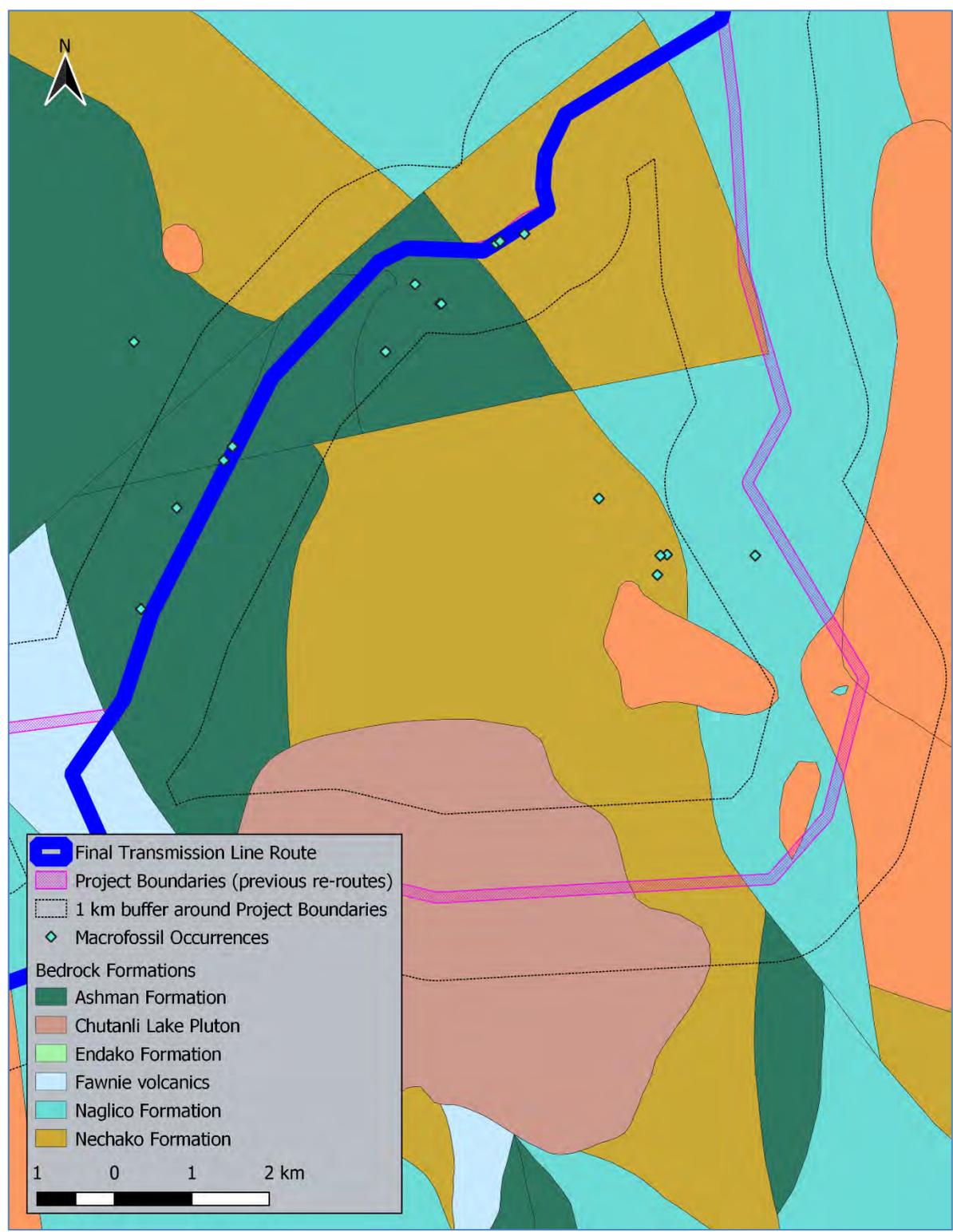
Map 1. Orthophoto of Project location, showing Project components.



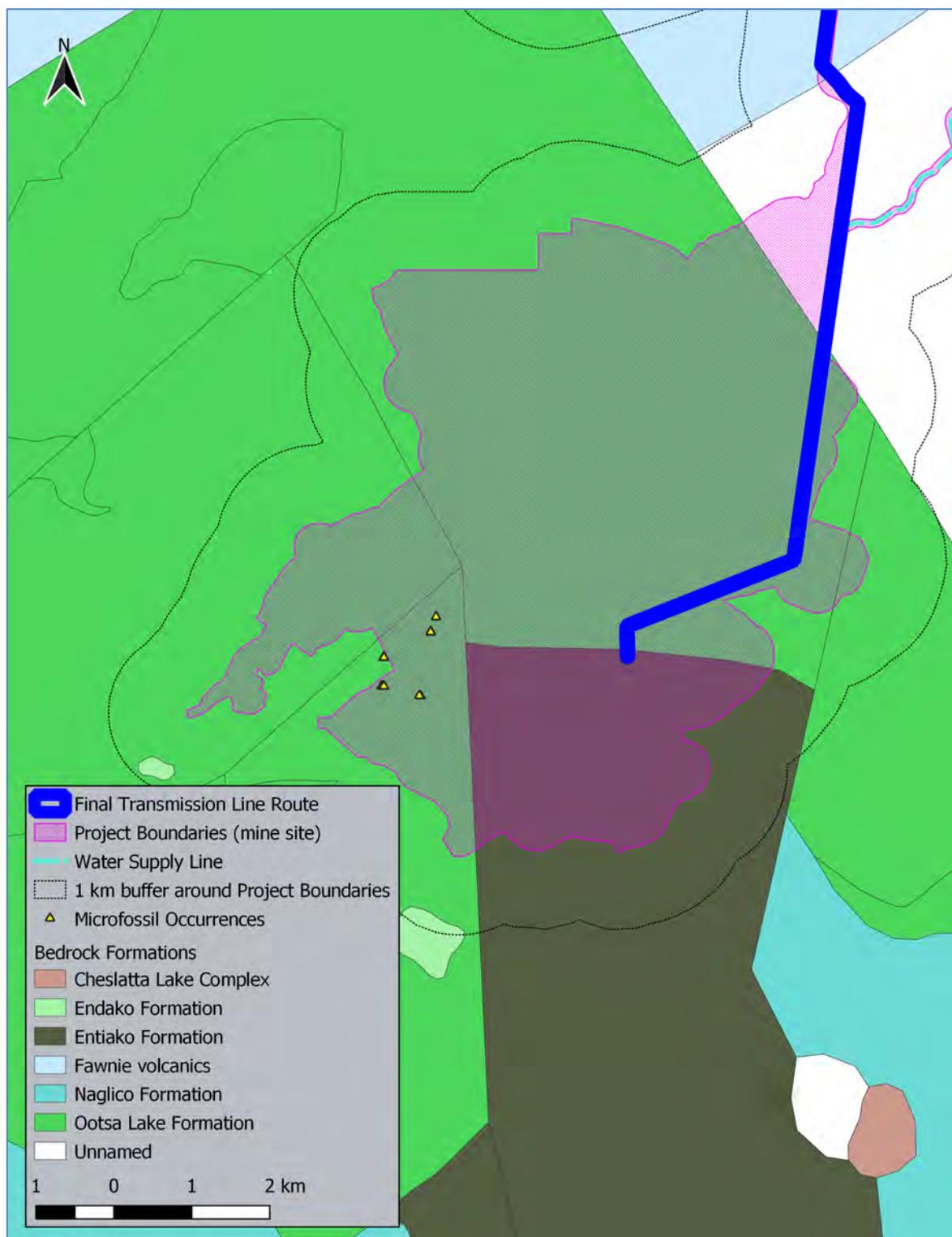
Map 2. Project location showing Quaternary Alluvium cover, as well as 1 km buffer around Project Area and fossil occurrences.



