

# Memo

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To: Stephen Lines, First Mining Gold Date: August 20, 2021  
From: Derrick Moggy, Sheila Daniel Wood  
CC: Mark Ruthven, Wood  
Ref: ONS2104  
Re: Springpole Gold Project, Project Description Update

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## 1. BACKGROUND

The environmental assessment for the Springpole Gold Project is required to fulfil the needs of both the Federal and Provincial governments, in accordance with the *Canadian Environmental Assessment Act, 2012* and the *Environmental Assessment Act*. The content of the Environmental Impact Statement / Environmental Assessment Report will be guided by the:

- Federal Environmental Impact Statement (EIS) Guidelines issued June 19, 2018
- Provincial Amended Terms of Reference (ToR) submitted to the Ontario Ministry of the Environment, Conservation and Parks on April 29, 2021.

There has been approximately three years since the submission of the Project Description to the Federal agencies (February 2018). Over that period of time, First Mining Gold Corp. (FMG) has continued:

- Consultation and engagement activities with Indigenous communities, government agencies and other stakeholders, with a particular focus during 2020
- Exploration efforts to further define the mineral resources
- Completion of a Prefeasibility-level engineering study
- Baseline environmental monitoring investigations
- Engaged additional environmental consulting support.

The continuing maturing of the project design including as described in the recently issued Pre-feasibility Study (*NI 43-101 Technical Report and Pre-Feasibility Study on the Springpole Gold Project, Ontario, Canada* Report Date: February 26, 2021), has resulted in the potential refinements to the preliminary project design contained in the Project Description submitted to the Federal regulatory authorities in 2018. These refinements have been reflected in the Provincial Amended ToR. A copy of the revised conceptual general arrangement is provided as Appendix A.

The intent of this memo is to clarify the alignment between the ongoing design process being advanced for the Springpole Gold Project, and the Project Description given the length of time that has elapsed since the approval of EIS guidelines. We note that further refinements may be undertaken during the EA process based on the evaluation of alternatives and consultation efforts.



## 2. PROJECT DESCRIPTION IN EIS GUIDELINES

The designated project as described in the EIS Guidelines includes the construction, operation, decommissioning and abandonment of the following project components:

- Main open pit and starter pit
- Waste rock, overburden, topsoil, lake bottom sediment, low grade ore storage and stockpiles
- Crusher, milling and processing facilities
- Tailings management facility
- Treatment facilities for potable water, sewage and effluent
- Explosives manufacture and storage
- Pipelines for tailings transport, water / waste transport and for freshwater
- Aggregate deposits
- All-season access road and haulage road network, and associated water crossings
- Transmission line
- Cofferdams
- Runoff and seepage collection system
- Ancillary infrastructure, including workforce accommodation camp, fuel storage and distribution system, office complex, maintenance shops and warehouses.

The description of the designated project was based on the Project Description submitted to the Agency by FMG in February 2018. A copy of the preliminary site plan from the 2018 Project Description is provided as Appendix B.

## 3. PRIMARY PROJECT DESCRIPTION UPDATES

The refinements that have occurred during the intervening period are typical of mining projects as design concepts progress. Unless identified in this memo, the Project Description remains representative of the project proposed to be developed. Further, there has been no material changes to the length and sequence of development activities for the Project.

The anticipated potential environmental effects (as defined by Section 5 of *CEAA, 2012*) for the Springpole Gold Project are unlikely to change materially in comparison to those effects described at a preliminary level in the 2018 Project Description. The Project continues to be situated primarily within the Springpole Lake watershed avoiding the Birch Lake watershed as practical. In addition to the two alternatives for disposing of tailings and mine rock noted in Table 2-1 of the 2018 Project Description, an additional alternative method includes a Co-disposal Facility located in the same footprint of the Waste Storage Facility (as shown Figure 3-2, 2018 Project Description, and Appendix A of this document) which resulted from the progression of engineering options. While this alternative extends slightly to the northwest towards Birch Lake to ensure sufficient capacity for the facility, a setback will be maintained from values and sensitive sites where feasible. The location of the proposed Co-disposal Facility alternative would be assessed for fisheries values and reported in the EIS. Although the runoff and seepage from the Co-disposal Facility alternative would be directed away from Birch Lake and into the Springpole Lake watershed for appropriate management, the preferred location for facility will include an assessment and mitigation of potential seepage in the EIS, as noted in Table 5-6 of the 2018 Project Description.

