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1.0 INTRODUCTION AND OVERVIEW

1.1 Proponent Information

First Mining Gold Corp. (FMG) proposes to develop, operate and eventually decommission and close an open pit gold and silver mine and ore process plant with supporting infrastructure located in northwestern Ontario known as the Springpole Gold Project (Project). The Project also has important critical mineral potential, hosting considerable tellurium which will be further evaluated during life of mine.

Name of Proponent	First Mining Gold Corp.
Proponent Address	Suite 2070, 1188 West Georgia Street Vancouver, British Columbia Canada V6E 4A2
Telephone	1-844-306-8827
Website	www.firstmininggold.com
Officer	Daniel W. Wilton Chief Executive Officer and Director
Primary Contact	Stephen Lines Vice President, Sustainability steve@firstmininggold.com

FMG is a publicly traded Canadian gold exploration and development company created in 2015. FMG is publicly listed on the Toronto Stock Exchange under the trading symbol FF, in the United States on the OTC-QX under the trading symbol FFMGF and on the Frankfurt Stock Exchange under the symbol FMG.

FMG has in place a corporate governance structure that is responsive to Canadian regulatory requirements. The primary duty and responsibility of the Board of Directors is to oversee the management of the business and affairs of FMG, with a view to both the short-term and the long-term success of the company. In supervising the conduct of the business, the Board and management set the standards of conduct for the company through established policies. The policies are based on FMG's values, which include the following:

- We are driven by integrity, transparency and respect.
- We continue to build relationships and partnerships for future success.
- We work responsibly to achieve safe and sustainable operations at our projects.
- We embrace challenges and continuously strive for optimal solutions.
- We value the strength of our talented and diverse team.
- We respect our shareholders' investment—in our projects, in our people and in our communities.

FMG strives to create a lasting positive legacy through opportunities to strengthen community well-being, infrastructure and businesses in the region of the Project. The company has published policies that guide the actions of management and employees, including:

Environmental Policy: FMG believes that environmental protection is a prerequisite for proper mine planning and development. Accordingly, environmental stewardship is an integral part of all aspects of our work when planning our projects and operating our sites. We believe that a healthy environment provides for healthy communities, which are fundamental for present and future generations. We are committed to developing high standards of environmental care with respect to water, air, wildlife, vegetation and aquatic life.

Indigenous Peoples Policy: FMG acknowledges the unique relationship that Indigenous Peoples hold within their traditional territories and the rights associated with those lands and resources. We appreciate the importance of environmental protection within these traditional territories and place this as a central focus in our project planning. FMG believes that through meaningful consultation and collaboration, in the spirit of reconciliation, our projects can be developed to support the respective vision and development goals that Indigenous communities may have for themselves.

Stakeholder Relations Policy: FMG appreciates that our projects involve many stakeholders including municipalities and residents, area service providers, land users, surface rights holders and businesses. In developing our projects, we strive to provide benefits locally and regionally and minimize adverse effects.

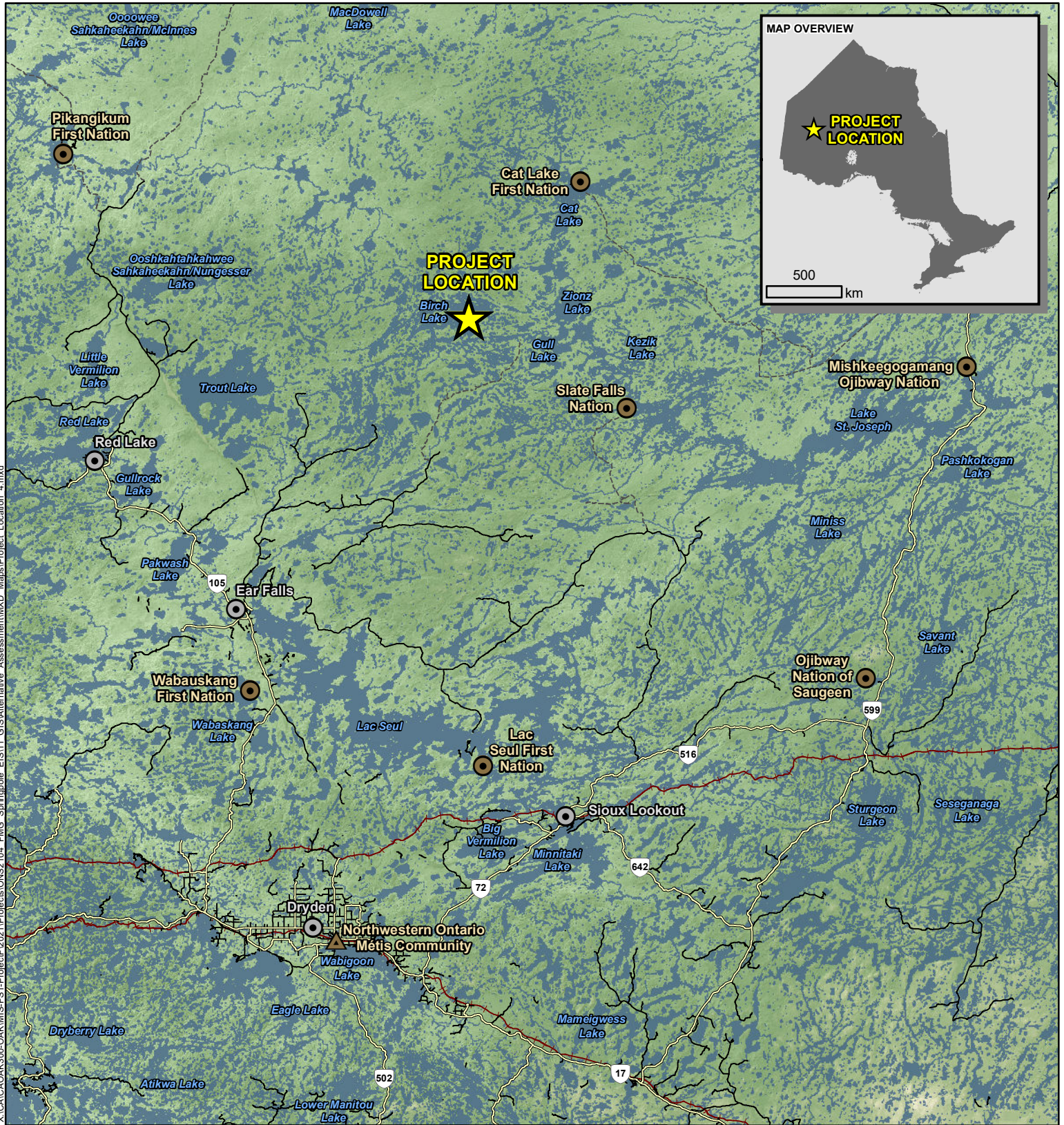
1.2 Project Location

The Project is located in a remote area of northwestern Ontario. The Project site lies approximately 110 kilometres (km) northeast of the Municipality of Red Lake. The Town of Ear Falls is 105 km to the southwest, and the Municipality of Sioux Lookout is situated approximately 150 km southeast of the Project site as shown in Figure 1.2-1.