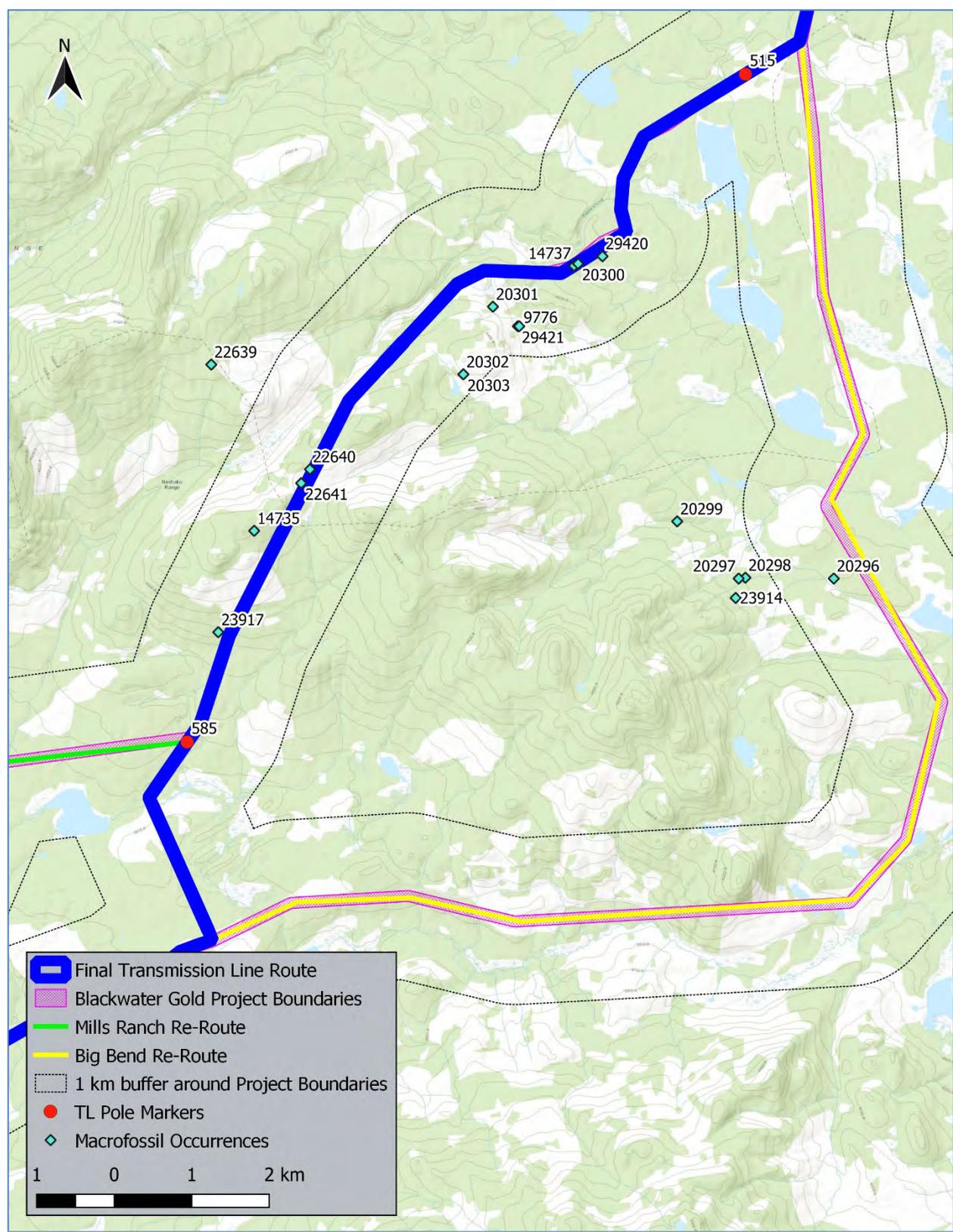
Map 3. Rock types documented within Project and surrounding areas.



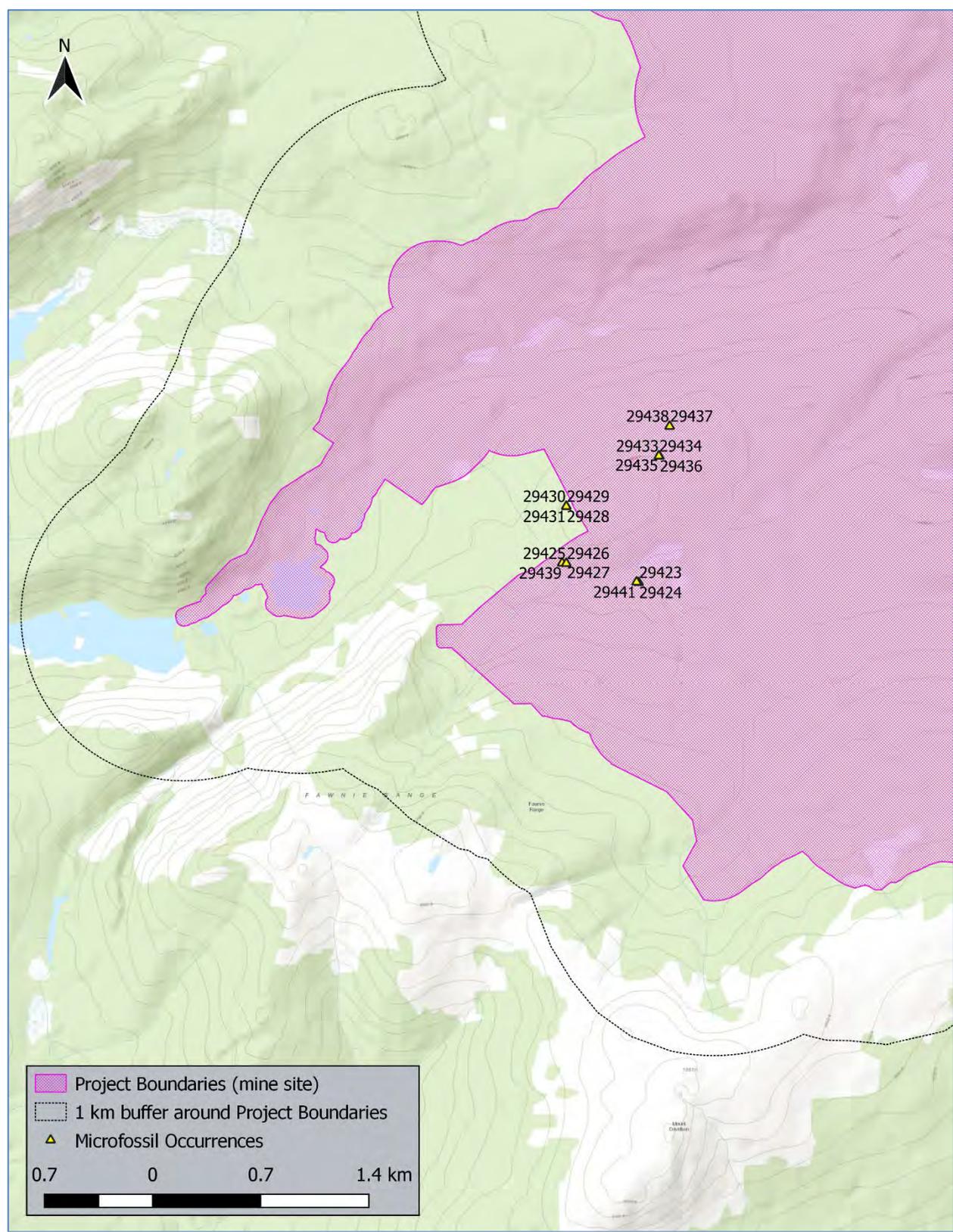
Map 4. Rock Formations documented for Project areas with macrofossil occurrences.



Map 5. Rock Formations documented for Project areas with microfossil occurrences.



Map 6. Macrofossil occurrences (identified by site ID numbers) near Project areas.



Map 7. Microfossil occurrences (identified by site ID numbers) near Project areas.