The bullets that follow provide an overview of the primary project design updates as currently understood:

- **Cofferdams:** In reference to Section 3.1.2 of the 2018 Project Description, there has been a re-assessment of the number and length of dams required, from approximately three dams of



510 metres (m) length, to two dams of approximately 940 m total length. However, the location and orientation of the dewatering cofferdams as shown in Figures 3-2, 3-2A, 3-2B and 3-2C in the 2018 Project Description have not materially changed and continue to be representative for the Project.

- **Lake Bed Sediments Repository:** This component may be located on land rather than in the portion of dewatered lake area, to facilitate future use of the material in site reclamation as noted in Section 3.1.4 of the 2018 Project Description. However, the alternative locations noted in the 2018 Project Description for the lake bed sediment repository will be considered during the preparation of the EIS. Alternative locations outside the Springpole Lake watershed are not expected to be identified. If an alternate location is identified outside the Springpole Lake watershed and determined to be the preferred alternative, the effects to that watershed would be assessed in the EIS.
- **Tailings Management Facility:** The alternatives to be assessed in the EIS are consistent in approach to the initial regulatory submission and the identification and assessment of appropriate alternatives is part of the EIS preparation which is ongoing.

As noted in Section 3.1.6 of the 2018 Project Description, and shown in Figures 3-2, 3-2A, 3-2B, 3-2C and 3-3, a Tailings Management Facility is proposed to be located south of the mine site, and a Waste Rock Facility adjacent to the open pit. There is the potential that tailings and waste / mine rock may be co-disposed in a co-located facility. In this case, the proposed Co-disposal Facility may be located where the Waste Rock Facility is shown in the figures noted above. The southern Tailings Management Facility is anticipated to be included as an alternate location.

Approximately 76 Mm<sup>3</sup> of tailings and 102 Mm<sup>3</sup> of mine rock from the Project will require storage over the life of the mine. The Project will be designed to store this capacity and based on the ongoing engineering design, is expected to have a height of approximately 70 m and surface area of about 360 ha subject to confirmation, which is similar to the 365 ha proposed in the 2018 Project Description. The footprint of the Co-disposal Facility may be further optimized at this location and will be described in the EIS.

- **Transmission line:** In reference to Section 3.1.10 of the 2018 Project Description, the preferred route and voltage is still under assessment. An approximately 90 kilometre (km) long right-of-way may be constructed by FMG for the installation of a 230 kV transmission line from the Springpole Gold Project site to the corridor for the Wataynikaneyap transmission line, as shown in Appendix C. One alternative transmission corridor route being considered may be routed alongside the existing E1C transmission line and through Slate Falls Nation Reserve lands to the Wataynikaneyap Transmission Line.
- **Wenesaga Road:** In reference to Section 3.1.7 of the 2018 Project Description, FMG has confirmed that Domtar received approval to construct a Primary / Class 1 Right-of-Way under the Forest Management Plan from km 105 to 130, which is the maximum extent of the road under the current Plan. A Primary / Class 1 Road is a public road constructed to enable two transport trucks to pass. This Plan approval process included consultation with Indigenous communities. To date, Domtar has constructed the road corridor to east of the Birch River crossing. As is standard practice, Domtar has constructed the road within the approved corridor based on forest management practice needs and may make upgrades (within the approved Class 1 standards) as required. The care and control for this road is currently the responsibility, and it will remain, with



Domtar. The Wenesaga Forestry Road as currently in place and/or approved, is adequate for FMG's requirements to transport personnel and supplies for the construction, operation and decommissioning of the Springpole Gold Project. FMG do not propose / anticipate additional upgrades will be needed for the Project.