Key coordinates (Universal Transverse Mercator) are as follows:

- **Main Project site:** 549,183 Easting (E), 5,693,578 Northing (N);
- **Endpoints of the mine access road:** 568,9216 E, 565,839 N to 569,4468 E, 550,950 N; and
- **Endpoints of the transmission line:** 564,7347 E, 607,343 N to 569,4630 E, 550,948 N (all NAD83, Zone 15U).

There is currently no permanent all-season land access to the Project site. The closest all-season forestry access road to the site is Wenasaga Road to the south, extending to within 18 km of the Project. The Project site is accessible by floatplane to Springpole Lake or Birch Lake during the late spring, summer and early fall. Following safety concerns with the Birch Lake ice road, establishment of a temporary overland winter access road was initiated in late 2023 from the northern end of the Wenasaga Road to the exploration camp to facilitate camp re-supply; however, the construction process was not completed. During lake ice freeze-up in the fall and breakup in spring, the site is accessible only by helicopter.



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LEGEND

- Project Location
- Town
- First Nation Reserve
- Northwestern Ontario Métis Community
- Highway
- Secondary Road
- Resource / Winter Road
- Railway

NOTES:
- Topographic information extracted from LIO, MNRF.



SPRINGPOLE GOLD PROJECT

Project Location

Datum: NAD83
Projection: UTM Zone 18N



PROJECT N°: ONS2104

FIGURE: 1.2-1

SCALE: 1:1,500,000

DATE: September 2024



1.3 Purpose of the Project and Project Justification

The purpose of the Project is to extract ore by open pit mining for processing on site to produce doré bars to meet global demands for gold and silver, and to provide a return on investment while supporting local employment and prosperity of the regional economy, including Indigenous economies. Doré bars are semi-pure products of gold and silver that will be transported off site and can be further purified for eventual use.

Critical minerals are essential resources that play a crucial role in various industries, including technology, manufacturing, defense, and especially renewable energy towards national and global decarbonization. Increase in current demand and forecasts are driving initiatives such as Ontario's Critical Mineral Strategy (MNR 2022); however, the deposit also contains critical minerals such as tellurium and fluorspar. Of the 31 critical minerals listed, tellurium, zinc, fluorspar and lithium occur in various quantities in and around the Project site.

Tellurium holds critical importance across multiple high-tech sectors, particularly within electronics, renewable energy and catalysis. As a pivotal mineral in the transition toward clean energy, approximately 40% of its current production is dedicated to the manufacture of photovoltaic cells. Additionally, roughly 30% is used in thermoelectric production, highlighting its essential role in energy efficient technologies.

Of note, while silver is not currently listed as a critical mineral by the Canadian government, it was designated by the French government in 2021 and is the most conductive element on earth, widely sought for industrial and green energy applications. Silver meets all the criteria listed by the Canadian government for a mineral to be listed, including its importance in the green economy along with the supply issues it faces domestically and globally. With over 24 million ounces of silver, the Springpole Project would be the most significant silver producer in Ontario and secure a domestic supply for over 10 years when industrial silver demand is projected to continue to rise with electric vehicle manufacturing and other green energy applications.

Gold and silver are required for many applications including for use as a monetary exchange medium; for art, jewelry and tableware; for electronic devices such as computers, cellular phones and televisions; and for medical equipment and devices and specialized medical treatments. The strong global demand for gold and silver cannot be fully met by recycling of metals already produced, resulting in a need for additional mining and processing of ore containing these metals. On the basis of this opportunity, a pre-feasibility study of the Springpole Gold Project was undertaken for FMG, and the results were presented in accordance with NI 43-101 (AGP 2021). The pre-feasibility study concluded that the Project could be feasibly developed as a phased open pit operation.

During the approximately 17.5 years from construction through active closure, the Project will increase gross domestic product by \$7.6 billion through direct, indirect and induced effects. This is equivalent to an average of just over \$430 million per year. The Project will also create 43,880 person-years of employment (including direct, indirect and induced effects) in Canada during construction, operations and active closure. The following is a summary of the primary economic benefits of the Project by phase, as detailed in Appendix Q-2.

During the construction phase:

- Creation of 3,240 full-time equivalent positions annually through direct, indirect and induced employment;
- Increase in employment (direct, indirect and induced) will create \$190 million in labour income annually; and



- Annually, the Project will generate \$37 million of revenue for the federal government, \$42 million for the provincial government and \$12 million locally.

During the operations phase:

- Creation of 3,540 full-time equivalent positions annually through direct, indirect and induced employment;
- Increase in employment (direct, indirect and induced) will create \$241 million in labour income annually; and
- Annually, the Project will generate \$85 million of revenue for the federal government, \$98 million for the provincial government and \$26 million locally.

During the decommissioning and closure phase:

- Annual employment (direct, indirect and induced) is 70 full-time equivalent positions, with total annual labour compensation of approximately \$4 million;
- Total closure expenditure is estimated at approximately \$45 million; and
- Ontario gross domestic product is directly increased by \$3 million each year.

Development of the Project will increase local and regional revenue, as well as business opportunities from which investments can be made in health and social services, community infrastructure, business development, training and employment. The Project will also increase the labour force capacity after operations cease to support future opportunities in the region and will result in the following infrastructure enhancements, which could be beneficial to the region, including potentially after the Project closes if they are retained:

- Extension of the Wenasaga Road closer to the Cat Lake First Nation Reserve lands; and
- Establishment of a new transmission line, sections of which goes through the Slate Falls Nation, which reinforces their connection to the electrical grid and has the potential to provide business opportunities and other long-term regional renewable energy initiatives for Indigenous communities.