## 6. TABLES

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Palaeontological Resource Potential (PRP) Level	Deposit Type				Management Concern
	Quaternary (unconsolidated, loose)	Sedimentary (layered, cemented) Rock	Igneous (Volcanic) Rocks	amorphic (altered) rocks	
<b>High Potential/ Fossils Expected or Certain</b>	Cave; beach; pit; and marine deposits	Fossiliferous to highly fossiliferous with regular to consistent and predictable yield of significant fossils at risk of impact; e.g. marginal marine deposits, organic-rich rocks.			Concern is high, with FIA and field survey and monitoring of bedrock disturbance justified or necessary.
<b>Medium Potential/ Fossils Possible or Unknown</b>	Moraines; outwash; lacustrine; travertine	Units in which fossil content varies, is unpredictable, scattered, or unknown; e.g., non-marine to distal marine deposits.			Careful consideration, with FIA and field survey likely justified.
<b>Low Potential/ Fossils Unlikely</b>	Thick glacial sand; colluvium; reworked gravel; high altitude fluvial	Units not known or likely to contain significant fossils; e.g., thick, uniform shale; coarse-grained sandstone; conglomerate.	Fossils can rarely be preserved in volcanic rocks		Concern is generally low.
<b>Very Low Potential/ Fossils Rare</b>	Highly weathered or slumped deposits	Weathering, corrosion and recrystallization	Nearly all igneous rocks are void of fossils	Low grade metamorphism can occasionally preserve fossils	Concern is negligible or not applicable.
<b>Nil</b>				High grade metamorphism destroys nearly all visible fossils	Concern is negligible or not applicable.

Table 1. Classification of Fossil Resource Potential based on deposit types, according to BCHB guidelines (BCHB 2022). Cells highlighted in Magenta indicate Project classification.

Fossil Potential (Proximity to Significant Resources)	Surface use only (if vegetated)	Minor surface disturbance (< 30 cm deep) (if vegetated)	Significant surface excavation (> 30 cm deep) or directly on sediment exposure
<b>Fossil Site(s) Known Locally</b>	Low Risk	Medium Risk	High Risk
<b>Fossil Site(s) Known in Region</b>	Very Low Risk	Low Risk	Medium Risk
<b>No Record of Overlap</b>	Very Low Risk	Low Risk	Low Risk

Table 2. Risk Matrix for palaeontological resources to be impacted by development, according to BCHRB guidelines (BCHB 2022). Cell highlighted in Magenta indicates Project classification.

## 7. APPENDIX A: FOSSIL OCCURRENCES NEAR BLACKWATER GOLD MINE

Site ID	Year of Collection	Geological Period	Size Category	Fossil Common Names	Species ID
20302	1994	Jurassic	macrofossil	ammonoid	
22639		undetermined	macrofossil	crinoid	
22640	1994	undetermined	macrofossil	bivalve; fish scale?	
23917	2006	Jurassic	macrofossil	bivalve	<i>cf. Retroceramus sp.</i>
29421	1994	Jurassic to Cretaceous	macrofossil	bivalve	
14737	1994	Jurassic or younger	macrofossil	ammonoid?; bivalve; trace fossil	<i>Propeamussium sp.</i> <i>Dactylioceras kanense</i> ; <i>Dactylioceras cf. D. tenuicostatum</i> ; <i>Tiltoniceras propinquum</i> ; <i>Tiltoniceras antiquum</i>
20298	1993	Jurassic	macrofossil	ammonoid	
20300	1994	Cretaceous?	macrofossil	bivalve; gastropod; fish scale?	<i>?Pholadomya sp.</i>
9776	1993	undetermined	macrofossil	bivalve	
20303	1994	Jurassic	macrofossil	ammonoid; bivalve	
22641	1994	Jurassic	macrofossil	bivalve; wood fragment	<i>?Myophorella sp.</i>
29420	1994	Jurassic to Cretaceous	macrofossil	ammonoid; bivalve; belemnite	<i>Propeamussium sp.</i> ; <i>?Pleuromya sp.</i> ; <i>Entolium sp.</i> <i>Dactylioceras kanense</i> ; <i>?Tiltoniceras antiquum</i> ; <i>Lioceratoides (Paciferas) propinquum</i>
20296	1993	Jurassic	macrofossil	ammonoid	<i>Dactylioceras kanense</i> ; <i>Dactylioceras sp.</i> ; <i>Tiltoniceras antiquum</i> ; <i>Lioceratoides (Paciferas) propinquum</i> ; <i>Lioceratoides (Paciferas) angionus</i>
20297	1993	Jurassic	macrofossil	ammonoid	
20301	1994	Jurassic	macrofossil	ammonoid; bivalve; belemnite?; scaphopod?	<i>Propeamussium sp.</i> <i>Dactylioceras sp. cf. commune</i> ; <i>Dactylioceras sp. cf. kanense</i> ; <i>?Hildaites sp.</i>
23914	2006	Jurassic	macrofossil	ammonoid	
14735	1994	Jurassic	macrofossil	bivalve	<i>Myophorella sp.</i>
20299	1993	Jurassic	macrofossil	ammonoid	<i>Bositra sp.</i>
29437		undetermined	microfossil	spores; algae	
29425		undetermined	microfossil	spores	
29435		undetermined	microfossil	algae	
29436		undetermined	microfossil	spores; woody debris	
29433		undetermined	microfossil	algae	
29438		undetermined	microfossil	organic detritus	
29439		undetermined	microfossil	incertae sedis	
29440		undetermined	microfossil	algal cyst	
29423		undetermined	microfossil	spores	
29424		undetermined	microfossil	spores; algae	
29426		Ordovician to Cretaceous	microfossil	acritarch; algae	
29432		undetermined	microfossil	woody debris	
29434		undetermined	microfossil	barren	
29429		undetermined	microfossil	woody debris	
29427		undetermined	microfossil	spores	
29428		undetermined	microfossil	woody debris	
29441		undetermined	microfossil	barren	
29430		undetermined	microfossil	woody debris	
29431		undetermined	microfossil	woody debris	

## **Appendix C Fossil Chance Find Procedure**

# CHANCE FIND PROTOCOL FOR PALAEOLOGICAL RESOURCES IN BRITISH COLUMBIA – BLACKWATER GOLD PROJECT

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PREPARED FOR

**ERM Consultants Canada Ltd.**

**1111 West Hastings Street, 15<sup>th</sup> Floor**

**Vancouver, B.C. V6E 2J3**

By

**Miriam Reichel-Bodner, Senior Project Palaeontologist**

**LIFEWAYS OF CANADA LIMITED**

**105, 809 Manning Rd. NE**

**Calgary, Alberta T2E 7M9**

JULY 2022

## INTRODUCTION

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Palaeontological resources (or fossils) in the Province of British Columbia are protected under the *Land Act* (LA), by the B.C. Fossil Management Office, Heritage Branch (BCHB). According to BCHB “...all fossils on Crown Land are property of the province and may not be sold or removed from the province. Collecting of fossils is prohibited without a permit”. Therefore, when a developer encounters a fossil during ground disturbing activities, it is required that the finds be reported to the Heritage Branch. Additionally, fossils are qualified under the *Heritage Conservation Act* (HCA) as items having “heritage value” because of their scientific and educational worth. The HCA provides protection and regulation for fossils or fossil sites when they are designated as Provincial Heritage Objects or Sites under the HCA.

Thus, under Section 12.1 of the HCA, a person must not “damage, desecrate or alter a Provincial heritage site or a Provincial heritage object or remove from a Provincial heritage site or Provincial heritage object any heritage object or material that constitutes part of the site or object”.

The following guidelines are established, should the Project development activities come across any fossil materials.

## PROJECT LOCATION AND RELEVANT GEOLOGIC INFORMATION

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The Project is located within the Nechako Plateau, about 160 km southwest of Prince George, BC. Proposed development areas include the mine site and associated infrastructure which include access roads, a landing strip, as well as water and transmission lines. The deposits underlying the Project consist of Quaternary till, volcanic, intrusive, and sedimentary deposits (Ashman Formation) (Figure 1).