- **Mine Access Road:** A number of alternative routes for the Mine Access Road will be assessed in the EIS. A winter operational road to support ongoing exploration activity at the Springpole site was approved in 2014, which generally follows the topographical high area between the terminus of the Wenesaga Forestry Road to the Springpole exploration camp. This route (as shown in the 2018 Project Description, Appendix 1, Figure 3-2A) may be the basis for one of the alternative routes for mine site access during construction, operation and closure of the Springpole Gold Project. Other alternative routes will be described and assessed in the EIS, including the second alternative identified in the 2018 Project Description, as shown in Appendix 1, Figures 5.2 and Appendix 6, Figures 7-6 to 7-13.

As indicated above, while there is the potential that tailings and waste / mine rock may now be co-disposed, there is an on-going evaluation of alternatives and there would still be an assessment of both mine rock and tailings storage. If the preferred alternative location results in overprinting fish frequented waters, the requirements of the Metal and Diamond Mining Effluent Regulations will be addressed including the preparation of an alternatives assessment for mine waste.

As the regulatory approvals process and consultation continues, and the engineering design progresses there may be additional project design optimizations. It should be noted that the federal EIS Guidelines indicates that:

*The Agency recognizes that projects may be in the early planning stages when the EIS is being prepared. Where the proponent has not made final decisions concerning the placement of project infrastructure, the technologies to be used, or that several options may exist for various project components, the proponent shall conduct an environmental effects analysis at the same level of detail for each of the various options available (alternative means) within the EIS.*

FMG acknowledges this statement and will prepare the EIS accordingly. FMG does not believe there is any required changes to the project components provided in the EIS Guidelines (as summarized above).

**4. CLOSING**

Should you have any questions regarding this memo, please do not hesitate to contact the undersigned.

Sincerely,  
Wood Environment & Infrastructure Americas  
a Division of Wood Canada Limited

<Original signed by>

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Senior Environmental Scientist

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Principal Geoscientist  
Discipline Lead Mining Approvals

Attachments:

- Appendix A: Figure 4.1.1: Revised Conceptual General Arrangement from Amended ToR (in progress)
- Appendix B: Figure 3.2C: Springpole Gold Project, Mine Site General Arrangement from Project Description
- Appendix C: Figure 1, Preliminary Transmission Line Corridor

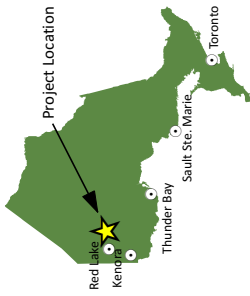


**APPENDIX A**

Conceptual General Arrangement, Revised from the Amended Terms of Reference



Property Reference



- Preliminary Preferred Transmission Line Route
- Preliminary Preferred Mine Site Access Road
- Haul Road
- Plant Site and Shops
- Coffor Dam
- Pit Boundary
- Waste Rock/Tailings
- Stockpile
- Dewatered Basin of Lake
- Wenesaga Road Extension

Mine Layout from Springpole PEA (SRK, 2019)  
Conceptual components to be refined during the EA.

