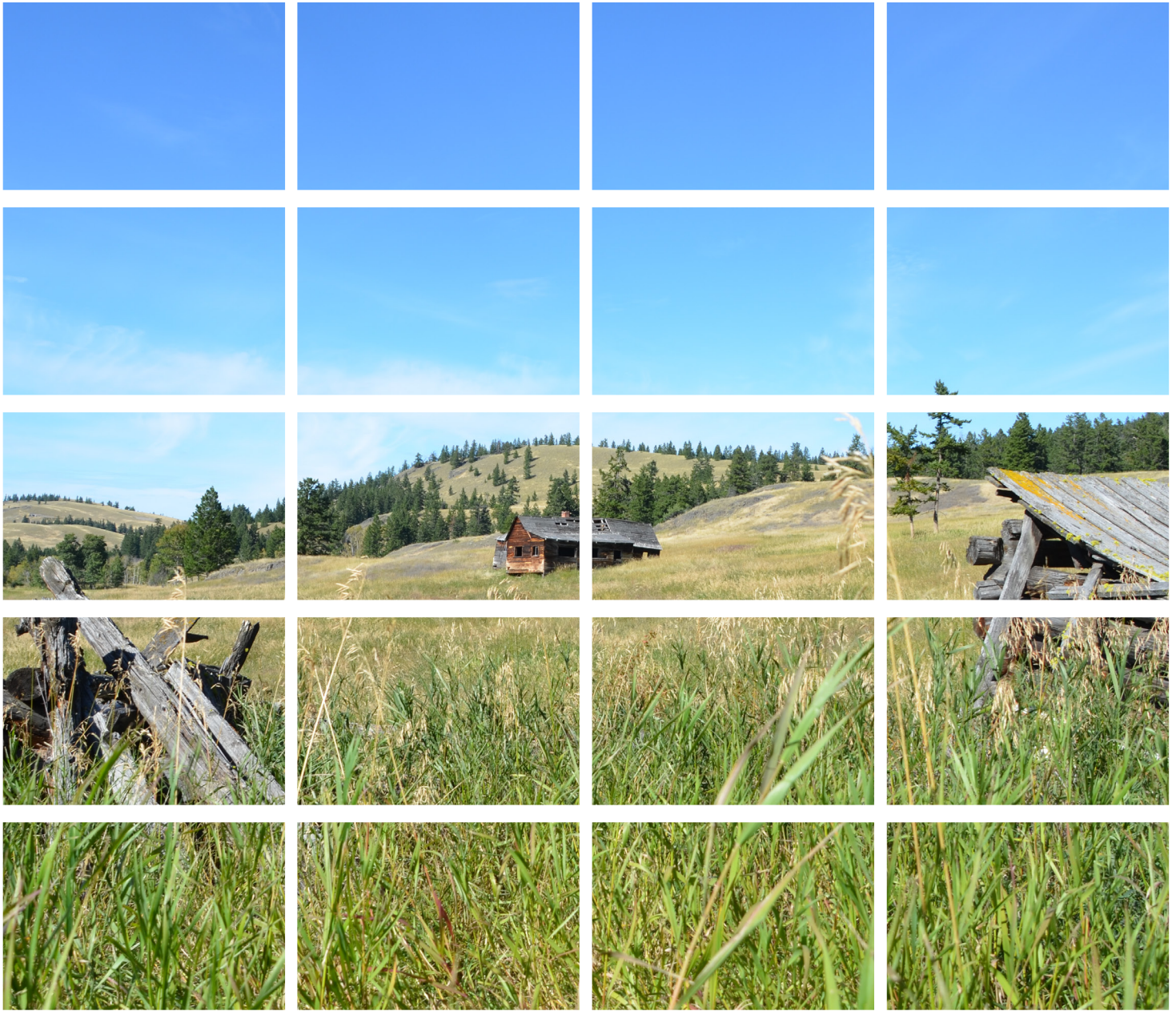


## *Appendix 9.2-A*

*Ajax Project: Heritage Baseline*

AJAX PROJECT

**Environmental Assessment Certificate Application / Environmental Impact Statement  
for a Comprehensive Study**



Prepared for:



# AJAX PROJECT Heritage Baseline

July 2015

**KGHM Ajax Mining Inc.**

AJAX PROJECT  
**Heritage Baseline**

**July 2015**

Project #0241224-0003

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## EXECUTIVE SUMMARY

This report presents the final results of ERM's heritage baseline study for the Ajax Project. The objective of this study is to summarize baseline information on Aboriginal and non-Aboriginal heritage resources within the Project area that post-date 1846 and are not automatically protected under the *Heritage Conservation Act* (HCA; 1996).

Field data was collected during the Archaeological Impact Assessment for the Project under HCA Permits 2009-0349 and 2014-0179. A separate archaeological baseline study, *Ajax Project: Archaeological Baseline Report* (ERM 2015a), and paleontological baseline study, *Ajax Project: Paleontological Baseline* (ERM 2015b) have also been conducted for the Project.

There is one historic era built heritage site designated under the HCA within the Project area. The St. Peter's Church Site is located within the Tailing Storage Facility and may have an associated cemetery. While no burial has been located the site has been recorded as an archaeological site (EdRc-61) to protect it until further studies can be conducted. Also within the Project area there is one petroform site, a hunting blind complex, identified as having high cultural significance by the Stk'emlupsemc te Secwepemc Nation (SSN). This site has been protected as archaeological site EdRc-25.

Rock piles have been identified by the SSN as having potential cultural significance. Within the Local Study Area (LSA) there are currently 92 identified rock piles and 64 of these are located in, or within 50 m of, Project developments. The majority of the rock piles were recorded in 2009 and interpreted as historic features associated with ranching and farming activities (Morin 2014). At this time none of the rock piles within the LSA are recorded as archaeological sites.

During the field Archaeological Impact Assessments (AIAs) undertaken for the Ajax Project fourteen historic built heritage sites were located with structures that may relate to early homesteading and settlement. Interviews and site visits were carried out with local landowners to provide additional information on some of these features. These sites are not designated under the HCA or *Local Government Act*. Other features related to historic era land use identified within the Project area include historic trails, three wooden traps, four historic ground disturbances, and a corral.

## ACKNOWLEDGEMENTS

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# AJAX PROJECT

## Heritage Baseline

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## GLOSSARY AND ABBREVIATIONS

Terminology used in this document is defined where it is first used. The following list will assist readers who may choose to review only portions of the document.

<b>Ajax South General Arrangement</b>	The current Ajax Project footprint.
<b>AIA</b>	Archaeological Impact Assessment
<b>AIR/EIS Guidelines</b>	Application Information Requirements/Environmental Impact Statement Guidelines
<b>AME</b>	Abacus Mining and Exploration Corp.
<b>Application/EIS</b>	Application for an Environmental Assessment Certificate/Environmental Impact Statement for a Comprehensive Study
<b>asl</b>	Above sea level
<b>BC</b>	British Columbia
<b>BCEAA</b>	British Columbia <i>Environmental Assessment Act</i>
<b>Borden Number</b>	The Canada-wide alphanumeric convention for naming archaeological sites.
<b>B.P.</b>	Before Present
<b>CE</b>	Common Era
<b>CEA Agency</b>	Canadian Environmental Assessment Agency
<b>CEAA</b>	<i>Canadian Environmental Assessment Act</i>
<b>CMT</b>	Culturally Modified Tree
<b>EMRSF</b>	East Mine Rock Storage Facility
<b>ERM</b>	ERM Consultants Canada Ltd.
<b>GPR</b>	Ground Penetrating Radar
<b>GPS</b>	Global Positioning System
<b>HCA</b>	British Columbia's <i>Heritage Conservation Act</i>
<b>Heritage Inspection Permit 2009-0349</b>	The permit issued to Terra Archaeology Ltd. authorizing an Archaeological Impact Assessment of the Ajax Project.

<b>Heritage Inspection Permit 2014-0171</b>	The permit issued to ERM authorizing an Archaeological Impact Assessment of the Ajax Project.
<b>KAM</b>	KGHM Ajax Mining Inc. (the Proponent)
<b>KGHM</b>	KGHM Polska Miedź S.A.
<b>LSA</b>	Local Study Area, defined as part of the Application for an Environmental Assessment Certificate/Environmental Impact Statement for a Comprehensive Study
<b>MFLNRO</b>	Ministry of Forests, Lands, and Natural Resource Operations
<b>MRSF</b>	Mine Rock Storage Facility
<b>New Gold</b>	New Gold Inc.
<b>NMRSF</b>	North Mine Rock Storage Facility
<b>OS</b>	Ore Storage
<b>Petroform</b>	Arrangements of rocks made by people.
<b>Project</b>	Ajax Project
<b>Proponent</b>	KGHM Ajax Mining Inc.
<b>ROW</b>	Right-of-Way
<b>RSA</b>	Regional Study Area, defined as part of the Application for an Environmental Assessment Certificate/Environmental Impact Statement for a Comprehensive Study
<b>SIB</b>	Skeetchestn Indian Band
<b>SMRSF</b>	South Mine Rock Storage Facility
<b>SSN</b>	Stk'emplupsemc te Secwepemc Nation
<b>Study Area</b>	The permitted study area, defined in Heritage Inspection Permit 2014-0171.
<b>Terra</b>	Terra Archaeology Ltd.
<b>TNRD</b>	Thompson Nicola Regional District
<b>TSF</b>	Tailings Storage Facility
<b>TteS</b>	Tk'emplúps te Secwepemc (formerly the Kamloops Indian Band)
<b>WMRSF</b>	West Mine Rock Storage Facility

# 1. INTRODUCTION

KGHM Ajax Mining Inc. proposes to develop the Ajax Project (Project), an open pit copper-gold mine at the historic Afton Mining Camp, south of the City of Kamloops, British Columbia (BC). The Project is located in the South-Central Interior of British Columbia, southeast of the junction of the Trans-Canada Highway No. 1 and the Coquihalla Highway (No. 5), within the Thompson Nicola Regional District.