## FOSSIL POTENTIAL

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The Project area with highest potential to yield fossils is the **sedimentary bedrock (Ashman**

**Formation) underlying the Final Transmission Line area, specifically between pole markers 515 and 585** (Figure 1). Some macrofossils, including bivalve shells (such as *Myophorella* sp.) (Figure 2) and ammonoids (such as *Dactylioceras kanense*) (Figure 3), as well as occasional gastropod (snail) shells and fish scales have been documented for this area. However, the fragmentary nature of these fossils has deemed them not significant. Even though typically sedimentary rocks hold a medium to high potential for significant fossils, this is not the case for this area due to the presence of conglomerates and a predominance of fragmentary fossil occurrences documented for the area.

Other project areas, especially the ones with underlying volcanic or intrusive rocks, have typically very low potential to yield significant fossil resources. Therefore, the overall potential for significant fossils to be discovered within the Project areas during development activities is low.

However, in the event of a discovery of well-preserved or unique macrofossils, or a dense fossil assemblage by on site personnel during mine development activities, the mitigative measures detailed in this Chance Find Protocol are to be followed.

## CHANCE FIND PROTOCOL

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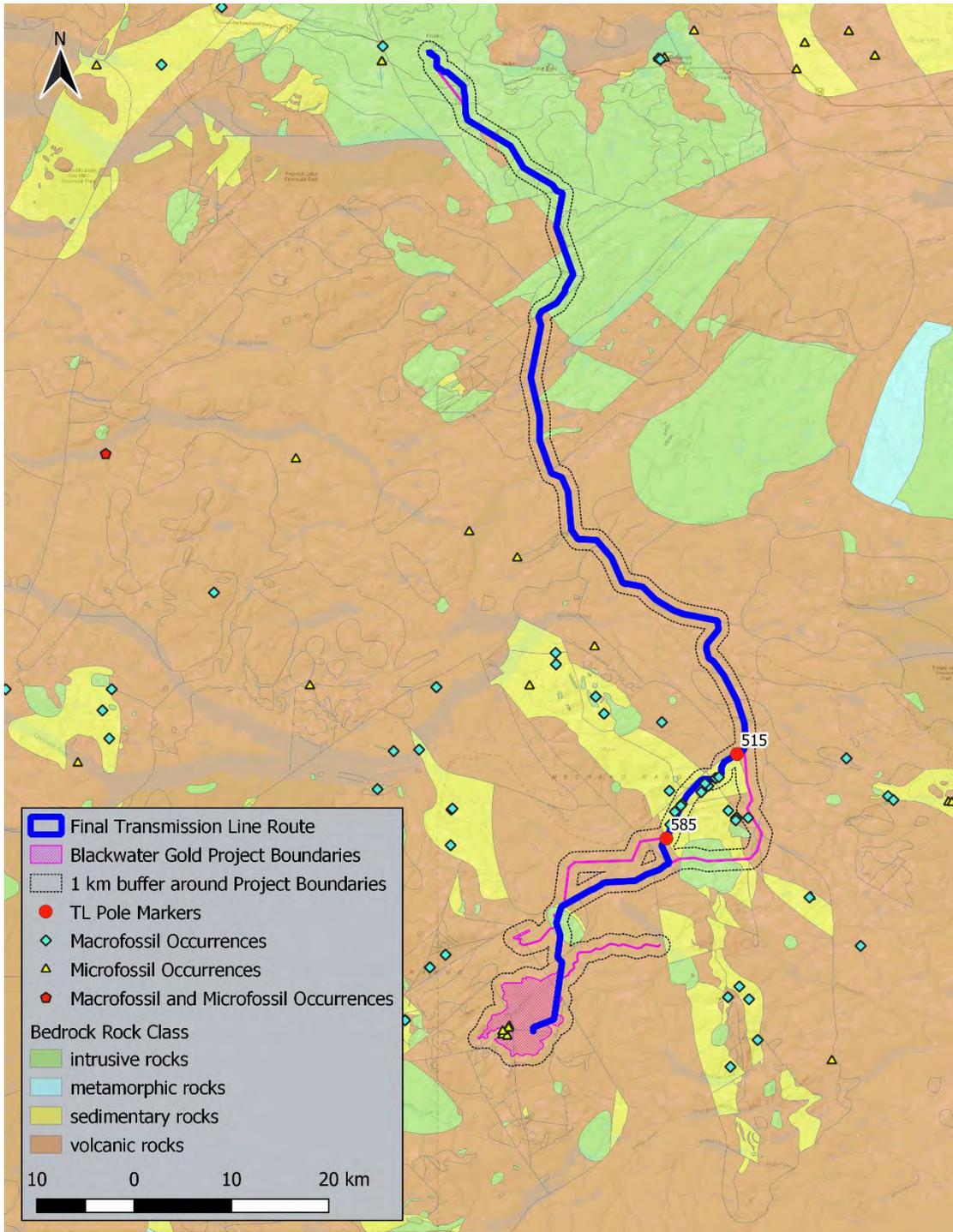
If any dense fossil sites (or well-preserved individual fossils) are encountered during development activities, the following steps are to be followed:

1. Inform the site Environmental Manager, who will in turn contact the Project Palaeontologist working on the project OR the B.C. Fossil Management Office, Heritage Branch directly to report the find;
  - a. Senior Project Palaeontologist at Lifeways of Canada Limited:  
  
Dr. Miriam Reichel-Bodner, C: 780-278-6697, E: [miriam@lifewaysofcanada.com](mailto:miriam@lifewaysofcanada.com),  
[www.lifewaysofcanada.com](http://www.lifewaysofcanada.com)
  - b. BC Fossil Management Office: P: (778)-698-4186, E:  
[Fossil.Management@gov.bc.ca](mailto:Fossil.Management@gov.bc.ca), <https://forms.gov.bc.ca/industry/report-a-fossil/>

2. Photograph the specimen (*in situ*) adding a scale (an object such as a pen or a coin may be used, however a millimetric scale is preferred). Take GPS coordinates of the location, as well as altitude;
3. Include notes about the type of fossil (if known) and depth data if found in an excavation, as opposed to the surface;
4. If it can be determined remotely by a palaeontologist that the fossil may be significant, it is expected that:
  - a. Any ground disturbance in the immediate vicinity of the find will be diverted and the fossil(s) will be left in place;
  - b. A buffer of 30-50 metres around the find will be established and taped off. Work must be redirected to another area until the following steps are taken;
5. If required, the Project Palaeontologist will collect additional data and will contact the B.C. Fossil Management Office, Heritage Branch or the Royal B.C. Museum;
6. The Project Palaeontologist will develop a mitigation plan in cooperation with the BCHB; and,
7. Work must not resume at that location until approved by the B.C. Fossil Management Office, Heritage Branch.

**Note:** *This Chance Find Protocol is a preliminary draft, and once the BCHB has reviewed the Addendum to the Palaeontological Report for this project and indicated the required next actions by the proponent, this protocol may be adjusted according to BCHB updated requirements.*

# FIGURES



**Figure 1.** Map of the Project Area, showing rock types known fossil localities, and pole markers at the edge of relevant rocks (based on digital geology map by Cui et al. 2017).

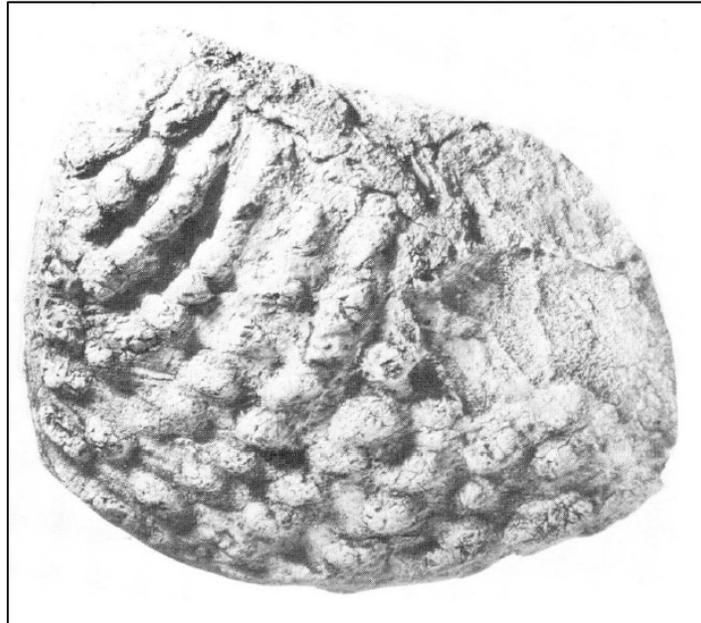


Figure 2. An example of *Myophorella* sp. (modified from Poulton 1977).