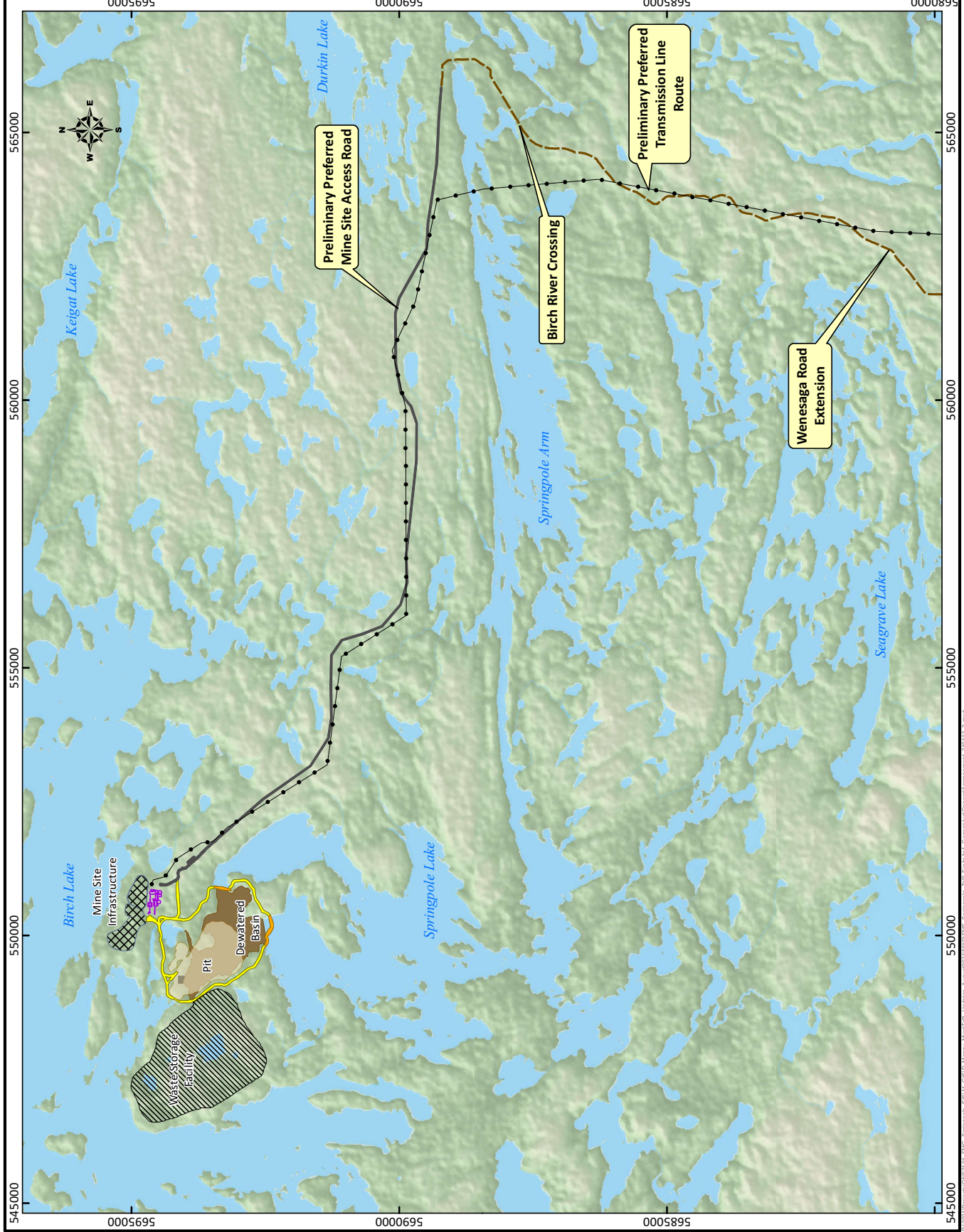


Springpole Gold Project

Conceptual General Arrangement

Figure 4.1.1.1

Kenora District, Ontario  
August 2021  
NAD83, UTM zone 15  
0 4  
Kilometers



**APPENDIX B**

Preliminary Site Plan from the 2018 Project Description





Property Reference



- Coffer Dam
- Silt Curtain
- Effluent Pipeline Corridor
- On-Site Haul Road
- Temporary Road\*
- Road & Power Line Corridor
- Potential Aggregate Source
- Open Pit
- Plant Site & Shops
- Stockpile & Crusher
- Tailings Management Facility
- Waste Rock
- Dewatered Area
- Archaeological Setback
- Potential Caribou Habitat Feature

\*Temporary Road would only be built if proximal aggregate deposit is developed.