The Project lies in the traditional territory of the Secwepemc Nation. Within the Secwepemc Nation, the Tk'emlúps te Secwepemc and the Skeetchestn Indian Band are the Aboriginal groups in closest proximity to the Project. In a cooperative effort, the Tk'emlúps te Secwepemc and Skeetchestn Indian Bands have formed the Stk'emlupsemc te Secwepemc Nation (SSN), as a division of the greater Secwepemc Nation. The Ashcroft Indian Band and Lower Nicola Indian Band, whose members are part of the Nlaka'pamux Nation also assert their Aboriginal rights to the Project area—an area of common interest with the SSN.

The Ajax property includes two historic pits: the Ajax West Pit, and the Ajax East Pit. Both pits were formerly mined in the 1980s and 1990s. As many as 25 rock types have been recognized in the Project area, some of which are “hybrid” units resulting from the intermixing of multiple rock types.

Key Project facilities include the Tailings Storage Facility (TSF), which is planned as a conventional tailings storage facility; water management ponds; Peterson Creek diversion, and the Tailings Embankments, which will be constructed using mine rock; and four mine rock storage facilities (MRSFs). The four MRSFs include:

- the South Mine Rock Storage Facility (SMRSF);
- the East Mine Rock Storage Facility (EMRSF);
- the West Mine Rock Storage Facility (WMRSF); and
- the In-Pit Mine Rock Storage Facility (IPMRSF).

Several facilities that will be part of the operation phase but not remain after project closure include the:

- plant facilities and administration buildings;
- reclamation stockpiles;
- explosives facility;
- truck stop and fuel storage;
- power lines; and
- access roads.

The mine plan for the Project predicts an operation based on a mill throughput of 65,000 tonnes of ore per day from the Ajax Pit with up to a 23 year mine life. The construction phase of the Project will be approximately two and a half years, and following the 23 year operation the decommissioning and closure phase is expected to take up to 5 years. Over the mine life the Project will produce approximately 140 million pounds of copper and 130,000 ounces of gold annually with the concentrate shipped by truck to the Port of Vancouver.

In May 2014, KGHM Ajax Mining Inc. (KAM) announced a revised Ajax Project site plan that moved key infrastructure several kilometres (km) to the south and southeast of the originally proposed infrastructure. ERM was retained by KAM to conduct a heritage baseline study (Figure 1-1)<sup>1</sup>.

This report presents the final results of ERM's heritage baseline study for the Ajax Project. The objective of this study is to summarize baseline information on Aboriginal and non-Aboriginal heritage resources within the Project area that post-date 1846 and are not automatically protected under the *Heritage Conservation Act* (HCA; 1996). Field data was collected during the Archaeological Impact Assessment for the Project under HCA Permits 2009-0349 and 2014-0179. Heritage sites, including historic buildings, petroforms, and historic ground disturbances are considered as there are occurrences of spatial and temporal overlap with the Project such that interactions are possible; and there is a perceived, reasonable likelihood that they will be affected by the Project. Separate baseline reports detailing the results of the archaeological impact assessments and paleontological studies also have been produced for the Project (ERM 2015a and 2015b).

### Report Structure

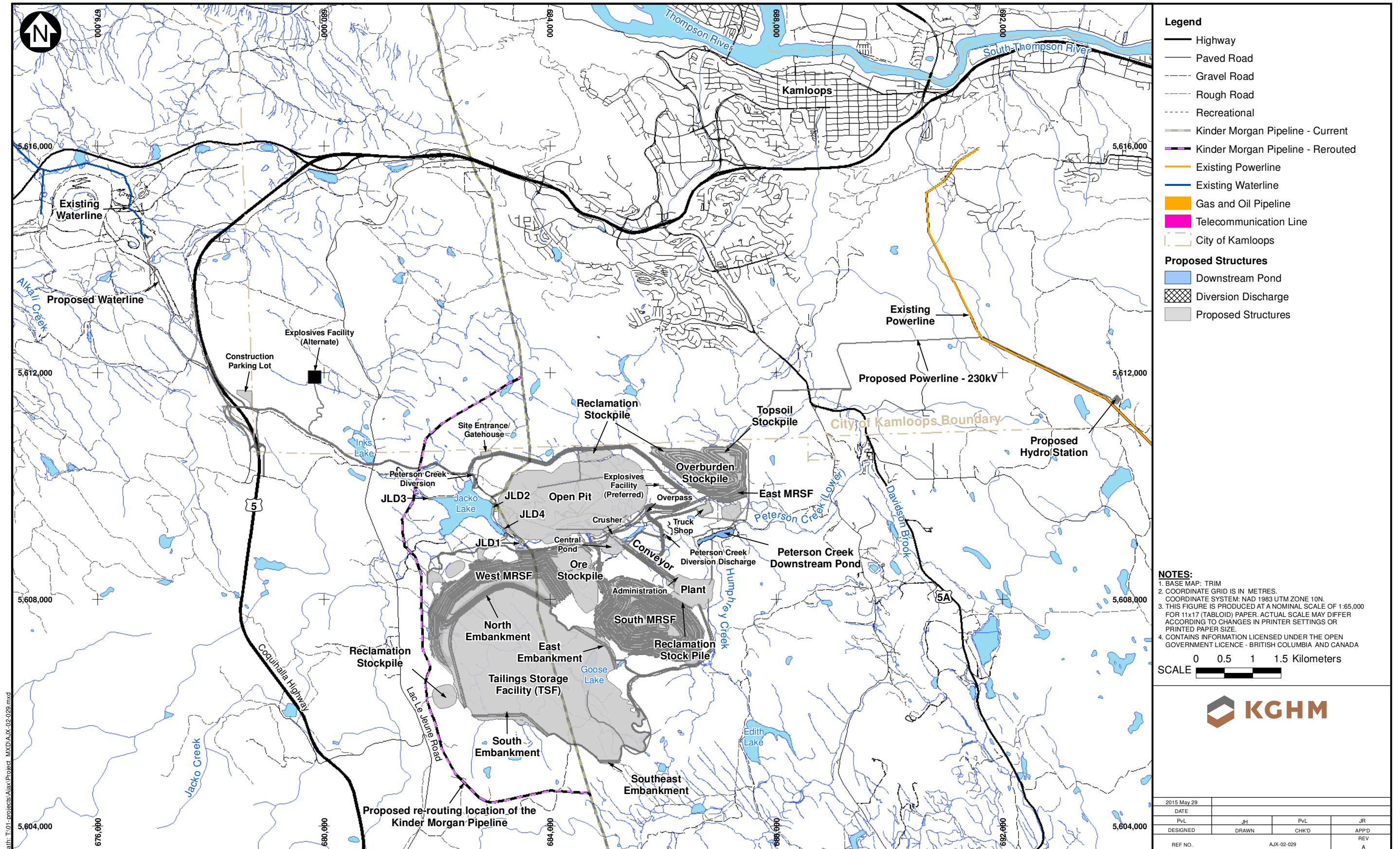
The Heritage Baseline report is structured as follows:

1. Section 1 describes the proposed Project, the study objectives and duration, relevant legislation, and First Nations communications;
2. Section 2 describes the methodology used for this study;
3. Section 3 details the environmental, ethnographic, and historical backgrounds;
4. Section 4 describes the heritage concerns identified;
5. Section 5 provides conclusions; and
6. Section 6 is the closing.

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<sup>1</sup> The current proposed Ajax Project is sometimes referred to as the Ajax South General Arrangement. In this report "Ajax Project" or "Project" refers only to the Ajax South General Arrangement, and not previously proposed Project footprints.

Figure 1-1  
Ajax Project



## 2. METHODOLOGY

### 2.1 SPATIAL BOUNDARIES

To define and focus the scope of the Heritage Baseline spatial boundaries a Regional Study Area (RSA) and a Local Study Area (LSA) were developed. The RSA and LSA are the same boundaries as those used for the Archaeological Effects Assessment.

#### 2.1.1 Local Study Area

The LSA incorporates the Project footprint and a 500 metre (m) buffer within which effects to heritage features can occur.

#### 2.1.2 Regional Study Area

The RSA is the same as the Archaeological Effects Assessment study area for consistency of reporting. This larger area provides a reasonable sample of protected heritage sites in the region and allows the effects on heritage sites within the Project area to be placed within a larger context.

### 2.2 DATA SOURCES

A review of published information for the LSA and RSA was conducted prior to fieldwork. The review included ethnographic, historic, archaeological, and environmental literature. The Kamloops *Community Heritage Register* (Donald Luxton and Associates Inc. 2008) was reviewed as was the *Canadian Register of Historic Places* (Parks Canada 2015). In addition, a search of the BC Archaeological Site Inventory database using the Remote Access to Archaeological Data application was carried out. First Nations land use and knowledge reports were also reviewed, including the *SSN Cultural Heritage Study* (Ignace et al. 2014). Local history for the area is based largely on *Bunch Grass to Barbed Wire* (Heritage Committee 1984). A separate archaeological baseline study has also been conducted for the Project, *Ajax Project: Archaeological Baseline Report* (ERM 2015a).

The Stk'emlupsemc te Secwepemc Nation (SSN) have defined cultural heritage to include a both tangible and intangible cultural heritage concerns including those summarized below:

- material sites objects and features from the past;
- named landscape features;
- places in the landscape associated with spiritually powerful beings;
- important dwelling and living places remembered by past generations;
- known powerful and spiritually associated places in the landscape;
- places that were/are known and used because of valued plant and animal resources; and
- cultural and linguistic knowledge that underlies connections to place (SSN 2014).