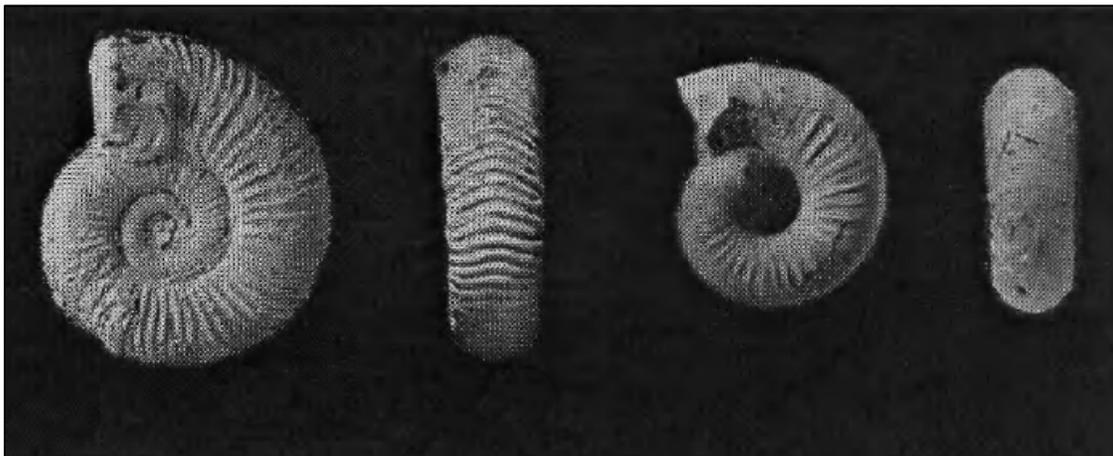


Figure 3. *Dactylioceras kanense* ammonoids (modified from Kutugin and Knyazev 2000).

## REFERENCES

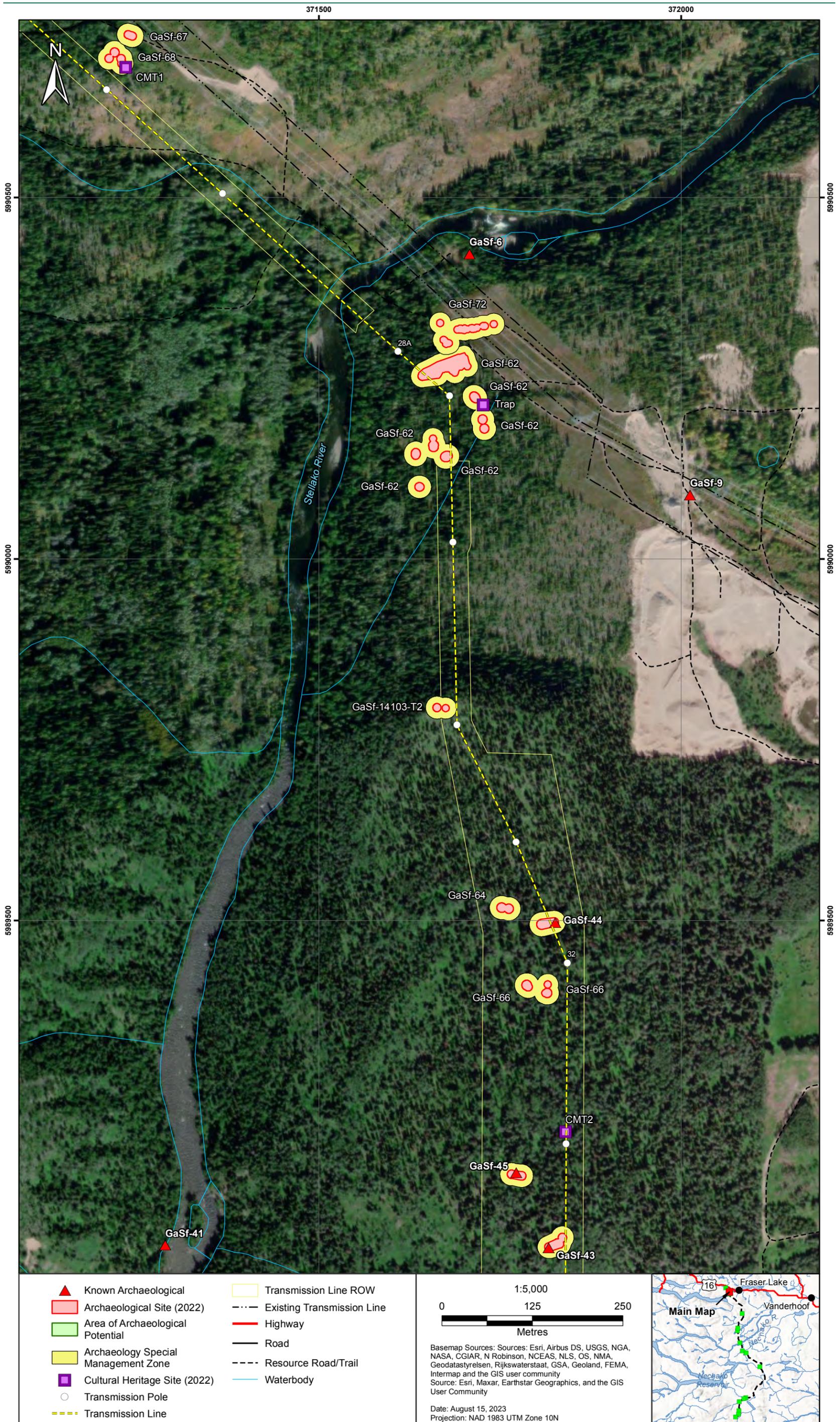
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- Cui, Y., Miller, D., Schiarizza, P., and Diakow, L.J., 2017. British Columbia digital geology. British Columbia Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey Open File 2017-8, 9p. Data version 2019-12-19.
- Kutygin, R.V., and Knyazev, V.G. 2000. Ontogeny of the Ammonoid genus *Dactylioceras* from Northeastern Russia. *Paleontological Journal*, **34**: 263-271.
- Poulton, T.P. 1977. Early Cretaceous Trigonid Bivalves of Manning Provincial Park, Southwestern British Columbia. *Geological Survey of Canada*, Paper 76-9. 25 pp.