Additional potential benefits of the Project include the following:

- Offers opportunities to local communities of Ear Falls and Sioux Lookout as potential key service points for the Project;
- Leverages and solidifies the existing forestry road infrastructure and secures its longer term use supporting access for local communities;
- Establishes a 230 kilovolt (kV) transmission line with a life span far greater than the life of mine that can support other long-term regional renewable energy generation initiatives;
- Provides the impetus for the development and implementation of training initiatives to facilitate employment growth in the region and the acquisition of transferable skills for generations to come;
- Diversifies the local economy, which is currently heavily reliant on forestry and government;
- Continues to support local initiatives currently in place including the Sioux Lookout Mining Centre for Excellence;
- Supports and sponsors community-based land use, social and recreational activities to facilitate improvements in overall health and well-being of local communities; and
- Provides environmental data (collected from environmental baseline investigations, as well as from future environmental monitoring efforts) that will contribute significantly to the understanding of the local and regional area across many environmental disciplines, including Species at Risk, such

as Caribou (Boreal population) and Wolverine, and potential reintroduction of Lake Sturgeon to local waters.

1.4 Project Overview

The general arrangement and mine site plan for the Project includes an open pit mine, onsite ore process plant, co-disposal facility (CDF) for tailings and mine rock, accommodations building, and related buildings and infrastructure, as well as aggregate operations, airstrip, a mine access road and transmission line. The designs presented in this Environmental Impact Statement / Environmental Assessment (EIS/EA) may be further optimized through more detailed engineering studies, regulatory guidance and feedback from ongoing consultation and engagement activities through the post-final EIS/EA submission review process.

The open pit is planned to be mined over approximately 10 years with concurrent stockpile processing, resulting in an operational Project life of approximately 10 years. Two dikes will be established to isolate the open pit basin from the remainder of the north basin of Springpole Lake. Dikes are essential for the safe and controlled dewatering of the mining area, and have been successfully implemented in a manner that protects the environment at several other northern mining projects in Canada including the Diavik Mine and Gahcho Kue Mine in the Northwest Territories and the Meadowbank Mine in Nunavut. Controlled dewatering of the mining area will be completed in accordance with all regulatory requirements, including for the water taking and removal or transfer of fish, which is planned to be done with community participation. To access the ore, mine rock will need to be removed. This rock will be stored in a secure and stable manner at the CDF near the open pit if it is not re-used as a construction material.

Ore from the open pit will be processed in an onsite process plant at approximately 30,000 tonnes per day (tpd) based on an anticipated annual average throughput. Tailings resulting from the processing of ore will be stored in the CDF, which will have a north cell for thickened non-acid generating tailings and mine rock and a smaller south cell for conventional slurry tailings deposition. A high proportion of the ore process plant water requirement will be recycled from the central water storage pond, and augmented by open pit water inflows, as well as runoff collected from the site. Excess site water will be treated to applicable federal and provincial effluent discharge requirements protective of receiving water and aquatic life and will be discharged to the southeast arm of Springpole Lake.

Mining operations will be supported by other onsite buildings, including a maintenance garage, warehouses, laydown areas, administration buildings, and an explosives storage and manufacturing facility. An onsite accommodations complex will be established to accommodate approximately 350 people during operations (and approximately 650 during construction), along with appropriate related infrastructure. Solid and liquid wastes will be collected and managed in accordance with regulatory requirements. Non-hazardous wastes will be transported off site to existing facilities such as in Ear Falls or Sioux Lookout for disposal. Hazardous waste will be transferred off site to licensed facilities capable of recycling and managing the materials.

Fish habitat offsetting will be required for waterbodies that will be affected and is an important part of the Project (see Appendix F for more details on the Fish Habitat Offsetting and Compensation Plan). Similarly, compensatory measures and an overall benefit permit will be required for any Species at Risk and their habitats such as Caribou (Boreal population). The specific measures towards achieving an overall benefit are outlined in Section 6.13.

A two-lane access road is required that will extend approximately 18 km from the mine site to the existing end of the Wenasaga Road. Aggregate deposits have been identified to support development of the road, as well as construction and maintenance activities. A portion of the road will concurrently support an approximately 1,000 m long airstrip to support up to two flights per week for the Project.

Power is required from existing or additional diesel-fired generators on site until the transmission line can be constructed to connect the site to the regional electrical grid.

The key components of the Project as shown in Figure 1.4-1 and Figure 1.4-2 include:

- Open pit and related infrastructure;
- Dikes (west dike and east dike);
- CDF for mine rock and tailings;
- Surficial soil stockpile;
- Ore stockpiles;
- Process plant and process plant complex;
- Site infrastructure;
- Water management and treatment facilities;
- Fish habitat development area;
- Accommodations complex;
- Aggregate operation(s);
- Transmission line; and
- Mine access road and co-located airstrip.

The overall Project development schedule consists of the following main phases:

- **Construction Phase:** Years -3 to -1 including the installation of infrastructure and preparation for open pit mining;
- **Operations Phase:** Years 1 to 10 with the first year potentially representing a partial year as the Project transitions from construction into operations; and
- **Decommissioning and Closure Phase:** Years 11 to 15 corresponding to the period when primary decommissioning and reclamation activities are carried out, to be followed by a period of post-closure environmental monitoring (Year 16+).

Construction will begin once the EA process is complete / approved, the necessary initial environmental approvals are received and a corporate decision is made to proceed.

The timeframe to complete the required site preparation and construction of the surface infrastructure to start open pit mining activities is two to three years. The primary construction phase activities will include:

- Mine access road and airstrip construction;
- Site preparation activities including clearing, grubbing and bulk earthworks;
- Aggregate resource development and operation;
- Onsite haul road construction;
- Initiation of compensatory fish habitat measures;
- Dike construction;
- Open pit preparation, including controlled dewatering of the open pit basin and stripping of lake bed sediments and overburden and excavation of mine rock at the open pit;
- Construction of buildings and onsite infrastructure;
- Construction of a transmission line connecting the site to the regional electrical grid;

- Preparation of the CDF;
- Establishment and operation of water and waste, management and treatment facilities; and
- Environmental protection and monitoring activities.

The operations phase is anticipated to last approximately 10 years, and will include the following primary activities along with other related activities:

- Development and ongoing mining in the open pit;
- Processing of ore in the process plant;
- Management of mine rock, ore, overburden and tailings in designated engineered facilities;
- Operation of water and waste management and treatment facilities;
- Environmental monitoring to confirm regulatory requirements are met;
- Follow-up environmental studies; and
- Progressive reclamation activities.