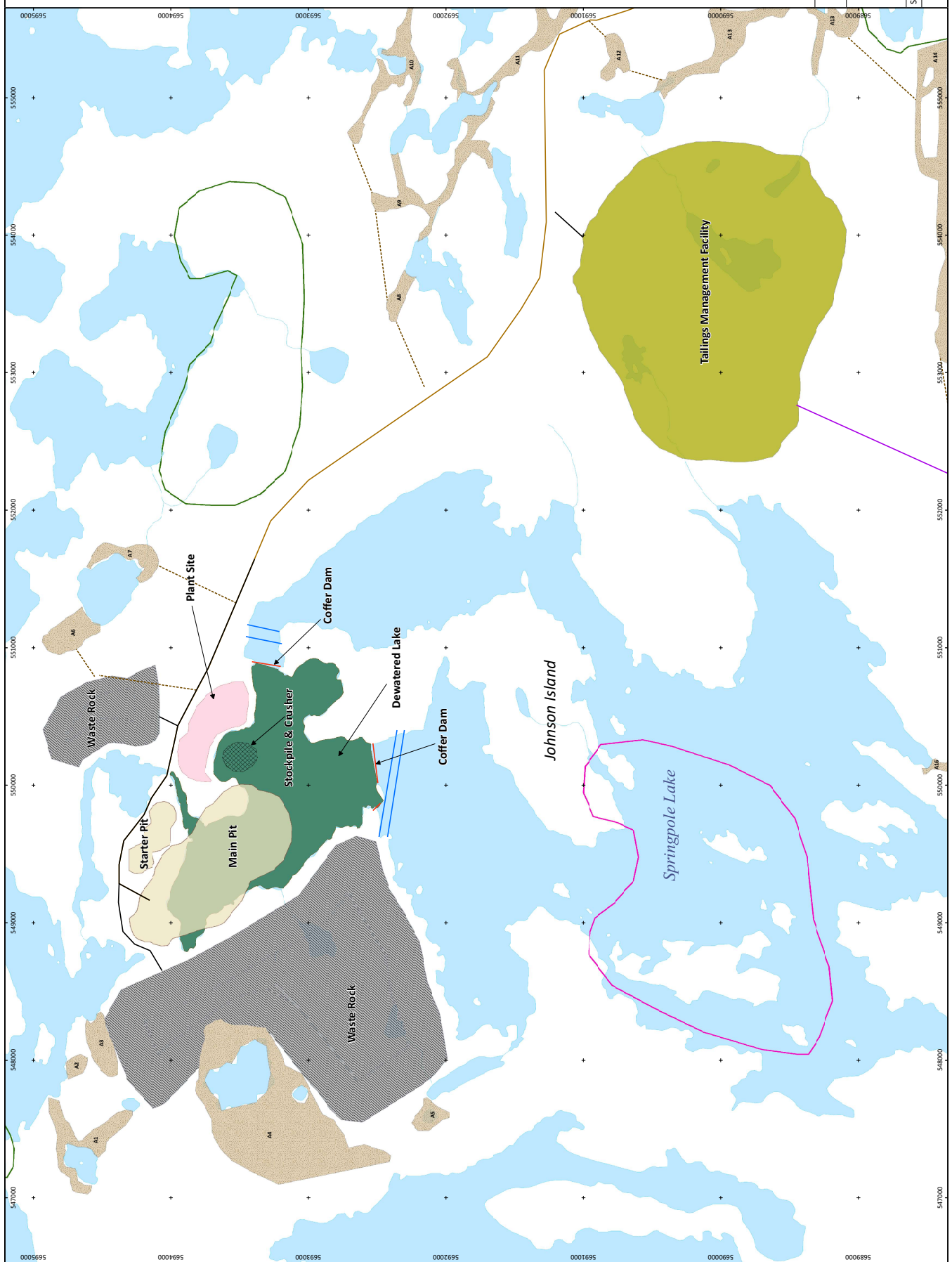
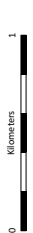
# Springpole Gold Project