KAM has commissioned the *SSN Cultural Heritage Study* for the Project within which the Stk'emlupsemc te Secwepemc Nation (SSN) have raised several topics of cultural heritage importance including archaeological site EdRc-25 (hunting blind complex), Jacko Lake, Goose Lake, Peterson Creek, and the possible use of rock piles as burial cairns (Ignace et al 2014).

Interviews and site visits were carried out with local landowner George Little, Brian Ciancone (former Manager of Sugarloaf Ranch), and members of the Anglican Church Bishop Andrews and Dwight Oatway.

During pedestrian survey of the Project area ground surfaces were visually examined for trails, structures, rock piles, ground disturbances, and other evidence of past human settlement or land use. Built heritage associated with historic farming and ranching activity were documented as were rock piles, and other features including historic ground disturbances, traps, and a corral.

### **3. BACKGROUND**

#### **3.1 CURRENT ENVIRONMENT**

The Ajax Project is in the South-Central Interior region of BC within the Thompson Nicola Regional District and the proposed key infrastructures are largely outside of the Kamloops city limits, located primarily on private land owned by KAM, with some utilization of Crown land. The proposed construction parking lot and alternate explosives facility as well as portions of the haul road are within the Kamloops city limits.

The Project is within the Thompson Okanagan Plateau of the southern interior of British Columbia and falls within three biogeoclimatic zones: the Bunchgrass, Ponderosa Pine and Interior Douglas Fir zones (MOF n.d., 1998, 1999). The Project area is characterized by low rolling hills on a plateau above Kamloops Lake which is situated to the north. Vegetation is primarily grassland though small stands of trees can be found in sheltered areas provided by low hills and incised drainages.

#### **3.2 ETHNOGRAPHIC BACKGROUND**

In 2014 the SSN produced the *SSN Cultural Heritage Study*, a detailed ethnographic background for the Ajax Project, some of which is summarized below (Ignace et al. 2014). Accounts of traditional lifeways in the area can also be found in the following sources: Boas (1891), Boelscher-Ignace (1998), Dawson (1891), Ray (1939), Stryd and Rousseau (1996), and Teit (1909).

The seasonal round of the Secwepmec included hunting on the hills and plateaus above river valleys. This was primarily focussed on large game such as elk, moose, and deer, although small species such as grouse, hare, marmot would also be taken (Ignace et al. 2014). Late summer and early fall were the primary times of the year when large game hunting would be conducted and deer or elk fences, consisting of stone alignments, may have been used in the hunting of this large game. Trapping of bear, beaver, and other fur-bearing mammals was also undertaken to provide material for clothing. Following the establishment of fur trading posts in Kamloops fur was also traded for western goods. Fishing was an important activity with Jacko Lake providing an important spring trout fishery and in the late fall salmon were harvested from the Thompson Rivers system. Plants were harvested during the spring, summer, and fall, adding nuts, roots, and berries to the diet and were used medicinally and for creating functional items such as tools and dwellings. Cambium was harvested from the Ponderosa Pine and Lodgepole Pine around Jacko Lake (Ignace et al. 2014).

Jacko Lake has been identified as an important area for traditional and current practices of the Secwepmec people. Ignace et al. (2014) notes that Jacko Lake was fished for trout and the area was used to harvest roots and to hunt deer and elk. Jacko Lake can be ice-free by the middle of April and could have provided access to fresh fish before seasonal salmon runs. A travel route also passed by the Jacko Lake area; the route, documented by Dawson in 1891 and used by the HBC brigades, ran from Kamloops south to Knutsford, past Jacko Lake, and on past Stump and Nicola lakes (see also Section 2.4). While Ignace et al. (2014) describes the Jacko Lake area as having been used for a number of resource procurement activities in the past, this use was limited following land exemptions.

This is confirmed by the six archaeological sites that have been located near the shore of Jacko Lake and at one of the sites an Early Nesikep projectile point was found indicating use of this area extends back approximately 7,000 years Before Present (B.P.) Historically, however, the water level in Jacko Lake has fluctuated; most recently, the current lake level was raised several metres by a dam at the outlet to Peterson Creek.

Peterson Creek, the outflow of Jacko Lake, originally named Jacko Creek on early maps, was fished by scoop-net at its outflow for trout during seasonal spawning. Areas along the Peterson Creek drainage were also used to hunt deer and elk (Ignace et al. 2014). There are currently 14 archaeological sites recorded along the stretch of Peterson Creek between the dam at Jacko Lake and Knutsford Hill (a distance of approximately 6 km). All of the sites are small and likely represent camp sites or hunting locations along the creek.

### **3.3 HISTORICAL BACKGROUND**

European exploration within the RSA began in the early 1800s. David Stuart of the Pacific Fur Company visited the Kamloops area in 1811 and established the first trading post in Kamloops in 1812 at the confluence of the North and South Thompson rivers on its south side. That same year the North West Company established their Thompson River Post, located on the east bank of the North Thompson River just north of its confluence with the South Thompson River. The presence of the Pacific Fur Company didn't last long, however, being purchased by the North West Company in 1813. The North West Company and the Hudson's Bay Company (HBC) amalgamated in 1821; the fort was later renamed Fort Kamloops (Wade 1912; Carlson 2006). By 1841 it had fallen into disrepair and rather than being rebuilt, a new fort was built on the west bank of the North Thompson River. In 1862 the post was moved south of the Thompson River to take advantage of the trade with the miners and cattle drivers who travelled the trails to the south of the river (Carlson 2006).

There is a long history of mineral exploration and mining within the RSA starting with the Cariboo gold rush of the 1850s. By the late 1800s, there were over 200 mineral claims documented in the Kamloops area. It wasn't until the late 1890s that larger operations began to appear including the Iron Mask Mine which was first staked in 1869, located approximately 8 km from Kamloops, immediately northwest of the current Ajax Mine. The Iron Mask Mine was later operated under the names Kamloops Mines Ltd. and the Kamloops Copper Company with mining operations sporadically starting and stopping between 1920 and 1928. It is likely that properties related to the current Project are situated within these early mineral claim areas (Bond 1988).

Work within the Ajax claim area was reported in 1898 by the Wheal Tamar claim group. Between 1904 and 1910 trenching was carried out and additional underground extraction occurred through the 1920s. In 1928, the Consolidated Mining and Smelting Company of Canada Ltd. (Cominco) optioned thirteen claims within and adjacent to the current Project area. Further exploration and mining continued through the 1970s and 1980s by Afton Mines Ltd. and Cominco. Within the central part of the current Project, the Ajax East and West open pits were being developed by 1988 along with the construction of a haul road to the Afton Mill. By 1997, production had ceased for both the east and west pits of the Afton mine (Bond 1988). There are currently approximately 160 ha of disturbance within the LSA relating to these developments from the two open pits and three rock

storage facilities. In addition to these large disturbed areas there are disturbances from access roads and exploration activities associated with these prior developments.

European settlement in the RSA increased during the 1840s-1850s when the discovery of gold brought gold seekers as well as settlers and cattle herders looking to profit by selling goods and services to the miners. During the early years of settlement, individual ranches and settlements were distributed along the few roads and trails that passed through the region which could serve the needs of passing miners and packers heading to the goldfields. Later settlement patterns conformed less to the established travel routes with a focus more toward choice grazing lands (Weir 1955). The first cattle drive into the region took place in 1846 when cattle were moved along the Brigade Trail from Oregon to Fort Vancouver then on to Fort Kamloops and Fort Alexandria. Small herds were kept for beef and dairy at Fort Kamloops (McLean 1982). In 1858 the HBC's exclusive license to trade with First Nations was cancelled and resulted in company men taking up land in the area (Weir 1955).

Hudson's Bay Company (HBC) employee Alexander Jacko took up residence and homesteaded in the area in the early 1850s. Of Métis decent, he came into the area in the 1830s working as a packer for HBC and died in 1862. Historic records indicate that he kept horses around Jacko Lake; the lake and creek were subsequently named after him (Balf 1969; Ignace et al. 2014). The homestead was taken over by his son Philip Jacko who pre-empted the family horse range in 1866 extending to Jacko Lake and built a house near the mouth of Jacko Creek. Philip Jacko is listed as Tk'emlups Indian in documents from this time period. He was born in 1840, and passed away between 1881 and 1884. He was married to Melvina, also a Tk'emlupsemc (Balf 1969; Ignace et al. 2014).

John Peterson moved to the area in 1862 starting a pack train operation between Lillooet and the Cariboo. When the CPR Survey started up in the area in 1871, Peterson sold his pack train to the government and continued on as the Survey's boss packer. In 1868 he settled in Kamloops, pre-empting land near Jacko Creek, a portion of the drainage, Peterson Creek, carries his name. Peterson built a large house and stables, purchasing more land from Philip Jacko at the creek mouth and from William Jones, making him the owner of much of the present area of Kamloops (Balf n.d.).

The population in the area continued to increase with the arrival of the railways in the 1880s and the incorporation of the city of Kamloops in 1893. By this time there was an established Main Street, grist and saw mills, a brickyard, blacksmith shops, as well as several stores and residences (Favrholdt 1983; Hagan 1882).

With the establishment of the Dominion Homestead Act of 1892, surveys of potential agricultural lands began in earnest across Canada. While Kamloops was not ideally suited to agriculture, early surveys treated the area as prairie lands with 160-acre parcels of land being surveyed. Several townships were established south of Kamloops to Stump Lake, stretching from northwest to southeast across the rolling landscape. In all, approximately 334 quarter-sections were homesteaded in the Railway Belt south of Kamloops up to the year 1915 (Favrholdt 1999).