Decommissioning of the Project will be completed in accordance with Ontario Regulation 35/24 Rehabilitation of Lands. The decommissioning and closure phase will include the following activities if not completed progressively during operations as appropriate:

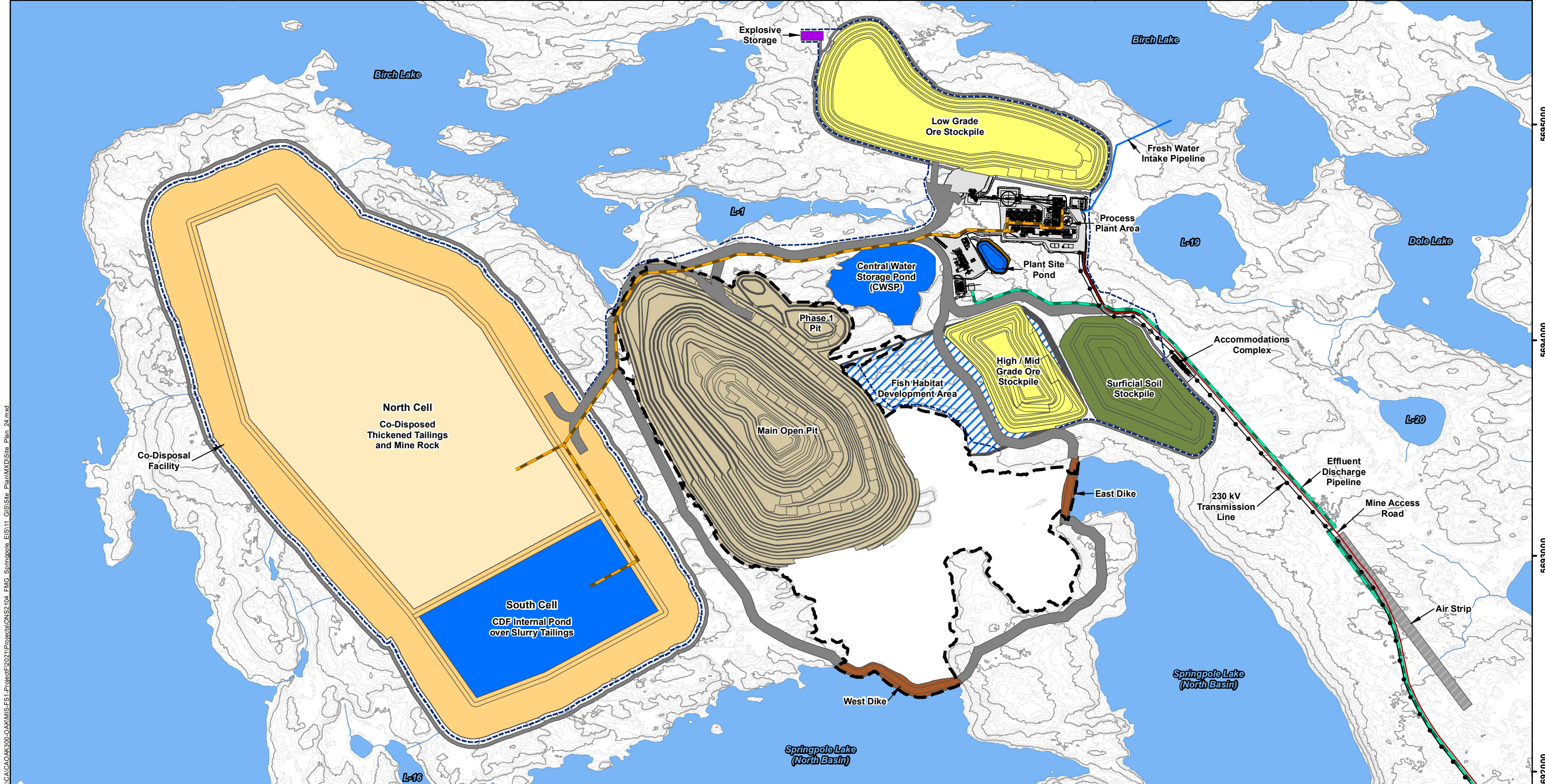
- Removal of assets that can be reasonably salvaged for re-sale or re-use;
- Demolition and recycling and/or disposal of remaining materials;
- Removal and disposal of demolition-related wastes in approved facilities;
- Reclamation of affected areas, such as by regrading, placement of an appropriate cover to facilitate revegetation if needed, and revegetation (active or passive);
- Open pit will be allowed to fill with water after mining ceases, with enhanced filling; and
- After all regulatory requirements are met, including as demonstrated through monitoring results, reconnect the reclaimed basin and fish habitat development area to Springpole Lake.

Long-term sustainable power generation opportunities will continue to be advanced during life of mine for incorporation into future mine closure planning, including potential solar, wind and biofuel projects. These opportunities will aim to leverage the transmission line infrastructure in place for the mine towards long-term renewable energy generation.

An extensive baseline dataset has been compiled for the Project area. Monitoring will continue through the life of the mine followed by close out monitoring to confirm:

- Physical stability;
- Chemical stability; and
- Biological rehabilitation.

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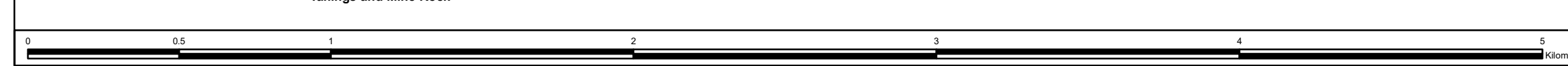
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|-------------------------------|--|--------------------|------------------------------------|-------------------------------|
| Watercourse | Proposed Mine Features | Process Plant Area | Mine Access Road | Fish Habitat Development Area |
| Waterbody | Open Pit | Dike | Seepage / Runoff Collection System | |
| Major Contours (5 m interval) | Open Pit Basin | Pond | 230 kV Transmission Line | |
| Minor Contours (1 m interval) | Ore Stockpile | Haul / Access Road | Fresh Water Intake Pipeline | |
| | Surficial Soil Stockpile | Explosives Storage | Effluent Discharge Pipeline | |
| | Co-Disposal Facility | Air Strip | Tailings Pipeline Corridor | |
| | Co-Disposed Thickened Tailings and Mine Rock | | | |

NOTES:
 - Contours extracted from 2020 LiDAR survey.
 - Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1. 26 June 2023 and modified by WSP July 2023.
 - 230 kV transmission line provided by First Mining Gold, April 2024.