Kenora District, Ontario

Figure 3-2C

Mine Site General Arrangement

Scale 1 : 65,000 NAD83, UTM zone15 Nov.2017

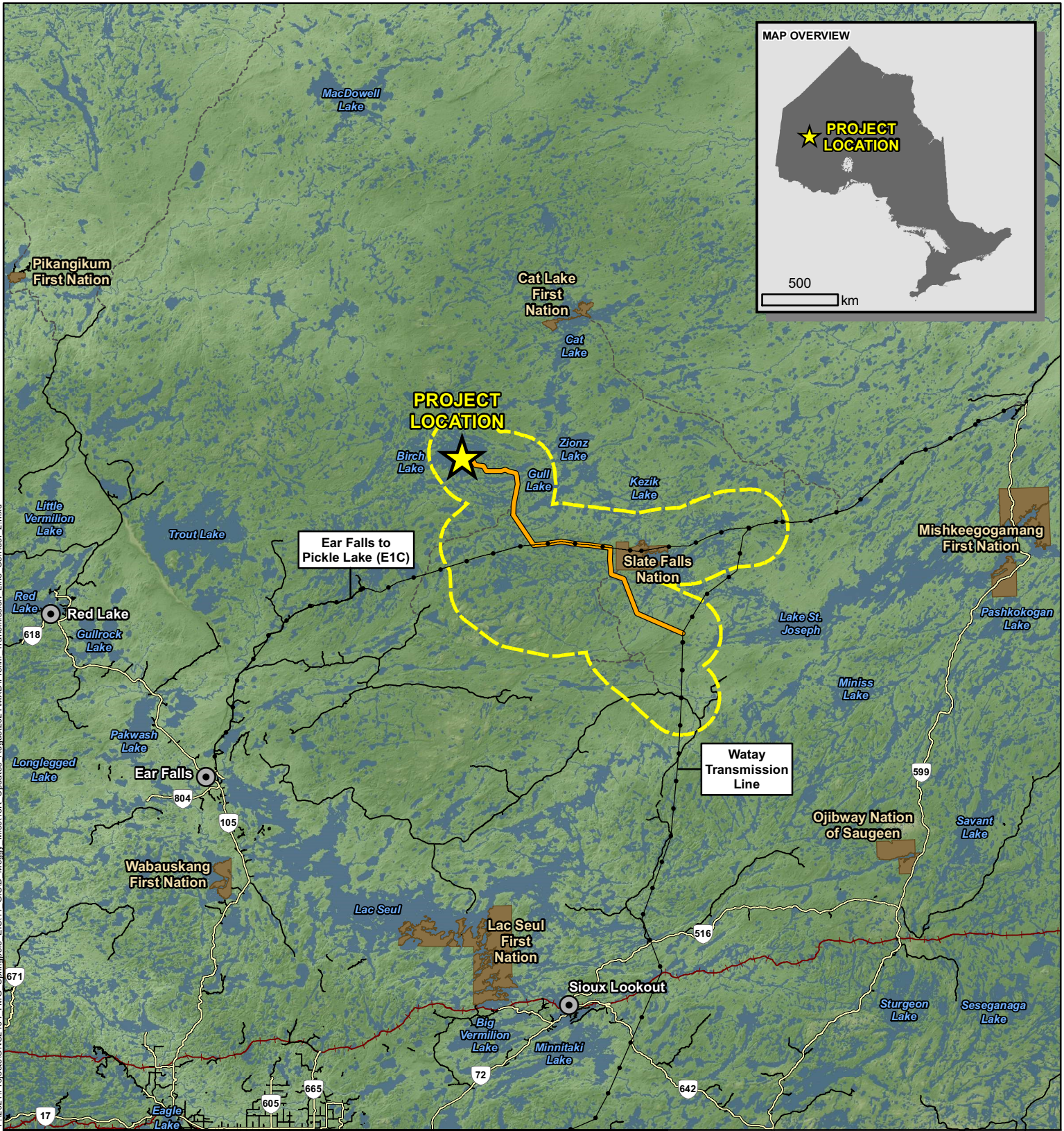


**APPENDIX C**

Preliminary Transmission Line Corridor



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**LEGEND**

- Project Location
- Preliminary Preferred Transmission Line Route
- Transmission Line Alternatives Corridor (10 km)
- Town
- First Nation Reserve
- Transmission Line
- Highway
- Secondary Road
- Resource / Winter Road
- Railway

NOTES:  
- Topographic information extracted from LIO, MNRF.



**SPRINGPOLE GOLD PROJECT**

**Preliminary Transmission Line Corridor**

Datum: NAD83  
Projection: UTM Zone 15N



PROJECT N°: ONS2104

FIGURE: 1



SCALE: 1:1,370,000

DATE: August 2021