In the early 1890s T. Charles Humphrey obtained a deed for land on what is currently called the Goose Lake Road. He and his brother Fred had homesteads beside each other and were some of the earliest European settlers in the area. At one point T. Charles had up to 10,000 acres leased from the government for ranching. They initially used the land to raise horses that were sold on the prairies

and to the army. As he was limited in how much land he could purchase outright from the government this ranch lease began to be occupied by homesteaders cutting into his available ranch land. In response he loaned incoming homesteaders a horse team, and farming equipment and if they couldn't make payments on the loan he bought them out. He also had men in his employ obtain homesteads and, once they had proved up he paid them \$1,000 for their land. Before the Great Depression Humphrey had 1,200 cattle on the ranch but was forced to reduce the stock in the 1920s when water was scarce during a drought. At one point Goose Lake completely dried up. In the late 1920s, following the death of his wife, T. Charles Humphrey sold the ranch to John Morrison. The Morrison family stayed in the area for generations eventually owning much of the land within the Project area. The other major landowners in the Project area is the Little family.

In the early 1900s two men, both with the name John Little, moved to the Goose Lake area. In 1931 John 'Big Jack' Little bought a property to the south of Goose Lake Road next to John 'Little Jack' Little. The two men became good friends. Little Jack had applied for his homestead in 1914 and farmed and raised cattle on the land. In addition to his homestead Little Jack had purchased other properties from discouraged homesteaders. A lifelong bachelor, Little Jack died in the late 1940s and left his property to George Little, the son of his friend and neighbour (Heritage Committee 1984). The Littles continued to farm and ranch on their property and George Little still lives on the property.

Historic records also indicate a church, St. Peter's Anglican Church, and associated cemetery was located within the LSA. An Anglican minister, Canon Akehurst, was instrumental in building the church on Goose Lake Road (Heritage Committee 1984). It was built in 1915 on land that had been donated to the church by Theodore Swanton. In its early years it was well attended with weddings, baptisms taking place and at least one burial was located nearby (Heritage Committee 1984). During the 1920s many of the church families moved away and the church fell into disuse. The church was eventually dismantled and its fittings and lychgate incorporated into the St. George's Anglican Church in North Kamloops. The St. Peter's Anglican Church site and cemetery have been assigned Borden Number EdRc-61, the designation provides protection for the site under the HCA (Section 4.1).

## 4. RESULTS

This section provides a summary of the designated historic sites within the RSA and the historic and heritage features that have been recorded within the LSA. Only two of the heritage sites within the LSA have been designated under the HCA; the designation provides protection for these sites under the HCA. As archaeological site locations are protected under the *Heritage Conservation Act* (1996) heritage features associated with archaeological site will not be shown on the maps within this baseline.

### 4.1 DESIGNATED HISTORIC SITES WITHIN THE RSA

In 2007 the city of Kamloops created a *Community Heritage Register*; a planning tool to facilitate management of the city's historic sites (Donald Luxton and Associates Inc. 2008). Community Heritage Registers are created by the municipalities under the provincial *Local Government Act* (1996). There are currently 22 designated built heritage sites within the RSA and of these nineteen were designated through council resolutions under the *Local Government Act* and three were designated under HCA Permits (Figure 4.1-1; Table 4.1-1).

**Table 4.1-1. Designated Heritage Sites within the RSA**

Borden Number	Description	Method of Designation
EdRc-61	St. Peter's Anglican Church	HCA Permit 2014-0171
EeRb-131	Old Sheepbreeder's Building	Council Resolution
EeRb-157	Kamloops Heritage Railway Station	Council Resolution
EeRb-158	Plaza Heritage Hotel	Council Resolution
EeRb-194	Memorial Arena	Council Resolution
EeRb-196	Kamloops Pioneer Cemetery	Council Resolution
EeRb-197	William W. Bishop House	Council Resolution
EeRb-198	Hayden House	Council Resolution
EeRb-199	Cattle Car and Caboose	Council Resolution
EeRc-17	Thompson River Post (Location IV) Fort Kamloops	HCA Permit 1977-017
EeRc-56	McIntosh Memorial	Council Resolution
EeRc-60	Stuart Wood School   Kamloops Public School	Council Resolution
EeRc-61	St. Andrew's Presbyterian / United Church	Council Resolution
EeRc-63	Old Kamloops Courthouse and Land Registry	Council Resolution
EeRc-65	Kamloops Bank of Commerce / Old Kamloops City Hall	Council Resolution
EeRc-66	Model Bakery / Inland Cigar Factory	Council Resolution
EeRc-67	Old Chinese Cemetery / Kamloops Chinese Cemetery	Council Resolution
EeRc-68	Royal Canadian Navy Ammunition Depot Bunkers	Council Resolution
EeRc-70	W. A. G. Marlatt House	Council Resolution
EeRc-71	Stoodley Residence	Council Resolution
EeRf-23	Steelhead Cemetery	HCA Permit 1978-008
EeRf-64	Steelhead Residence / Wilson Residence	Council Resolution

## 4.2 BUILT HERITAGE SITES WITHIN THE LSA

Built heritage within the LSA provides a tangible link to the early historic settlement of the area and historic indigenous land use (Figure 4.2-1).

Fieldwork to identify historic heritage features within the LSA was conducted in 2014 and included pedestrian survey, Ground Penetrating Radar (GPR) work, and interviews with local landowners and members of the Anglican Church. Participants included local landowner George Little, Brian Ciancone (former Manager of Sugarloaf Ranch), members of the Anglican Church Dwight Oatway and Bishop Andrews, Lisa Seip (ERM), and KAM representatives. George Little and Brian Ciancone helped ERM locate built heritage features in the Project area and provided background information on the early settlement of the area. Bishop Andrews and Dwight Oatway of the Anglican Church assisted with determining the location of St. Peter's Anglican Church. GPR and a metal detector were also employed to try to find evidence of the church and burial location(s).

These field studies and accompanying research have identified the following heritage features within the LSA.

### 4.2.1 Designated Built Heritage Sites within the LSA

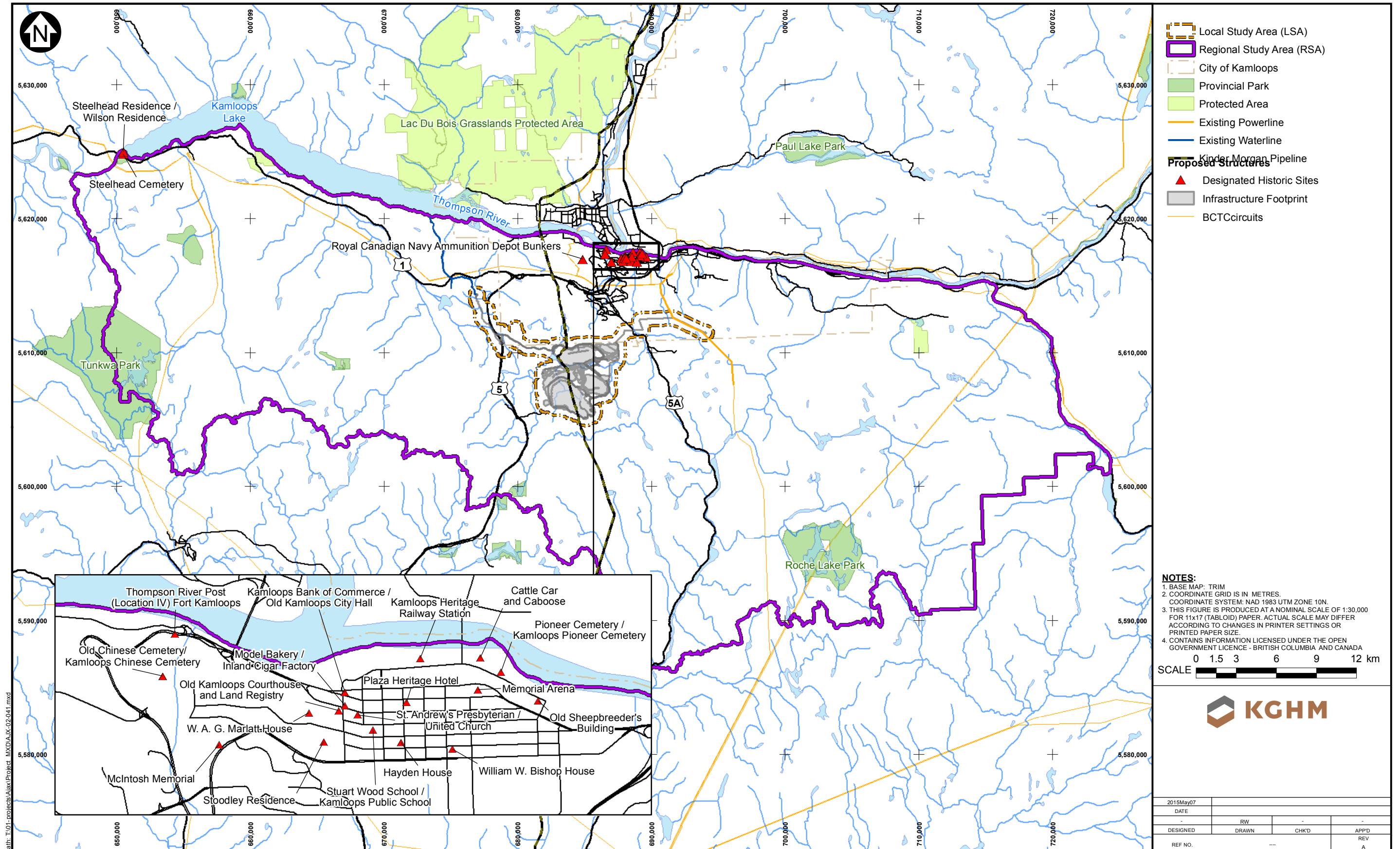
There is one built heritage site located within the LSA. The site of St. Peter's Anglican Church was designated under HCA Permit 2014-0171.