SPRINGPOLE GOLD PROJECT

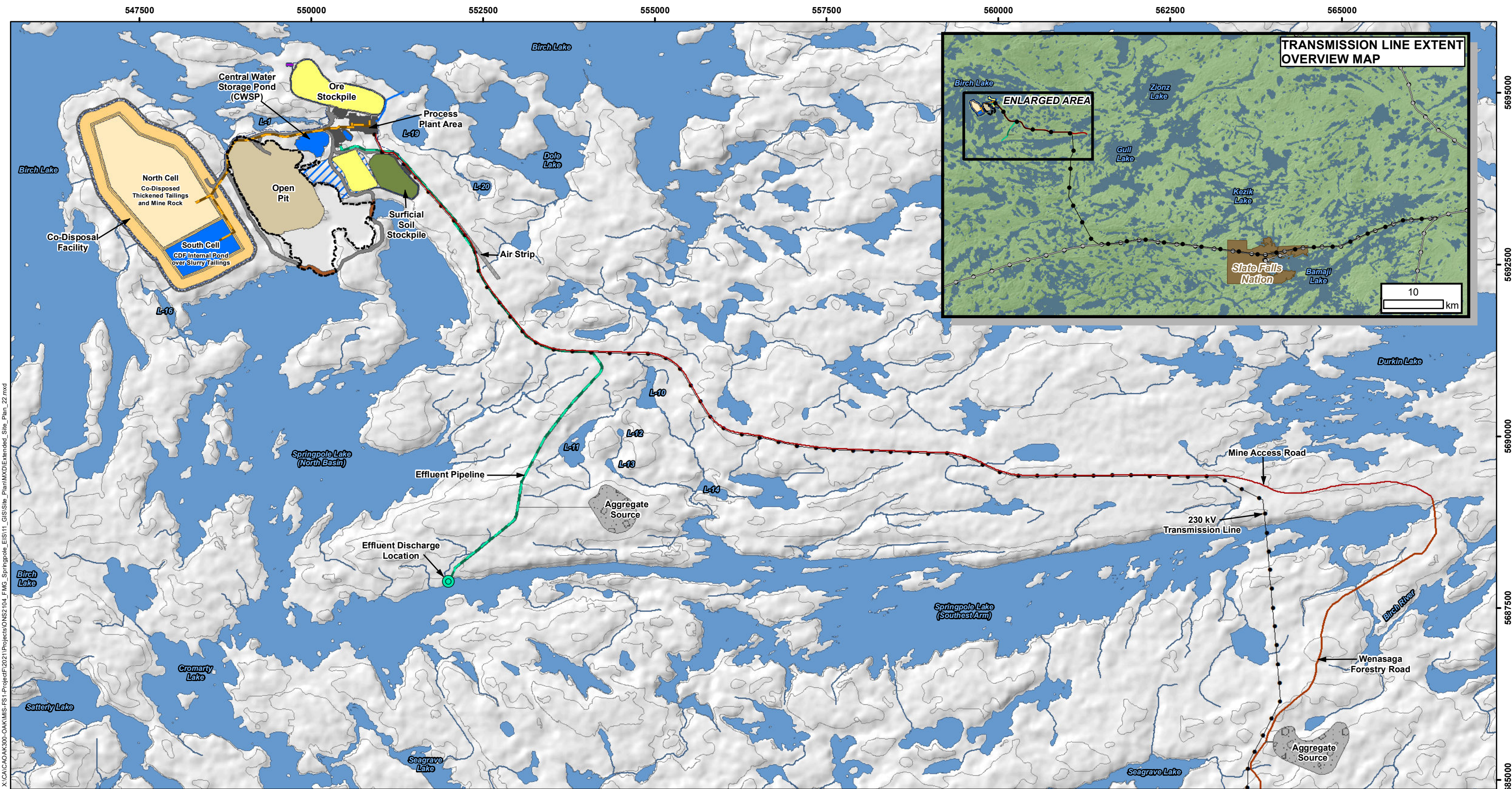
EIS / EA Site Plan



Datum: NAD83
 Projection: UTM Zone 15N

PROJECT N°: ONS2104 **FIGURE: 1.4-1**
 SCALE: 1:17,000 DATE: April 2024

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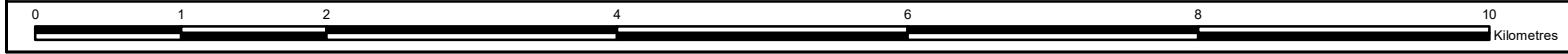
LEGEND

Aggregate Source	Proposed Mine Feature	Process Plant Area	Mine Access Road	Fish Habitat Development Area
Existing Road	Open Pit	Dike	Seepage / Runoff Collection System	Effluent Discharge Location
Watercourse	Open Pit Basin	Pond	Fresh Water Intake Pipeline	
Waterbody	Ore Stockpile	Haul / Access Road	Tailings Pipeline Corridor	
Existing Transmission Line	Surficial Soil Stockpile	Explosives Storage	Effluent Discharge Pipeline	
Contour (10 m intervals)	Co-Disposal Facility	Air Strip		
	Co-Disposed Thickened Tailings and Mine Rock			

NOTES:
 - Topographic information extracted from LIO, MNRF.
 - Proposed site plan provided by Ausenco, drawing number 104496-GX-03000-31344-003, Rev 1, 26 June 2023 and modified by WSP July 2023.
 - 230 kV transmission line provided by First Mining Gold, April 2024.

Datum: NAD83
 Projection: UTM Zone 15N

SPRINGPOLE GOLD PROJECT	
EIS / EA Extended Site Plan	
PROJECT N°: ONS2104	FIGURE: 1.4-2
SCALE: 1:52,000	DATE: April 2024



1.5 Project Setting

The region is underlain by glaciated terrain characteristic of a large part of the Canadian Shield. Land areas are generally of low relief with less than 30 metres (m) of local elevation, with numerous lakes and watercourses. The Project site is centred between Springpole Lake and Birch Lake, which are part of the Albany River system, which eventually flows northward into Hudson Bay (except for a portion of the flow which is diverted to the Nelson River watershed to the west under the Manitoba - Ontario Lake St. Joseph Diversion Agreement). Tree cover generally consists of mature spruce, balsam, birch and poplar, with black spruce and muskeg swamps occupying low-lying areas.

The site has been subject to mineral exploration intermittently since the 1920s and more recently dating back to 2009. FMG acquired 100% of the Project in 2015 when it completed the acquisition of Gold Canyon Resources Inc. The land tenure for the site and surrounding area consists of patented mining claims, unpatented mining claims, and leased unpatented mining claims. FMG has submitted a Notice of Intent to Lease to the Province to convert some of its mining claims to leases.

There are no nearby permanent residences, with only a small number of seasonal cabins present on Birch Lake and Springpole Lake. The region hosts remote cabins and seasonal camps. There are no dedicated protected areas, conservation reserves or parks within 20 km of the Project site. The closest federal lands to the mine site are associated with Cat Lake First Nation and Slate Falls Nation Reserve lands located approximately 45 km to the northeast and south, respectively.