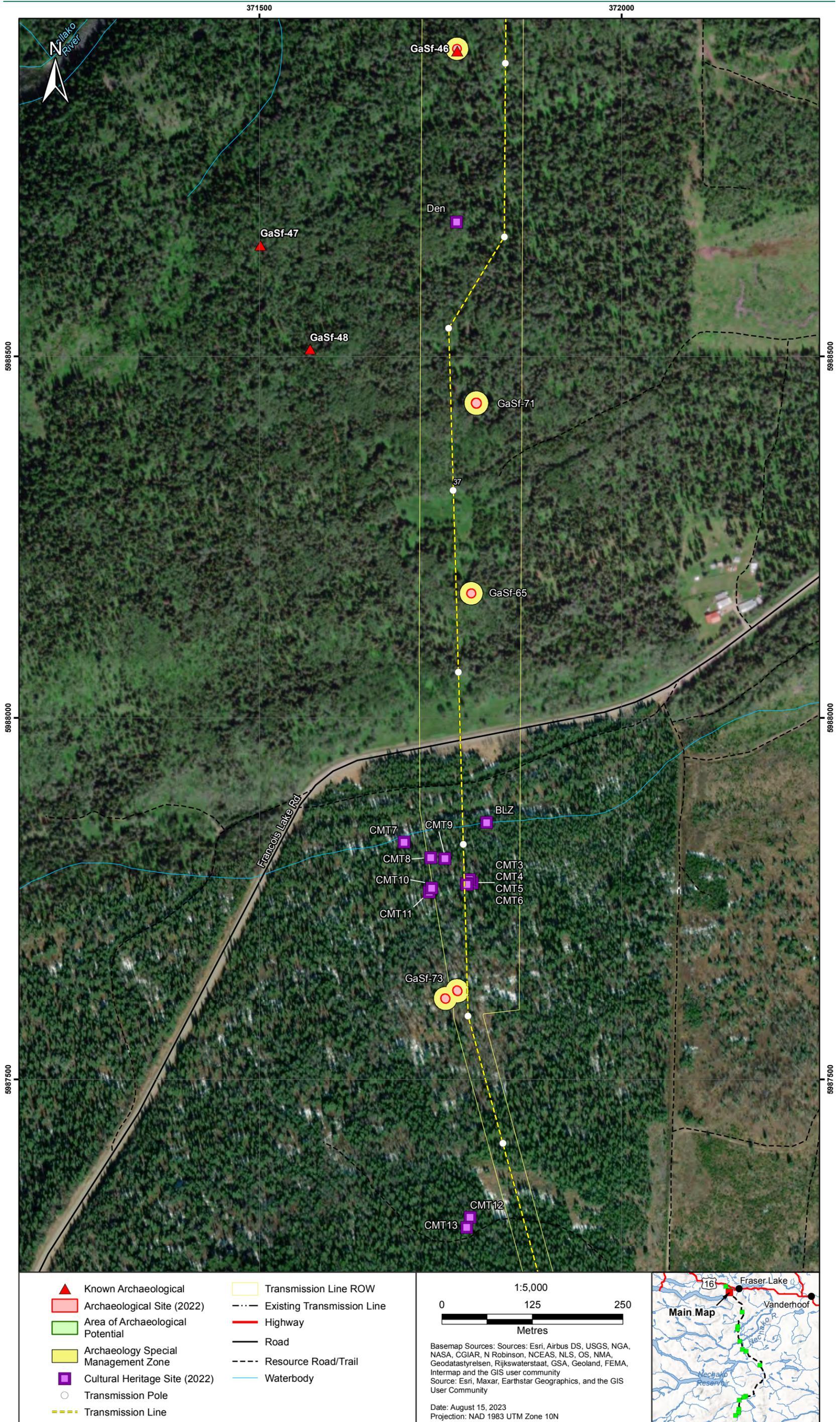
# **Appendix D 2022 Preliminary Field Findings and Management Zone Map Sheets**



**Appendix D-1: 2022 Field Findings and Management Zones - Map 1**



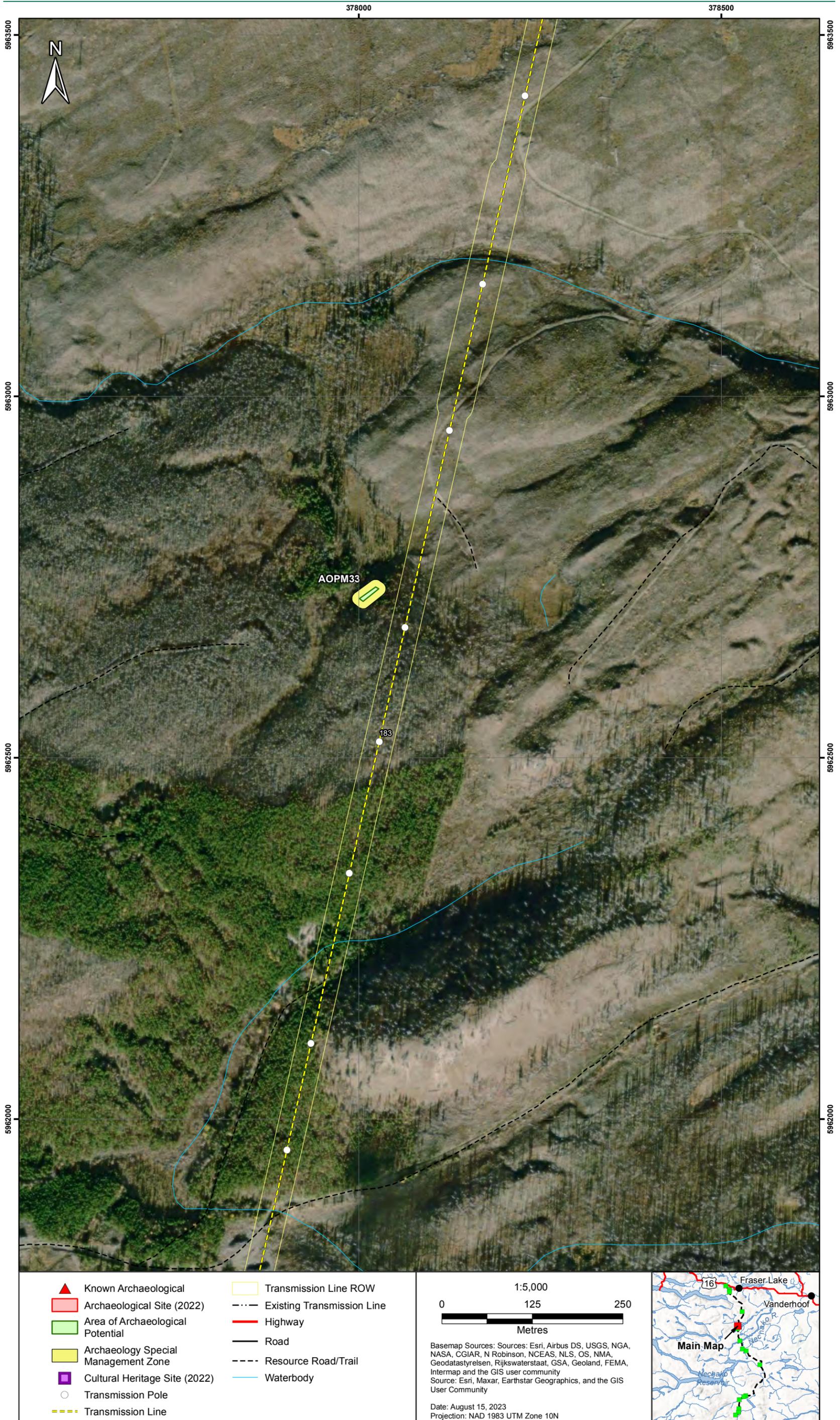
**Appendix D-2: 2022 Field Findings and Management Zones - Map 2**