#### 4.2.1.1 *St. Peter's Anglican Church (EdRc-61)*

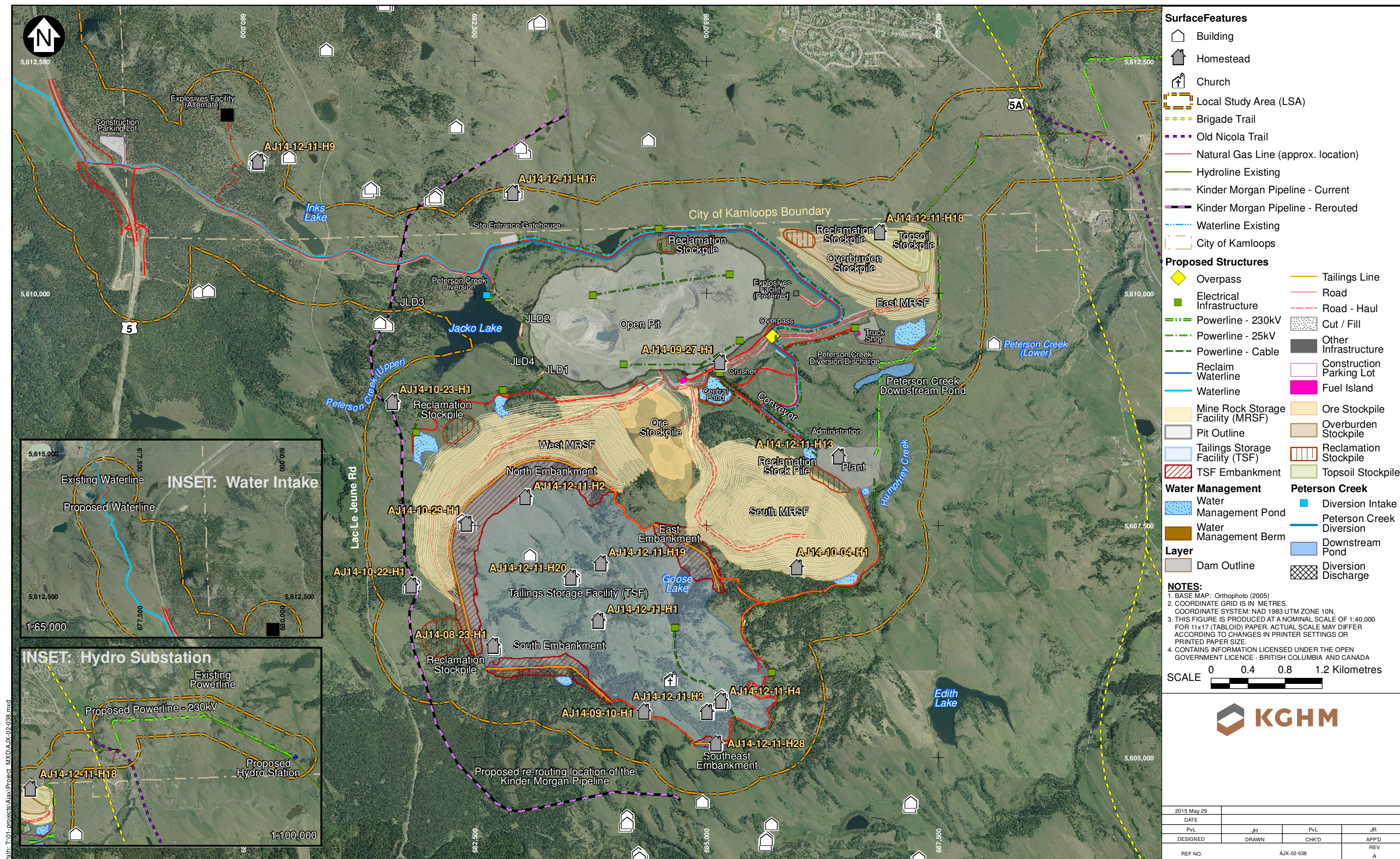
The St. Peter's Anglican Church, also recorded as archaeological site EdRc-61, is located within the proposed TSF on the northwest side of the Goose Lake Road. This location of St. Peter's Anglican Church is based on a combination of evidence including historic maps, archival research, and the recollection of George Little who stated that this is where he observed a grave marker (wooden cross) laying on the ground. Interviews and site visits were conducted with Bishop Barbara Andrews and Dwight Oatway of the Anglican Church (Anglican Parishes of the Central Interior), and George Little, whose family has owned and ranched much of the surrounding land since the early 1900s. George Little has lived on the Goose Lake Road since the 1930s, less than a kilometre from the church site.

The church was constructed in 1915 on land donated by Theodore Swanton. It had a lychgate donated by Brook Haverfield and two organs donated by the George and Osborne-Smith families. The church fell into disuse in the 1920s and was later dismantled (Heritage Committee 1984). Though the church is no longer standing on the site there is the potential that one or more burials, including the infant daughter of the Osborne-Smith's, associated with the church's cemetery remain at the site (Heritage Committee 1984). This site was not formally registered as a cemetery with the Province of BC. At present, there are no visible features of the church or cemetery remaining. The Anglican Church (Anglican Parishes of the Central Interior) was consulted as part of this study, and they have no documentation of the grave being removed from the site and reinterred elsewhere.

**Figure 4.1-1**  
**Designated Historic Sites within the RSA**



**Figure 4.2-1**  
Homesteads and early Historic Trails within the Ajax Project Area



- Surface Features**
- Building
  - Homestead
  - Church
  - Local Study Area (LSA)
  - Brigade Trail
  - Old Nicola Trail
  - Natural Gas Line (approx. location)
  - Hydroline Existing
  - Kinder Morgan Pipeline - Current
  - Kinder Morgan Pipeline - Rerouted
  - Waterline Existing
  - City of Kamloops
- Proposed Structures**
- Overpass
  - Electrical Infrastructure
  - Powerline - 230kV
  - Powerline - 25kV
  - Powerline - Cable
  - Reclaim Waterline
  - Waterline
  - Mine Rock Storage Facility (MRSF)
  - Pit Outline
  - Tailings Storage Facility (TSF)
  - TSF Embankment
  - Tailings Line
  - Road
  - Road - Haul
  - Cut / Fill
  - Other Infrastructure
  - Construction Parking Lot
  - Fuel Island
  - Ore Stockpile
  - Overburden Stockpile
  - Reclamation Stockpile
  - Topsail Stockpile
- Water Management**
- Water
  - Water Management Pond
  - Water Management Berm
  - Dam Outline
  - Peterson Creek
  - Diversion Intake
  - Peterson Creek Diversion
  - Downstream Pond
  - Diversion Discharge
- Layer**
- Layer

**NOTES:**

1. BASE MAP: Orthophoto (2005)
2. COORDINATE GRID IS IN METRES. COORDINATE SYSTEM: NAD 1983 UTM ZONE 10N.
3. THIS FIGURE IS PRODUCED AT A NOMINAL SCALE OF 1:40,000 FOR 11x17 (TABLOID) PAPER. ACTUAL SCALE MAY DIFFER ACCORDING TO CHANGES IN PRINTER SETTINGS OR PRINTED PAPER SIZE.
4. CONTAINS INFORMATION LICENSED UNDER THE OPEN GOVERNMENT LICENCE - BRITISH COLUMBIA AND CANADA

SCALE 0 0.4 0.8 1.2 Kilometres



2015 May 29			
DATE			
PVL	JH	PVL	JR
DESIGNED	DRAWN	CHK'D	APP'D
REF NO.	AJX-02-038		REV
			A

In 2014, ERM used several methods to confirm the church and cemetery's location. A local history book, *Bunch Grass to Barbed Wire* (Heritage Committee 1984) was reviewed which includes a map of the church and cemetery location in relation to historic property boundaries. The Canada Department of Mine & Technology survey map of the Kamloops area dated 1951 also places the church in this approximate location. Archival research was conducted with the assistance of Melanie Delva, archivist at the Anglican Diocese of New Westminster. A Land Title search was also conducted but it appears that, in contrast with the information provided in *Bunch Grass to Barbed Wire* (Heritage Committee 1984), no deed was issued for the church property (D. Johnson, pers. comm.).

Archaeologists from ERM and George Little surveyed the site area and identified two segments of an uncommon, heavy gauge "woven-wire" type of fencing along the west and south boundaries of the site area. These were interpreted by Mr. Little as being the fencing used around the church and cemetery area and it is distinct from the 3-4 row barbed wire fencing that is ubiquitous in the area. Mr. Little recalled as a child seeing a wooden cross in this area. A GPR survey of the site was conducted by Precision Radar Scanning; however, the GPR results were inconclusive. Other than the unique fencing material, no features or objects associated with the church or cemetery were observed at the site.

As there is no evidence that any burial(s) at the cemetery were ever moved and because the location is not a registered cemetery, the St. Peter's Anglican Church and cemetery were registered as an archaeological site. The site dimensions were estimated from the two segments of distinct fencing material. The northwest-southeast fence segment (67.2 m) marks the western extent of the site, and abuts a ranch access road immediately to the west. The northeast-southwest fence segment (62.0 m) marks the southern extent of the site, with Goose Lake Road situated immediately to the south.

#### **4.2.2 Undesignated Built Heritage within the LSA**

During the field programs undertaken for the Ajax Project fifteen sites were located with structures or features that may relate to early homesteading and settlement within the LSA. Additionally the locations of the early historic Brigade and Nicola Trails were identified based on historical information but no physical evidence of the trails was located during the AIAs. These sites are not currently designated under the HCA or *Local Government Act* but may be of interest to the local community.

##### *4.2.2.1 Early Historic Trails within the LSA*

When the fur trade began in the Kamloops area existing Aboriginal trails were used for moving furs to the trading posts. Later they were used for moving cattle into the area. The first cattle drive into the region took place in 1846 when cattle were moved along the Brigade Trail from Oregon to Fort Vancouver then on to Fort Kamloops and Fort Alexandria (Weir 1955). These established travel routes through the area affected the trend of later settlement, including the Brigade Trail, a branch of which ran south from Fort Kamloops past Stump and Nicola lakes (Figure 4.2-1). During the early years of settlement, individual ranches and settlements were distributed along the few roads and trails that passed through the region which could serve the needs of passing miners and packers heading to the goldfields. Later settlement patterns conformed less to the established travel routes with a focus more toward choice grazing lands (Weir 1955). The Brigade and Nicola trails cross through the LSA near the location of current Highway 5A.