1.6 Project Planning and Management Strategies

The environmental assessment (EA) process is a planning tool to ensure the Project is considered in a careful and precautionary manner that avoids or mitigates potential environmental effects and considers the benefits and opportunities from the Project. A key part of the EA planning process initiated by FMG is the early and transparent sharing of Project information at key milestones occurring since 2018. With the publishing of a comprehensive draft EIS/EA in May 2022, over two years have been allocated to providing meaningful consultation opportunities on all aspects of the Project for Indigenous communities, regulators and other interested parties.

Consultation opportunities have facilitated the ability of all parties to participate in the planning process by sharing their comments, questions and feedback on the Project. During the 28-month long draft EIS/EA consultation process leading up to the submission of the final EIS/EA, FMG responded to technical and Indigenous/public comments from provincial and federal regulators (i.e., Environment and Climate Change Canada; Impact Assessment Agency of Canada [IAAC]; the Ministry of the Environment, Conservation and Parks [MECP]; the Ministry of Mines; the Ministry of Northern Development and Mines; the Ministry of Tourism Culture and Sport; and the Ministry of Natural Resources), Indigenous communities (i.e., Mishkeegogamang Ojibway Nation and Slate Falls Nation, Métis Nation of Ontario) and the local public. In response to comments, FMG invested over 100,000 person hours in supplemental studies and analysis for the final EIS/EA. Feedback on the draft EIS/EA has helped refine and optimize the Project design, field studies, effects assessment methods and mitigation measures, all of which have been incorporated in the final EIS/EA submission.

The Project is planned and designed to avoid adverse environmental effects through careful configuration and use of best available technology economically achievable (BATEA). The following is a brief summary of key guiding principles for Project development and design:

- Minimize the Project footprint (at 867 hectares [ha], the Project's mine site area represents one of the smallest footprint open pit mining projects in the gold sector for a mine of its class in Canada).
- Proactively and collaboratively identify ecological values, and adopt a progressive transparent approach to site planning that avoids or minimizes effects on these areas to the extent reasonable.
- Implement a precautionary approach to development that uses BATEA, to reduce potential environmental, health and safety risks.
- Minimize freshwater consumption, manage and treat contact water, maximize water recycling and minimize treated effluent discharge.
- Continue to supplement the baseline environmental dataset to support future environmental permitting, monitoring and management.
- Achieve socioeconomic benefits for the region.
- Plan ahead for closure so that the site will be rehabilitated to a productive and natural state that is physically, chemically and biologically stable.

In this final EIS/EA, FMG proposes to implement a variety of planning and management strategies that further avoid or reduce potential adverse environmental effects of the Project and support benefits for the region, including:

- Implement BATEA for water treatment;
- Limiting the Project footprint;
- Designing for closure and end land use objectives including long-term sustainable energy infrastructure;
- Seeking to minimize disruptions on Traditional Land Use activities and supporting culture and well-being;
- Hiring and contracting locally where goods and services are available;
- Working with service providers to implement employment readiness and training programs;
- Establishing Indigenous environment committees to support monitoring activities and adaptive management through life of mine
- Establishment of an Independent Geotechnical and Tailings Review Board (IGTRB) to provide independent oversight on the CDF and dikes;
- A plan to address mental health and addictions by supporting employees and communities;
- A plan to achieve net zero over the Project life.

FMG has undertaken to optimize Project design and infrastructure siting so that the location and configuration of the Project facilities avoid or limit the potential environmental effects of the Project. FMG has focused on achieving a highly compact mine site, resulting in one of the smallest open pit mining footprints in the gold sector for a mine of its class in Canada. With a mine site area footprint of only approximately 867 ha and a total Project footprint including the mine access road and transmission line of approximately 1,365 ha, this represents a remarkable design achievement. With these efforts, Project facilities have been located to avoid and reduce interactions with sensitive environmental features. Where avoidance is not practicable, proven mitigation measures have been included.

Since the draft EIS/EA was submitted for comment, engagement with Slate Falls Nation resulted in optimizing the transmission line route to pass north of the community of Slate Falls adjacent to the existing E1C line, thereby reducing the length of new linear corridors created and avoiding important land use areas.

This engagement aligned with comments received from the MECP Species at Risk Branch that emphasized the importance of minimizing new linear corridors. Traditional Land Use information shared by Mishkeegogamang Ojibway Nation also noted several land use values located along the southern end of the Alternative 3 transmission line route which further informed the optimization of the transmission alignment.

The Project is designed to meet applicable building, safety and industry codes and standards. The engineering design of the Project aims to incorporate climate change considerations, and Project components and infrastructure are being designed to manage variable weather events. The Project components are being designed to meet the National Building Code of Canada, the Canadian Dam Association guidelines, and other design codes and standards for wind, snowfall, extreme precipitation, seismicity and other weather variables. These standards and codes provide factors of safety regarding environmental loading (e.g., snow load, high winds and seismic events) and Project-specific activities and events.

A variety of environmental protection, mitigation and management measures have been incorporated into planning, design, construction, operation and ultimate closure of the Project. As part of the mitigation measures, habitat offsetting and compensation will be implemented to counterbalance localized effects on fish habitat and Caribou, as required and provided for under the federal *Fisheries Act* (RSC 1985, c. F-14) and provincial *Endangered Species Act, 2007* (SO 2007, c. 6). To date, FMG has carried out industry-leading environmental programs across the Project region that will support long-term monitoring, management and sustainability.

Other Project initiatives that have been developed and implemented as a commitment to feedback received during consultation and engagement are the IGTRB, Employee Health & Wellness Strategy and a Net-Zero Strategy.

Independent Tailings and Geotechnical Review Board

The Project has established an IGTRB to provide independent oversight on the design planning and construction, operation, performance and closure planning, with the objective of long-term safety and environmental protection. The IGTRB was established early during the EA process, in advance of construction, to support the planning process and provide review and study advice from the early design stage through to closure. The IGTRB's inaugural report related to the designs included in the final EIS/EA and FMG's responses addressing the report are included in Appendix V-3. Future IGTRB reports, responses and actions undertaken by FMG to address IGTRB feedback will be made available to interested parties through the life of mine.