**Appendix D-3: 2022 Field Findings and Management Zones - Map 3**



**Appendix D-4: 2022 Field Findings and Management Zones - Map 4**



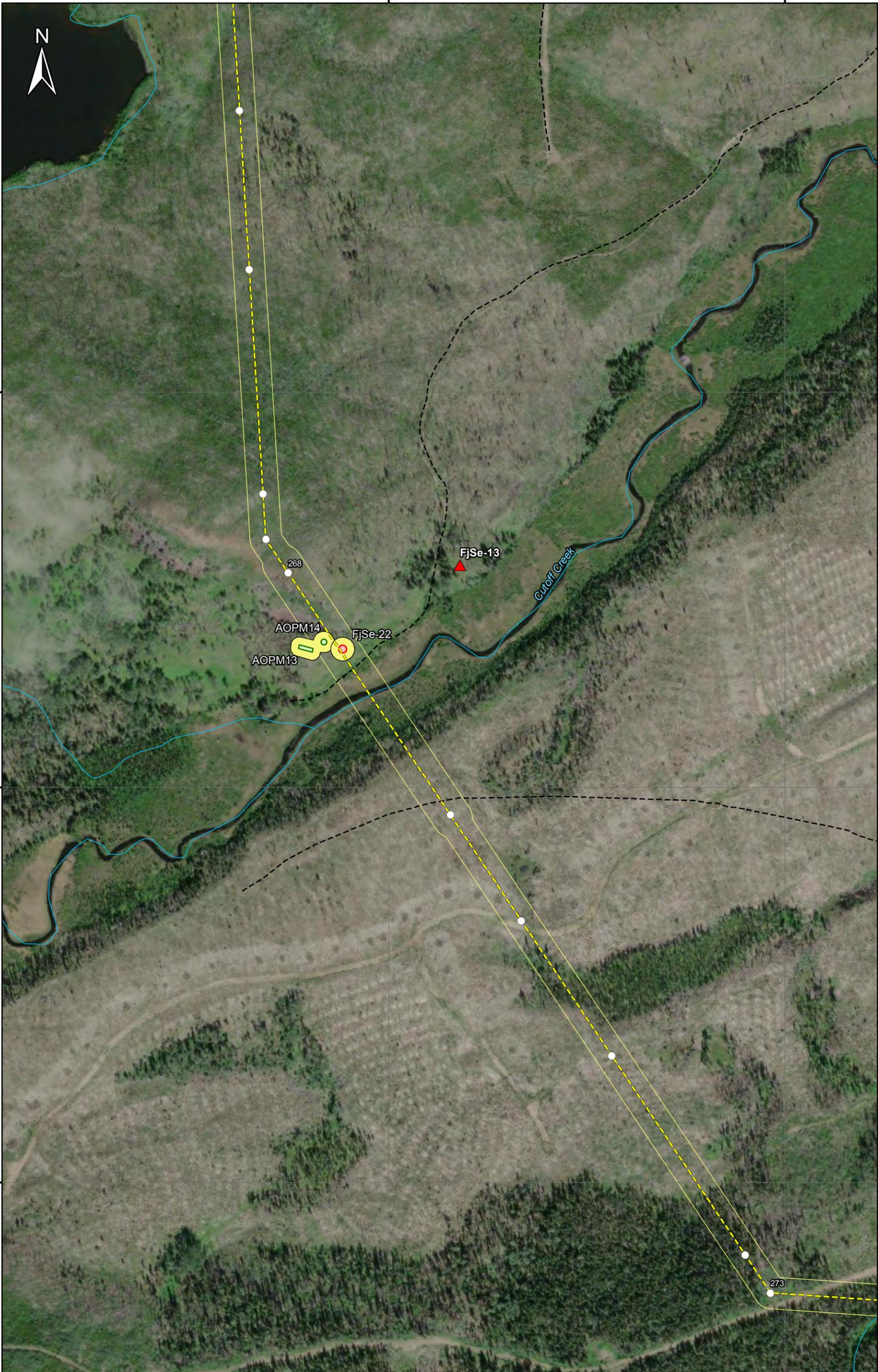
**Appendix D-5: 2022 Field Findings and Management Zones - Map 5**



**Appendix D-6: 2022 Field Findings and Management Zones - Map 6**



**Appendix D-7: 2022 Field Findings and Management Zones - Map 7**



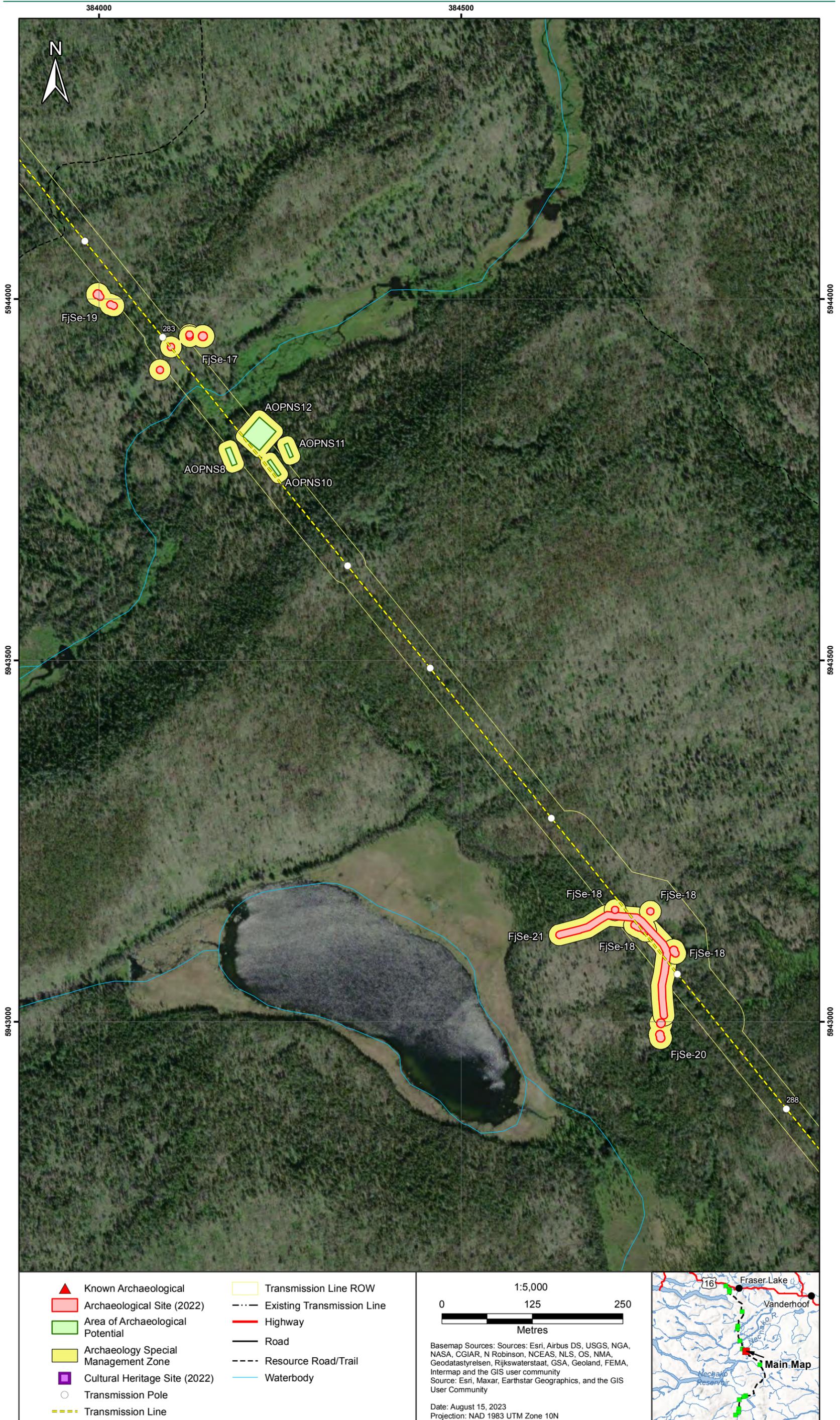
Known Archaeological	Transmission Line ROW
Archaeological Site (2022)	Existing Transmission Line
Area of Archaeological Potential	Highway
Archaeology Special Management Zone	Road
Cultural Heritage Site (2022)	Resource Road/Trail
Transmission Pole	Waterbody
Transmission Line	