#### 4.2.2.2 Gainer Homestead (AJ14-12-11-H1)

The Gainer homestead (AJ14-12-11-H1) is located within the TSF approximately 750 m to the west of the Goose Lake Road (Plate 4.2-1). R.H. Gainer took up land in 1909 but moved to Little Fort not long after (Heritage Committee 1984). The cabin was occupied from 1912 to 1918 (G. Little, pers. comm.). There are two existing buildings. The first is a two-storey log cabin with saddle-notched corner joints, second storey shingle-siding, and a collapsed roof. The second building is a log outbuilding with only three low walls with saddle-notched corner joints remaining. The structures are in an area measuring 66 m (north-south) by 10 m (east-west).



Plate 4.2-1. View of the exterior of the two-storey building on the Gainer homestead, looking south.

#### 4.2.2.3 Bentley Homestead (AJ14-12-11-H2)

A small shed (AJ14-12-11-H2) that may once have been part of the Bentley homestead (G. Little, pers. comm.) is located at the north end of the TSF. The remains of the small shed are the only feature in the area. The shed measures approximately 4 m (northwest-southeast) by 3.5 m (northeast-southwest).

#### 4.2.2.4 Swanton Homestead (Little Property; AJ14-12-11-H3)

The Swanton Homestead (AJ14-12-11-H3) is located within the TSF to the southeast of the Goose Lake Road (Plate 4.2-2). It is part of George Little's property with the land originally belonging to Theodore O. Swanton (Heritage Committee 1984). Swanton sold the property to John 'Little Jack' Little in 1922 and was inherited by George Little, the son of his friend John 'Big Jack' Little upon his death. The property is currently occupied by George Little and there are a number of structures still

standing including a cabin, barns, and other outbuildings. The cabin is a two-storey log construction with shingle siding and a gable roof. The cabin and associated outbuildings occupy an area of approximately 45 m (north-south) by 34 m (east-west).



*Plate 4.2-2. View of the Swanton homestead (Little Property) and the surrounding area, looking west.*

#### 4.2.2.5 Haverfield Homestead (AJ14-12-11-H4)

This homestead (AJ14-12-11-H4) is located within the TSF to the southeast of the Goose Lake Road (Plate 4.2-3). It is currently part of George Little's farm though originally the land belonged to Brook Haverfield. The house built in 1908 was originally inhabited by the Haverfields. In 1923 they sold to the Humphreys who later sold to the English (Heritage Committee 1984). There are six structures still standing including the bungalow-style cabin with a gable roof and weatherboard siding, a chicken coup of log construction with saddle-notched joints and a board-and-batten front, and two other outbuildings (both of log construction with saddle-notched joints and cement chinking). The cabin appears in fair condition. The chicken coup is in good condition. The other outbuildings are in poor condition with missing roofs. The cabin and its associated buildings occupy an area measuring approximately 125 m (north-south) by 60 m (east-west).

A barn, potentially associated with this homestead, is located approximately 450 m south of the cabin and outbuilding at the southern end of the TSF within the South Tailings Dam Embankment area (Plate 4.2-4). The barn, constructed of milled flat timber with an existing roof, is the only feature in the area. The barn is in good condition.



*Plate 4.2-3. View of Haverfield homestead looking north.*



*Plate 4.2-4. View of barn and the surrounding area, looking west.*

#### 4.2.2.6 J. Humphrey Homestead (AJ14-12-11-H13)

This homestead (AJ14-12-11-H13) is located on a hill within the Plant Site. The homestead consists of the remains of a historic cabin that based on a map of the original homesteads is possibly part of the J. Humphrey's homestead (Plate 4.2-5). In 1895, T. Charles Humphrey and his brother Fred homesteaded beside each other and were involved in raising horses and cattle for the prairie homesteaders and the army. In the late 1920s the ranch was bought by John Morrison (Heritage

Committee 1984). At present only a cabin remains at this location. The cabin measures approximately 10 m (east-west) by 8 m (north-south). There is evidence that cattle or other livestock have been using the cabin for shelter and it is currently in poor condition with the floor boards broken and the roof collapsing.



*Plate 4.2-5. View of the cabin facing northwest.*

#### 4.2.2.7 Leiper Homestead (AJ14-12-11-H18)

This homestead (AJ14-12-11-H18) consists of the remains of a historic cabin. Based on a map of the original homesteads in the area this building is possibly from the Leiper homestead (Heritage Committee 1984). The cabin is located within the northeast corner of the East MRSF and topsoil stockpile. The cabin remains are the only feature in the area and measure approximately 7 m (northeast-southwest) by 6 m (northwest-southeast).

#### 4.2.2.8 F.C. Humphrey Homestead (AJ14-12-11-H19)

This site (AJ14-12-11-H19) consists of a granary, and based on a map of the original homesteads this building is possibly from the F.C. Humphrey homestead (Heritage Committee 1984). The granary is located within the TSF to the west of the Goose Lake Road. Only the granary remains and it measures approximately 7 m (northwest-southeast) by 6 m (northeast-southwest).

#### 4.2.2.9 Osborne-Smith Homestead (AJ14-12-11-H20)

The site consists of the remains of the Osborne-Smith homestead (AJ14-12-11-H20), which later became the Little home (Plate 4.2-6). Arthur D. Osborne-Smith moved to the Goose Lake Road area in 1903 to raise Clydesdale horses. He was married in 1906 and had three children in 1910, 1913, and 1915. The youngest, Beatrix May, died shortly after birth and was buried on August 11, 1915 beside

St. Peter's Anglican Church (Heritage Committee 1984). The buildings are located within the TSF to the west of the Goose Lake Road. There are six existing features in the area including a 1 ½-storey log cabin with square-notched corner joints and shingle siding on the second floor has a more modern addition built out of milled flat timber, a horse barn with square-notched log construction, a chicken coup of log construction with square-notched joints, a log building with saddle-notched joints, and two outbuildings of milled flat timber. The structures occupy an area measuring approximately 70 m (east-west) by 57 m (north-south). All buildings are in fair to good condition. A trapper's cabin was also reported in this quarter-section (approximately 450 m to the northwest) but was not located.



*Plate 4.2-6. View of Osborne-Smith homestead and the surrounding area, looking west.*

#### 4.2.2.10 Vic Homestead (AJ14-10-29-H1)

The site (AJ14-10-29-H1) consists of buildings associated with the remains of the Vic homestead (Pers. Comm. George Little). The site is located within North Embankment of the TSF. There are three existing features in the area including a standing barn and cabin of log construction with V-notched corners and no existing roof, and a collapsed shed (Plate 4.2-7). The structures are in an area measuring approximately 87 m (east-west) by 34 m (north-south).

#### 4.2.2.11 Heck Homestead (AJ14-12-11-H16)

The site (AJ14-12-11-H16) consists of the remains of a historic homestead that based on a map of the original homesteads is potentially the Heck homestead. The buildings are located approximately 450 m north of the Site Entrance Gatehouse. There are two existing features in the area: the remains of a cabin and the remains of a root cellar. Only the walls of the structures remain. The structures occupy an area measuring approximately 66 m (east-west) by 20 m (north-south).



*Plate 4.2-7. View of the Vic Homestead and the surrounding area, looking west.*

#### *4.2.2.12 Homestead 1 (AJ14-12-11-H9)*

Homestead 1 (AJ14-12-11-H9) is located to the west of Lac La Jeune Road approximately 170 m east of a proposed alternate Explosives Facility Access Road. The site consists of the remains of a historic homestead of unknown origin. There are six existing features in the area including the remains of five log cabins (or possible cabins) and one outhouse. Only the walls of the structures remain. The structures occupy an area measuring approximately 70 m (east-west) by 65 m (north-south).

#### *4.2.2.13 Homestead 2 (AJ14-10-22-H1)*

Homestead 2 (AJ14-10-22-H1) is approximately 350 m west of the TSF North Embankment. The site consists of the remains of a historic homestead of unknown origin (Plate 4.2-8). There are two existing features in the area including the remains of a “hill house” type log cabin with saddle-notched corners and some concrete used for the chimney and a stove/oven inside and a root cellar located about 66 m to the northeast of the cabin. Only the walls of the structures remain.

#### *4.2.2.14 Homestead 3 (AJ14-10-23-H1)*

Homestead 3 (AJ14-10-23-H1) is approximately 300 m northwest of the Hydro Line corridor. The site consists of the remains of a historic homestead of unknown origin (Plate 4.2-9). The cabin remains are the only feature in the area. The cabin is of log construction, has dovetail-notched corners, cement and straw chinking and no remaining roof (only the walls are still standing). The cabin footprint is about 7.5 m north-south and 6 m east-west. Two ceramic tableware pieces were found

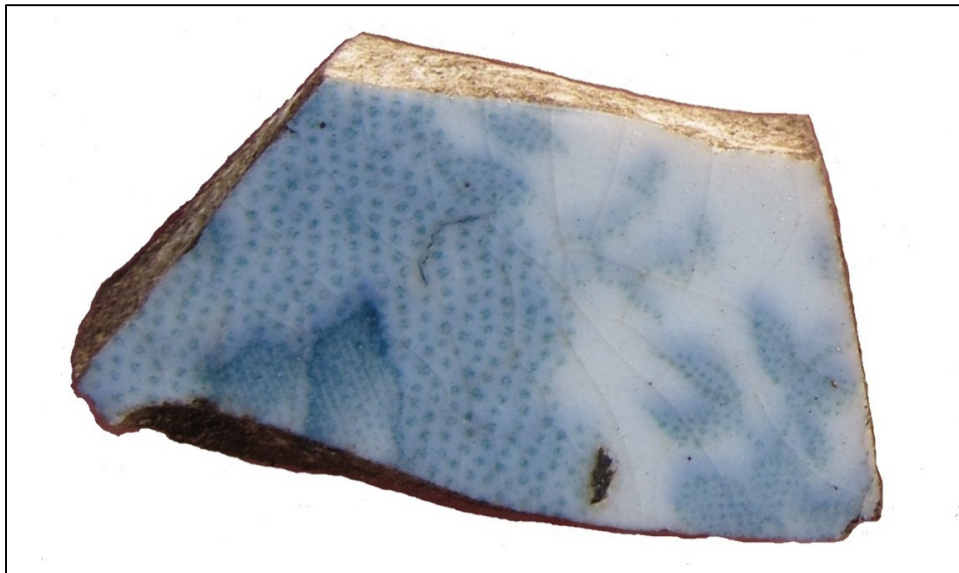
nearby consisting of refined white earthenware fragments with a cobalt-blue transfer of a plant (likely *Clematis*) motif (Plate 4.2-10).