Employee Health & Wellness Strategy

The development of the Employee Health & Wellness Strategy (Appendix Q-3) is a key component in following up on the feedback FMG heard during engagement and consultation with local communities and health service providers. Through the draft EIS/EA consultation process, FMG was informed of the challenges that many communities and individuals face with mental health and addictions, and the various barriers to treatment and employment opportunities. As a key employer for the region, the Project can be leveraged as a vehicle for positive change and employment stability for many. Working with communities, governments, service providers and experts in the field, FMG's proactive approach contained in the Employee Health & Wellness Strategy is based on emerging practices and will continue to be informed by those who are proximate to the Project. The Employee Health & Wellness Strategy responds to what FMG has heard, including that northern-focused health and wellness support is crucial to improving employment

participation; creating a mental health-conscious workplace; and enabling the Project, local people and communities to thrive. The approach necessitates more than standard corporate occupational health and wellness policies and programs. It requires tailored health and wellness approaches, services and programs, in coordination with health service providers, that address the holistic needs of northern people and communities participating in the mining industry.

For the Project, FMG is committed to providing employees with access to the health and wellness support and services they need to achieve their potential and be successful in the workplace and beyond. Health and wellness support from employers has traditionally been focused on reducing employee sickness and absenteeism. The Employee Health & Wellness Strategy takes a progressive approach to account for the broader geographic, economic, social and community factors that underpin an individual's ability to bring their best self to work and home after work. It considers the major factors that affect and could improve holistic health and wellness for a diverse workforce including physical, mental, cultural, family and emotional issues. Additional considerations are also factored to address barriers to employment in remote work environments for women and young workers.

The Employee Health & Wellness Strategy looks at employee health and well-being through a proactive lens by embracing education, prevention and early intervention measures. From design to implementation, FMG provides a collaborative framework with opportunities for continual improvement input and guidance so that services and support offered will remain relevant throughout the life of mine.

Net-Zero Strategy

The Government of Canada is committed to achieving net-zero emissions by 2050. Ontario is committed to action on climate change, including reducing greenhouse gas emissions to 30% below 2005 levels by 2030 (Ministry of Energy 2024). FMG is committed to supporting the federal and provincial target of net-zero through the development and implementation of a Net-Zero Strategy (Appendix I-2). The Net-Zero Strategy details FMG's plan for a net-zero Project and to embed a climate positive approach to all aspects of the Project. The Net-Zero Strategy is presented in support of the target to reduce the net greenhouse gas emissions to zero over the life of the Project. It includes the use of technologies and practices to reduce fossil fuel use and potential opportunities through carbon offsets and credits to balance residual greenhouse gas emissions from the Project.

1.7 Regulatory Framework

1.7.1 Federal Environmental Assessment Requirements

The federal Regulations Designating Physical Activities (SOR/2012-147) under the *Canadian Environmental Assessment Act, 2012* (SC 2012, c. 19, s. 52) identify the physical activities that constitute the designated projects that could require completion of a federal EA. The following provisions were considered to potentially apply to the Project:

- The construction, operation, decommissioning and abandonment of a new metal mill with an ore input capacity of 4,000 t/day or more (Section 16(b)); and
- The construction, operation, decommissioning and abandonment of a new rare earth element mine or gold mine, with an ore production capacity of 600 t/day or more (Section 16(c)).

Based on these criteria, FMG submitted a Project Description to the Canadian Environmental Assessment Agency, now IAAC, in February 2018. Based on the Project Description, the Canadian Environmental Assessment Agency determined that a federal EA was required and issued federal EIS Guidelines for the Project on June 19, 2018, as amended on March 11, 2022.

The draft EIS/EA provided an opportunity for consultation, as does this final EIS/EA. Comments received from Indigenous communities, government agencies and other interested parties received on the draft EIS/EA were considered in refining the Project and shaping this final EIS/EA. The final EIS/EA is intended to fulfil the requirements of the federal EIS Guidelines.

1.7.2 Provincial Environmental Assessment Requirements

In Ontario, EAs are carried out in accordance with the Ontario *Environmental Assessment Act* (RSO 1990, C. E.18). Projects are not required to complete a comprehensive EA unless required by a designating regulation under the *Environmental Assessment Act* or if there is a voluntarily agreement to undertake a comprehensive EA.

Certain components of a mine development project may be subject to one or more streamlined EA processes, as is the case for the Project:

- Class EA for Resource Stewardship and Facility Development Projects for components such as pipelines, water crossings, forestry / tree cutting, water impoundment structures and support permits issued by the Ministry of Natural Resources such as under the *Public Lands Act* (RSO 1990, c. P.43); *Aggregate Resources Act* (RSO 1990, c. A.8); *Crown Forest Sustainability Act, 1994* (SO 1994, c. 25); *Fish and Wildlife Conservation Act, 1997* (SO 1997, c. 41); and the *Lakes and Rivers Improvement Act* (RSO 1990, c. L.3).
- Class EA for Activities of the Ministry of Energy and Mines under the *Mining Act* (for the addition of lands to existing leases).
- Class EA for Minor Transmission Facilities (230 kV transmission line).

Per Section 3.0.1 of the *Environmental Assessment Act*, a request for a Voluntary Agreement can be submitted to the Ontario Ministry of the Environment and Climate Change (now the MECP) to have the *Environmental Assessment Act* apply to the Project. It was determined that a single, coordinated provincial comprehensive EA process was preferred to address anticipated provincial EA needs. The decision to enter into a Voluntary Agreement to complete a comprehensive EA for the Project was based on several factors, including:

- The evolution of planning and identification of additional infrastructure for the Project and increased certainty of carrying out one EA process that will encompass all the Class EA requirements for all aspects of the Project;
- Improved transparency and clarity through the integration and coordination of provincial and federal EA requirements;
- Nature of the undertaking, such that the potential provincial EA requirements and public interest warranted a comprehensive EA; and
- Feedback received during engagement activities with government agencies, Indigenous communities and other interested parties.

Accordingly, FMG entered into a voluntary agreement with the MECP on April 18, 2018, to conduct a provincial comprehensive EA for the Project that will satisfy the *Environmental Assessment Act*. The Project is subject to Part II.3 of the *Environmental Assessment Act*.

The comprehensive EA process requires approval of a Terms of Reference (ToR) in prescribed format that will guide the content of the provincial EA. FMG prepared a draft ToR which was issued for regulatory, Indigenous and public comment in February 2020. The final Amended ToR was approved by the Ontario Minister of the MECP on November 8, 2021. A detailed summary of the process is included in Section 2.7.3.

This final EIS/EA was prepared in accordance with the provincially approved Amended ToR and the requirements of the Ontario *Environmental Assessment Act*. Comments received from Indigenous communities, government agencies and other interested parties on the draft EIS/EA have informed the final EIS/EA and will continue to refine the design of the Project.