0 125 250  
Metres

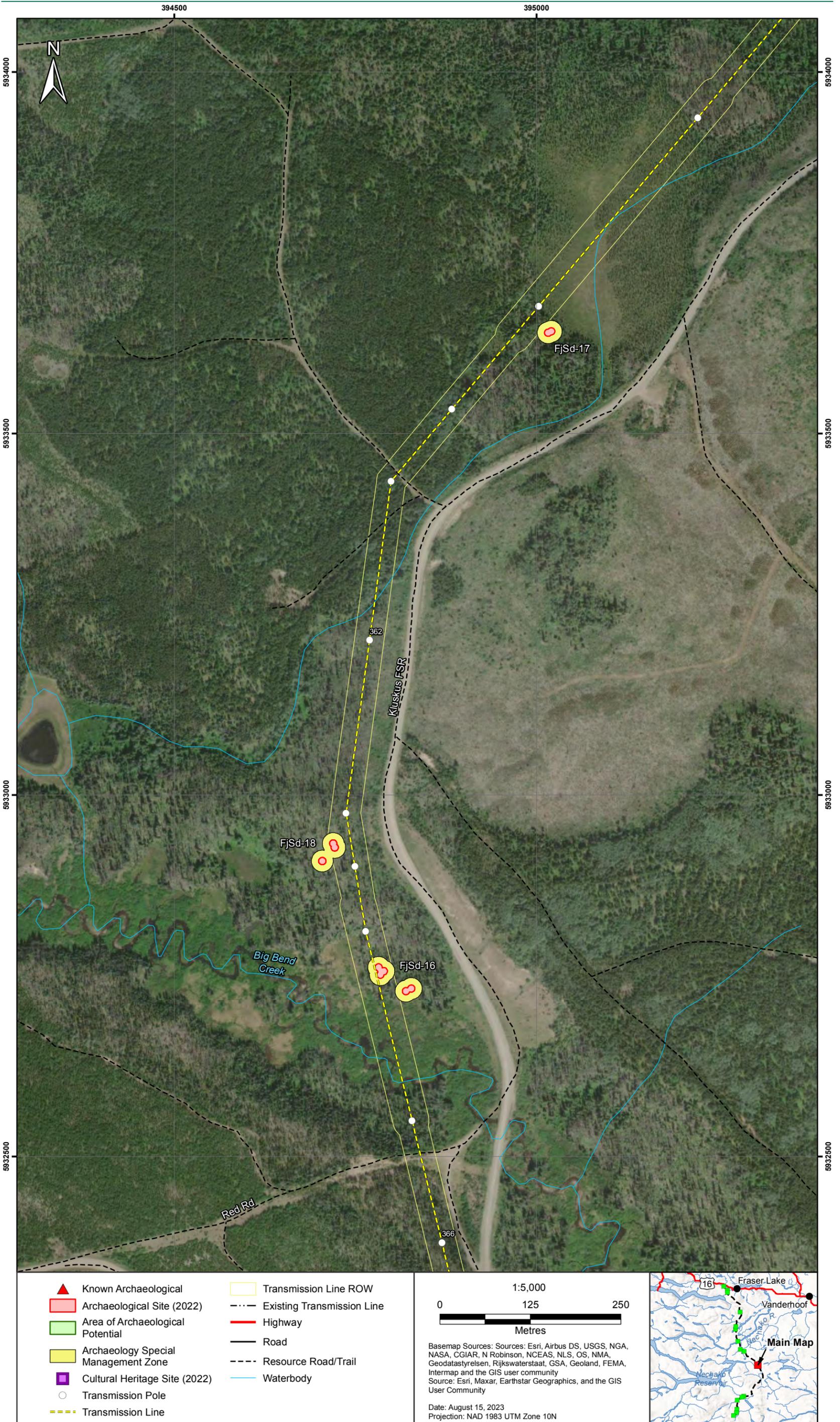
Basemap Sources: Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatasysteisen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community  
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Date: August 15, 2023  
Projection: NAD 1983 UTM Zone 10N

Appendix D-8: 2022 Field Findings and Management Zones - Map 8



**Appendix D-9: 2022 Field Findings and Management Zones - Map 9**

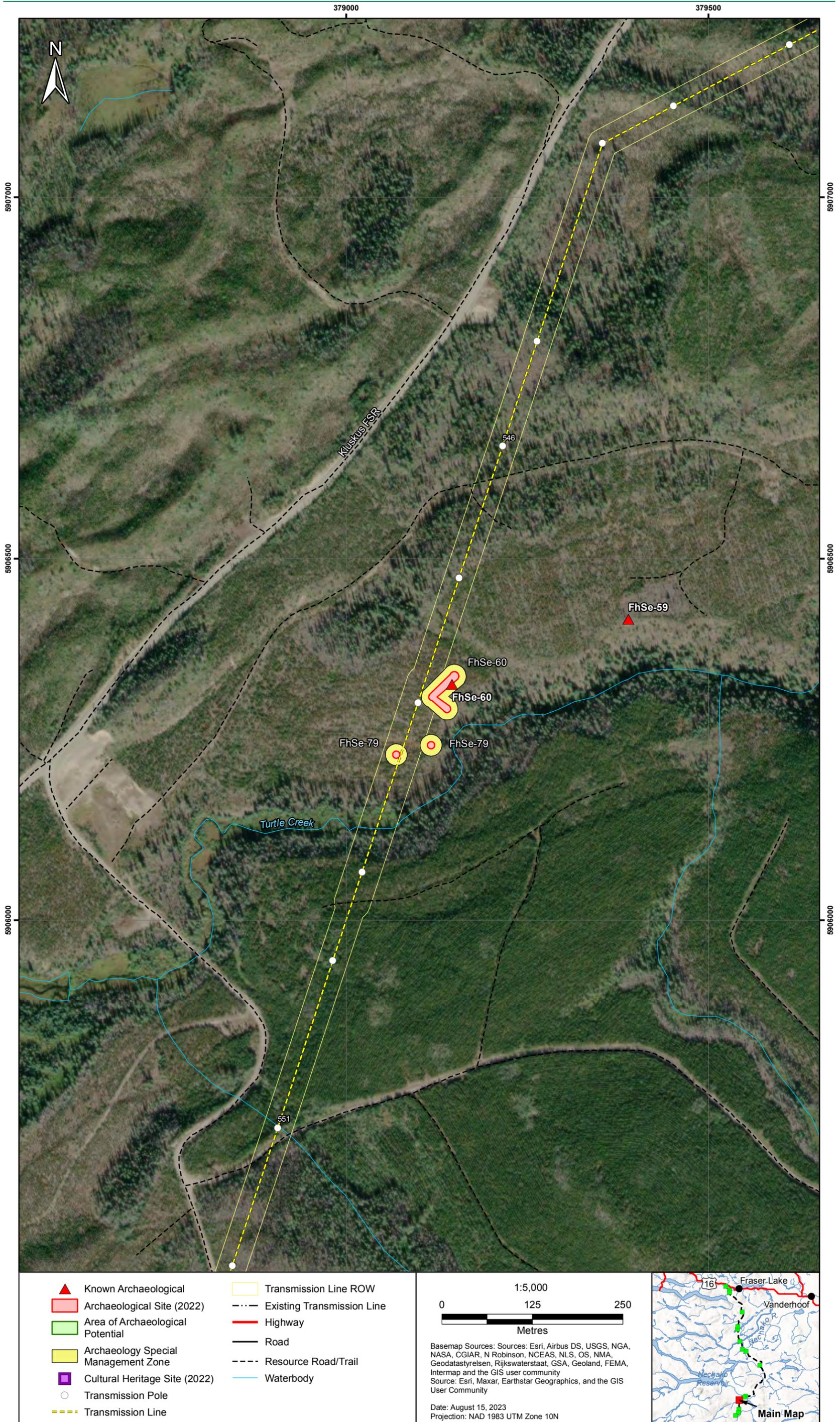


**Appendix D-10: 2022 Field Findings and Management Zones - Map 10**



**Appendix D-11: 2022 Field Findings and Management Zones - Map 11**





**Appendix D-13: 2022 Field Findings and Management Zones - Map 13**

# Appendix E 2023 Preliminary Field Findings

The following fieldwork has been completed in 2023.

July 31 thru August 3 (4 consecutive days)

The revised Stellako crossing corridor section from pole 27 to 31 was surveyed from previously AIA'd survey corridor, west to the permitted boundary. During the survey, three new test locations were identified on the south side of the river and tested out for a total of 209 tests with negative results. On the north side, two previously known AOPs that extended west from previous surveys were tested out for a total of 38 tests with negative results.

No further work recommended for this new Stellako area.

During access to the Stellako north survey areas a new archaeological site, GaSf-14576-T1, consisting of 17 cultural depressions was encountered and recorded. This site is 86 m WSW of the new ROW centre line, and is immediately outside of the western permitted boundary. This site is currently outside of the TL construction zone and will need management if project construction comes within the 50-metre management buffer protocol.

August 4

For the section between poles 367-373, the area has been fully surveyed identifying two areas of potential which were fully tested for a total of 58 negative tests.

No further work is recommended for this section.

## Approval Signature Record

Reviewer Role	Name	Signature	Date