Plate 4.2-8. View of Homestead 2 (AJ14-10-22-H1) looking northwest.



Plate 4.2-9. View of Homestead 3 looking east.



*Plate 4.2-10. A small piece of ceramic tableware identified at Homestead 3.*

#### 4.2.2.15 Homestead 4 (AJ14-08-23-H1)

Homestead 4 (AJ14-08-23-H1) consists of two log structures and one historic ground disturbance (also discussed in Section 4.4.3) located in the southwest corner of the TSF. Structure M20-HF1 is a log building with a collapsed roof measuring approximately 5 m by 4 m with a low table or bench visible inside and a low entry on the west wall (Plate 4.2-11). It is thought to be a shed or outbuilding. The other structure, M20-HF2, is larger measuring 7 m by 5 m and has no roof or entry and nothing inside (Plate 4.2-12). There is an approximate 6 m extension of logs laid out to the east. The historic ground disturbance to the northwest may have been an associated root cellar (Plate 4.2-13).



*Plate 4.2-11. View south of structure M20-HF1 with collapsed roof.*



Plate 4.2-12. View west of structure M20-HF2 with extension of logs in foreground.



Plate 4.2-13. View east of historic ground disturbance with log building M20-HF2 in the background.

#### 4.2.2.16 Homestead 5 (AJ14-09-10-H1)

Homestead 5 is located to the south of the TSF along Goose Lake Road. While there is no building currently at this site, historic ground disturbances and a ceramic insulator hanging in a tree indicate

that a building with electricity had previously been located here (Plate 4.2-14). This building is also depicted on the 1951 Canada Department of Mine & Technology survey map of the Kamloops area.



*Plate 4.2-14. An insulator located in a tree above the location of Homestead 5.*

### **4.3 PETROFORMS**

Petroforms within the RSA include stone features created when people move and organize rocks in a purposeful manner. These features may be associated with mineral exploration, farming and ranching activity, or Aboriginal land use.

#### **4.3.1 Petroforms within the RSA**

The SSN have indicated that some of the rock piles identified during archaeological impact assessments within the RSA may mark prehistoric or historic burial locations. ERM is aware of two locations to the north of the LSA at which the SSN have undertaken GPR studies in an attempt to verify this assertion. To date the SSN has not provided KAM or ERM with the results of the geophysical investigations. The first GPR location is a series of 35 rock piles located just over the crest of a south sloping hill (Plate 4.3-1). The other location is a single rock pile located to the west of a small lake. Field inspection by ERM archaeologists indicate that some of these rock piles are likely associated with historic fence lines as they included the remains of old fence posts and had metal wire running through them.

#### **4.3.2 Designated Petroforms within the LSA**

A potential prehistoric hunting blind complex at archaeological site EdRc-25 is located within the LSA. This site is protected under the HCA and has been identified as culturally significant by the SSN.



Plate 4.3-1. One of thirty-five rock piles located on a south sloping hill.

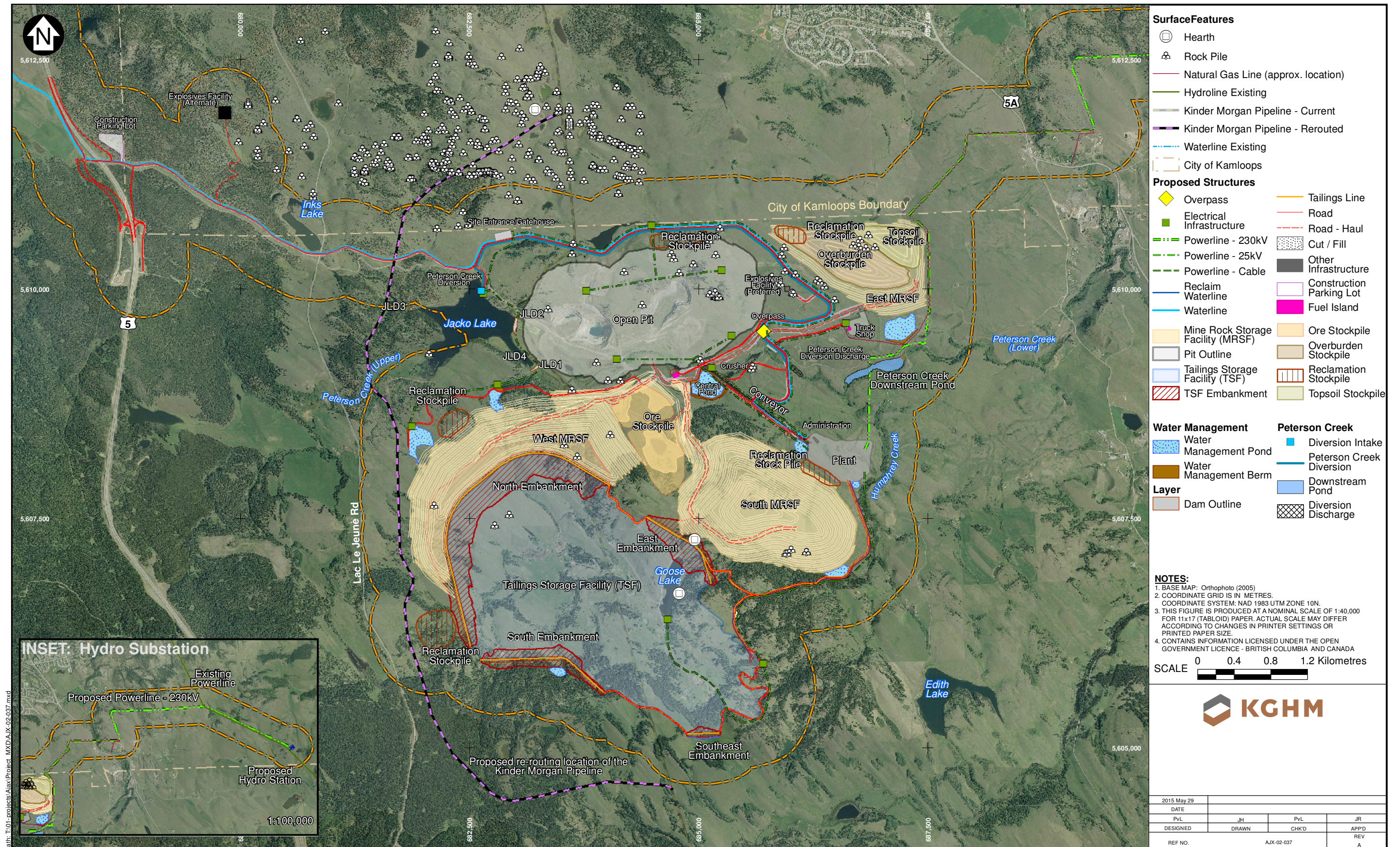
#### 4.3.2.1 Hunting Blind Complex (Archaeological Site EdRc-25)

Archaeological site EdRc-25 was recorded as three semicircular petroforms of unconfirmed antiquity and function (Plate 4.3-2). No prehistoric cultural material was identified at the site during shovel testing (Morin 2014). The site is located 170 m to east of the existing open pit, and is in an area that has seen extensive exploration activity over the past 100 years. The *SSN Cultural Heritage Study* identifies the three petroforms located at EdRc-25 as blinds associated with the communal hunting of elk, caribou, or deer. The SSN states that hunting blind sites are in their experience rare within their territory, although they have been found in other regions of BC (Ignace et al. 2014). For additional information see the *Ajax Project: Archaeological Baseline Report* (ERM 2015a).

#### 4.3.3 Undesignated Petroforms within the LSA

As rock piles to the north of the LSA have been identified by the SSN as having potential cultural significance those within the LSA are summarized below (Table 4.3-1, Figure 4.3-1, Plate 4.3-3). Within the LSA there are currently 92 identified rock piles and 64 of these are located in, or within 50 m of, Project developments. The majority of the rock piles were recorded in 2009 and interpreted as historic features associated with ranching and farming activities (Morin 2014). Some of the rock piles may be related to early homesteading activities required under the Dominion Homestead regulations that detailed the improvements necessary for receiving title to the quarter section. These included building a habitable house, 30 acres needed to be broken and at least 20 acres cropped, and the whole area fenced. At this time none of the rock piles within the LSA are recorded as archaeological sites.

**Figure 4.3-1**  
**Petroforms within the Ajax Project Area**





*Plate 4.3-2. One of the petroforms at site EdRc-25.*



*Plate 4.3-3. A rock pile located to the south of South MRSE.*

**Table 4.3-1. Historic Rock Piles within 500 m of Project Developments**

Development Component	Number of Rock Piles
Open Pit	25
TSF and WMRSF	6
SMRSF	5
EMRSF and associated Overburden and Topsoil Stockpiles	10
Reclamation Stockpile to the north of the Open pit	3
Roads and Utility Corridors	15
Within the LSA but outside current development components	28

#### 4.4 OTHER HERITAGE FEATURES IDENTIFIED

Other features associated with historic use of the LSA include traps for small game, historic ground disturbances, and a corral (Figure 4.4-1).