1.7.3 Environmental Assessment Coordination

The draft EIS/EA was prepared as a single document to meet both the provincial and federal requirements and serves as the basis for review by the relevant federal and provincial agencies. FMG has been working closely with the federal and provincial environmental approval agencies to coordinate the federal and provincial EA processes. This coordination is directed by the *Canada-Ontario Agreement on Environmental Assessment Cooperation* (CEAA 2004), as led by IAAC and the MECP. The coordinated approach facilitates greater efficiency, fosters cooperation between the parties and results in a single body of documentation that satisfies both federal and provincial EA requirements. Taking this approach will also support effective engagement with Indigenous communities and the public through the EA processes.

FMG has worked with the MECP and IAAC to coordinate the timing of release of and review of baseline reports, preliminary alternatives assessment materials and the draft EIS/EA, which has enabled all parties including FMG to understand the perspectives and comments from the various ministries and agencies. This is explained further in Section 2 of the draft EIS/EA. FMG has also worked with the MECP and IAAC to coordinate joint technical overview meetings on the draft EIS/EA.

The federal EIS Guidelines and the provincially approved Amended ToR provided as Appendices B-1 and B-3, together set out the framework and requirements for the EIS/EA. Concordance tables to these requirements are provided in Appendix B-2 (federal EIS Guidelines) and Appendix B-5 (approved Amended ToR)

1.7.4 Other Regulatory Aspects

As the Project is located in Ontario, it will need to meet applicable federal and provincial legislation and regulatory requirements; further information regarding anticipated approval requirements is provided in Section 11. Relevant government policies, management plans, land use plans, objectives, standards or guidelines are discussed through this EIS/EA as pertinent.

1.8 Participants in Environmental Assessment

1.8.1 Government Agencies

The following government agencies / representatives are anticipated to have an interest in the EA process (where applicable, current agency names are listed):

Federal Government

- Crown-Indigenous Relations and Northern Affairs Canada;
- Environment and Climate Change Canada;
- Fisheries and Oceans Canada;
- Health Canada;
- Impact Assessment Agency of Canada;
- Indigenous Services Canada;
- Natural Resources Canada;
- Transport Canada; and
- Federal Parliament representatives.



Provincial (Ontario) Government

- Ministry of the Environment, Conservation and Parks;
- Ministry of Economic Development, Job Creation and Trade;
- Ministry of Citizenship and Multiculturalism;
- Ministry of Energy and Mines;
- Ministry of Infrastructure;
- Ministry of Indigenous Affairs and First Nations Economic Reconciliation;
- Ministry of Labour, Immigration, Training and Skills Development;
- Ministry of Municipal Affairs and Housing;
- Ministry of Natural Resources (formerly Ministry of Natural Resources and Forestry);
- Ministry of Tourism, Culture and Gaming;
- Ministry of Transportation;
- Ontario Energy Board and Independent Electricity System Operator; and
- Provincial legislature representatives.

Municipal Governments

- Township of Ear Falls;
- Municipality of Sioux Lookout;
- Municipality of Red Lake; and
- City of Dryden.

1.8.2 Indigenous Communities

The focus of Indigenous consultation and engagement activities associated with the Project to date and going forward is primarily on identified potentially affected Indigenous communities. An understanding of the potential Indigenous communities interested in the Project was developed through advice from the MECP to FMG (letter dated April 25, 2018) and through advice provided by IAAC including through letters dated July 31, 2018, and May 14, 2020.

Considering the direction from regulators, discussion with local communities and the design of the Project, the following potentially affected or interested Indigenous communities have been identified as participants in the EA:

- Cat Lake First Nation;
- Lac Seul First Nation;
- Mishkeegogamang Ojibway Nation;
- Ojibway Nation of Saugeen;
- Pikangikum First Nation;
- Slate Falls Nation;
- Wabauskang First Nation; and
- Northwestern Ontario Métis Community.

FMG continues to share Project-related information with all of these communities and provide opportunities to share feedback.

1.8.3 Other Interested Parties

Other interested parties engaged by FMG to date with respect to the Project include:

- Land tenure holders in the immediate vicinity of the site;
- Local and regional communities and public that have expressed, or are anticipated to have, an interest in the Project; and
- Local users of the land, including hunters, trappers and fishers.

The list of interested parties may evolve throughout Project development and operation to reflect varying levels of interest and opportunities over time.

1.9 Methods

Methods used throughout this document are consistent with a number of other mining projects subject to *Canadian Environmental Assessment Act, 2012* and the Ontario *Environmental Assessment Act* that were reviewed by government agencies, Indigenous communities and other interested parties at the time.

Section 3 provides an overview of natural, biological and human environment conditions, which are detailed in a more focused manner to support the effects assessment (Section 6). The baseline investigations from which these summaries were developed were completed using standard field protocols and scientific methods as indicated under each of the respective disciplines to accurately document spatial and temporal variability. The information used in this final EIS/EA has been supplemented with Traditional Knowledge and Traditional Land Use information where available for use in assessing the Project. Traditional Knowledge sharing is a process and will continue throughout all phases of the Project.

Section 4 assesses the alternative methods of carrying out the Project in accordance with the EIS Guidelines and the provincially approved Amended ToR that informed the Project as described in Section 5. The method used to assess the alternatives has been developed to ensure a transparent conclusion as to the preferred alternative, as has been successfully used in previous EAs for Ontario mining projects. The method relies on a comparative evaluation of the overall advantages and disadvantages of an alternative as demonstrated through the performance objectives.

Sections 6 and 7 describe the effects that the Project is predicted to have on the environment, and Section 8 describes the effects the environment could have on the Project. The prediction of effects is carried out using analytical methods and tools including laboratory tests, mass balance calculations, statistical packages and various types of models. These tools and analytical methods are summarized within each section as appropriate, or reference is given to the detailed methods in supporting technical documents appended. The significance of the effect is assessed after the application of mitigation measures through defined assessment criteria and indicators.

1.10 References

AGP Mining Consultants (AGP). 2021. NI 43-101 Technical Report and Pre-Feasibility Study on the Springpole Gold Project, Ontario, Canada. Report Date: February 26, 2021.

Canadian Environmental Assessment Agency (CEAA). 2004. Canada–Ontario Agreement on Environmental Assessment Cooperation. <https://www.canada.ca/en/impact-assessment-agency/corporate/acts-regulations/legislation-regulations/canada-ontario-agreement-environmental-assessment-cooperation-2004.html>.

Ministry of Energy. 2024. [Ontario's Low-Carbon Hydrogen Strategy](https://www.ontario.ca/page/ontarios-low-carbon-hydrogen-strategy). <https://www.ontario.ca/page/ontarios-low-carbon-hydrogen-strategy>.

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