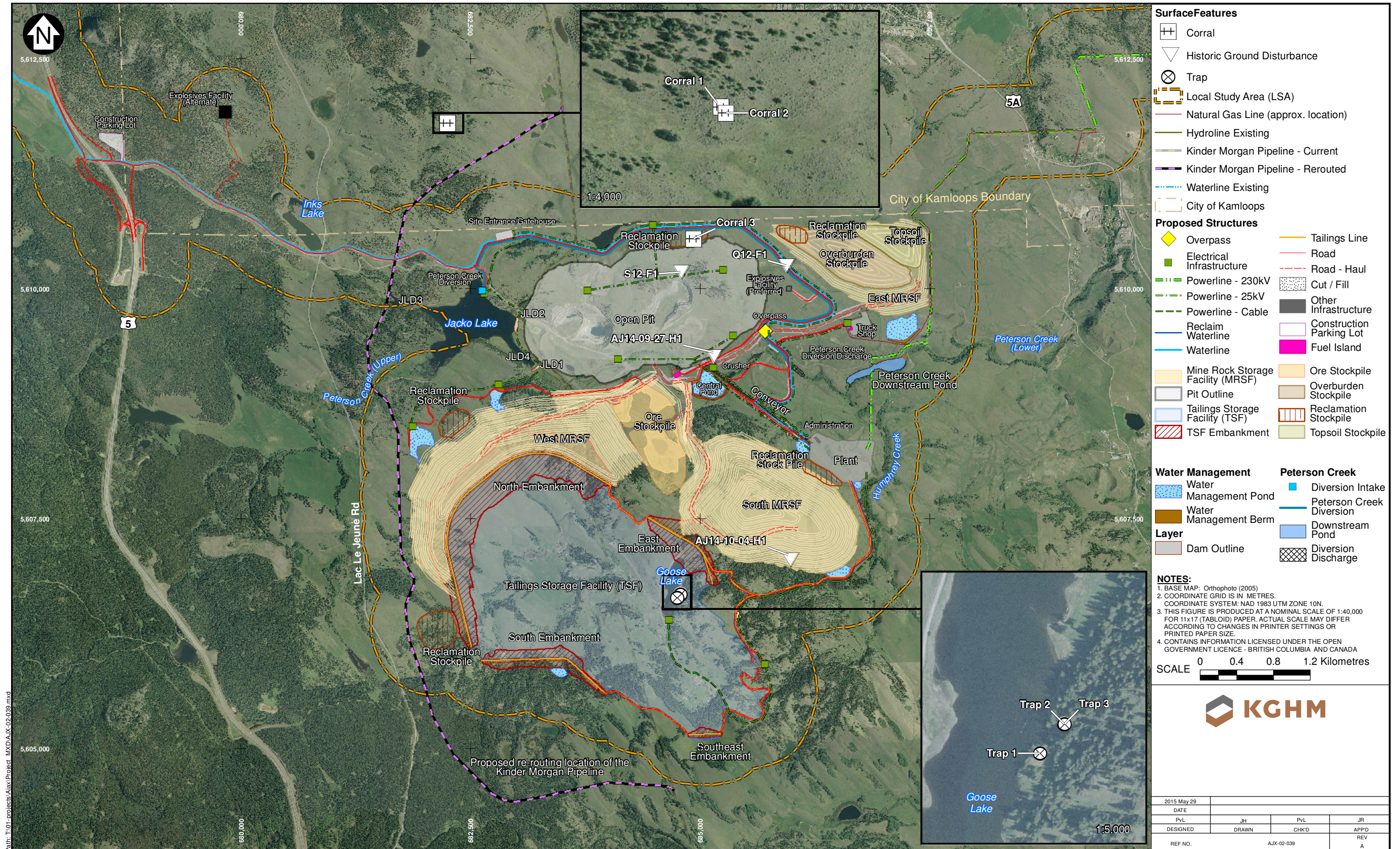
##### 4.4.1 Traps

Three wood animal traps were located to the east of Goose Lake within the TSF. The traps, located at the bases of trees were constructed of milled wood and wire nails and are not designated under the HCA (Plate 4.4-1). A hearth was associated with two of the traps.



*Plate 4.4-1. A wooden trap located at the base of a tree to the east of Goose Lake.*

**Figure 4.4-1**  
**Traps, Historic Ground Disturbances, and Corrals within the Ajax LSA**



#### 4.4.2 Historic Ground Disturbances

There are four historic ground disturbances within the Ajax Project area. None of these historic ground disturbances are currently designated under the HCA. Three of the ground disturbances are located in the Open Pit area and are associated with previous mining activity. One historic ground disturbance is located within the South MRSF and is associated with early homesteading.

##### 4.4.2.1 Historic Ground Disturbance AJ14-09-27-H1

The historic ground disturbance AJ14-09-27-H1 consists of a historic mineral exploration trench with a small rock wall. It is located approximately 10 m south of the proposed Open Pit and approximately 10 m north of a proposed access road (Plate 4.4-2). The site extends 5 m north-south and 6 m east-west.



Plate 4.4-2. View of historic ground disturbance AJ14-09-27-H1 and the surrounding area, looking east.

##### 4.4.2.2 Historic Ground Disturbance AJ14-10-04-H1

Historic ground disturbance AJ14-10-04-H1 is located within the South MRSF. The ground disturbance is 2 m (north-south) by 2 m (east-west). The site consists of two historic ground disturbances cut into the wall of a gully. Based on the presence of milled lumber in the ground disturbances the site is likely the remains of two historic root cellars (Plate 4.4-3).

##### 4.4.2.3 Historic Ground Disturbance Q12-F1

Historic ground disturbance Q12-F1 is located within the proposed Open Pit and 50 m to the north of an existing open pit. The ground disturbance was identified as being related to previous mining activity in the area (Morin 2014).



*Plate 4.4-3. View of the historic ground disturbance at AJ14-10-04-H1.*

#### **4.4.2.4**      *Historic Ground Disturbance S12-F1*

Historic ground disturbance S12-F1 is located to the east of the proposed Open Pit and within a proposed access road ROW. The ground disturbance was identified as being related to previous mining activity in the area (Morin 2014).

#### **4.4.3**      **Corral**

A corral was identified by Terra within the Reclamation Stockpile to the north of the Open Pit (Morin 2014).

## 5. CONCLUSIONS

The results of the heritage baseline study indicate that there are 22 historic era built heritage sites designated under the *Local Government Act* (1996) or the *Heritage Conservation Act* (1996) within the RSA. Only one of these, the St. Peter's Church and Cemetery Site (EdRc-61) is located within the LSA. Also within the LSA there is one petroform site, the hunting blind complex, identified as having cultural significance by the SSN. This site is already protected as archaeological site EdRc-25.

During the field programs undertaken for the Ajax Project fourteen historic built heritage sites were located within the LSA. Interviews and site visits were carried out with local landowners George Little and Brian Ciancone to provide additional information on some of these features. While these sites are currently not designated under the HCA or *Local Government Act*, they relate to early homesteading and settlement within the region and can be tied to local family histories.

The SSN are concerned that rock piles within the RSA, to the north of the LSA, may have been used to cover and protect burials. As rock piles to the north of the LSA are of concern to the SSN, the 92 rock piles identified within the LSA have been mapped in relation to Project developments. There are currently 64 rock piles located in, or within 50 m of, Project developments.

Jacko Lake has been identified as an important area for traditional and current practices of the Secwepmec people. Ignace et al. (2014) notes that Jacko Lake was fished for trout and the area was used to harvest roots and to hunt deer and elk. Jacko Lake can be ice-free by the middle of April and could have provided access to fresh fish before seasonal salmon runs. A travel route also passed by the Jacko Lake area; the route, documented by Dawson in 1891 and used by the HBC brigades, ran from Kamloops south to Knutsford, past Jacko Lake, and on past Stump and Nicola lakes (see also Section 2.4). While Ignace et al. (2014) describes the Jacko Lake area as having been used for a number of resource procurement activities in the past, this use was limited following land exemptions.

This is confirmed by the six archaeological sites that have been located near the shore of Jacko Lake and at one of the sites an Early Nesikep projectile point was found indicating use of this area extends back approximately 7,000 years Before Present (B.P.). Historically, however, the water level in Jacko Lake has fluctuated; most recently, the current lake level was raised several metres by a dam at the outlet to Peterson Creek.

Peterson Creek, the outflow of Jacko Lake, originally named Jacko Creek on early maps, was fished by scoop-net at its outflow for trout during seasonal spawning. Areas along the Peterson Creek drainage were also used to hunt deer and elk (Ignace et al. 2014). There are currently 14 archaeological sites recorded along the stretch of Peterson Creek between the dam at Jacko Lake and Knutsford Hill (a distance of approximately 6 km). All of the sites are small and likely represent camp sites or hunting locations along the creek.

Other features related to historic era land use within the LSA include three wooden traps, four historic ground disturbances, and one corral. The historic Brigade and Nicola trails also cross the LSA, however no physical evidence was located during the field survey.

## 6. CLOSING

This report was prepared by ERM on behalf of KGHM Ajax Mining Inc. Any use, reliance, or decisions made by third parties based on this report are the sole responsibilities of such third parties.

This Heritage Baseline was not designed to address issues of traditional Aboriginal use and does not constitute a traditional use study. This report was written without prejudice to issues of Aboriginal rights and/or title.

We trust that the information contained in this report is sufficient for your present needs.

Sincerely,

ORIGINAL SIGNED



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