BACK RIVER PROJECT:
Type B Water Licence
8BC-BRP----

Main Application Supporting Document

September 2017

Version 2.0

Executive Summary

The Back River Project (the Project) is a proposed gold project owned by Sabina Gold & Silver Corp. (Sabina) within the West Kitikmeot region of southwestern Nunavut. It is situated approximately 400 km southwest of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet, and 520 km northeast of Yellowknife, Northwest Territories (NWT). The Project is located predominantly within the Queen Maud Gulf Watershed (Nunavut Water Regulations, Schedule 4) (Appendix A, base Figure 1).

The Project is comprised of two main areas with interconnecting winter ice roads (WIR): Goose Property and the Marine Laydown Area (MLA) situated along the western shore of southern Bathurst Inlet. The majority of annual resupply will be completed using the MLA, and an approximately 160 km long winter ice road will interconnect these sites.

The Feasibility Study for the Project, completed in June 2015, positively identified the economic viability and potential of the Back River Project. The mine plan reflects an estimated 10 year operating mine life based on currently identified ore reserves, with a total ore feed of 19.8 million tonnes to a single process plant at the Goose Property. The life of the Back River Project, from Mobilization and Construction to Operations and Closure, and Post-Closure, is 27 years.

Mobilization and Construction activities could begin in 2018 with the staging of materials at the MLA, followed by three years of construction of the Goose Property infrastructure. For the purpose of this application, the first year of production is termed "Year 1". Production (Operations Phase) will carry on for 10 years followed by Closure activities (up to eight years). It should be noted that the Operations Phase may be extended beyond 10 years should additional mineral deposits become economical to be developed. Sabina will continue Post-Closure monitoring until closure objectives have been achieved.

The regulatory framework provided in the Nunavut Agreement (Agreement), *Nunavut Project and Planning Assessment Act* (NuPPA) and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA or Act) allows for interim, short-term approvals of water uses related to exploration or development work for a proposal under impact review. Provided the scope of works being considered for development works are being considered by the NIRB as part of the review of the Project, the NWB is not restricted from issuing an interim, short-term period water licence for development work related to the Project. Sabina recently completed public hearings related to the environmental review and assessment of the Project, and the NIRB recommendation for the project to proceed with issuance of a Project Certificate has been forwarded to the Minister. The Ministerial decision is pending.

Sabina is submitting this Type B Water Licence application and supporting documents (Application) for proposed development works, as well as supporting ongoing exploration and baseline data collection related to the Project. Sabina believes the scope of activities proposed for this Application are consistent with scope identified in the Project Proposal submitted to the NIRB for review. Sabina understands the Application can be processed as an interim, short-term approval consistent with Article 13.5.5 of the Agreement. The proposed scope of activities related to the Project are described in Table ES-1.

Construction scheduling and implementation for the Project is dependent upon, and restricted by, the seasonal sealift to support mobilization of supplies and equipment. Following issuance of the Project Certificate, the securing of a Type B Water Licence would allow for development works to potentially begin in Q1 2018, while Sabina awaits the receipt of the Type A Water Licence. Waiting to receive a Type A Water Licence prior to starting development works would have significant impact on Sabina's overall project schedule and the economic feasibility of the Project.

Given that the scope of development work activities are consistent and within the overall scope of activities for the Project, following issuance of the Project Certificate, and the Type B Water Licence, all development works will comply with Project Certificate Terms and Conditions (where applicable), and until such time as regulatory approvals are obtained for the various FEIS and FEIS Addendum Management Plans. A full list of management programs and associated plans proposed under the Type A Water Licence application is provided in Section 6, Table 6.1. Sabina intends to follow the measures and commitments highlighted in these plans (where applicable) unless otherwise defined in a Type B development work management plan until full project approval is obtained through the various regulatory instruments (i.e., DFO authorization, Land lease, Water Licence, etc.).

Table ES-1. Development Work Activities

GOOSE PROPERTY
Goose Exploration Camp Operation
Ice Airstrip Construction and Operation
Mobilize Fuel, Equipment, and Supplies
Winter Ice Road Construction and Operation
Operate Airstrip Quarry
Operate Umwelt Quarry
Locate Temporary Fuel Storage
Construct All-weather Service Roads and Water Crossings
Construct Goose Plant Site and Fuel Storage Area Pad
Airstrip Extension
Rascal Stream Re-alignment
Relocate Explosives Storage Area
Water Intake Installation
MARINE LAYDOWN AREA
Ice Airstrip Construction and Operation
Mobilize Fuel, Equipment, and Supplies (Air)
Upgrade Temporary Exploration Camp
Operate MLA Quarry
Construct All-weather Service Roads, Laydown Areas, and Fuel Storage Area
Mobilize Additional Fuel, Equipment, and Supplies (Vessels)
Install One Steel Bulk Fuel Tank
Water Intake/Discharge Installation

Aulapkaiyini Naittuq

Tamna Hanningayuq Havauhikhaq (Havauhikhaq) piumayauyuq gold-mik havauhikhaq nanminiriyauyuq uumannga Sabina Gold unalu Silver Kuapuriisinga (Sabina) Uataanit Kitikmeonmi hivuravyaani uataanit Nunavut. Ittuq 400 km hivuravyaani uataanit Iqaluktuutiamit, 95 km hivuravyaani kivataani hivuraanit nunguvinga Qingaukmit, unalu 520 km tununngavyaani uataanit Yalunaimit, Nunatsiaqmi. Tamna Havauhikhaq illuaqtuq Queen Maud Kangirhingani Imaqarvinga (Nunavut Imaq Maligangit, Naunaitkutaq 4) (Naunairvik A, tungavinga Piksa 1).

Tamna Havauhikhaq piliurhimayuq malruuknik Hivulliqpaangani atayumik ukiumi hikumik apqutilik (WIR): Goose Uyarakhiurvinga unalu Tariuqmi Iliuraqhimavinga (MLA) ittuq uataanit hinaa hivuraanit Qingauk. Tamaanguyuq ukiumi urhuqyuaqtaffaarniq iniqtauniaqtuq atuqlugu MLA, ittuq Qingaukmi, ittuq 160 km takiyuq ukiumi hiku apqutit ataniaqtait hapkuat nayuganganik.

Tamna Piniaruknaqhiuq Naunaiyainiq Havauhikhamut, iniqtiqtuq June 2015mi, ilitariyauyuq maniliurniqmut piniaruknaqhiuq piniaqtuqlu uumunnga Hanningayuq Havauhikhaq. Tamna uyarakhiurvik ihumaliurut naunaiqtaa itqurnarutauyuq 10nik ukiunik aulapkainiaqtuq uyarakhiurvik piyuq nutaanik ilitariyauyuq ore-qaqtuq, atauttimut ore-mik piyuq uuminnga 19.8 millian taansnik avaliittumut piyuq ihumaliurut uumani Goose Uyarakhiurvinga. Uyarakhiurvikhaa Hanningayuq Havauhikhaq, uumannga Iniqhimaittuq unalu Igluqpiliurniq Aulapkaininnganut Umikvikhaq, Umikvikhanga, ittuq 27 ukiunik.

Inirhimaittuq unalu Igluqpiliurniq hulilukaarutingit pilihaaqniaqtuq 2018mi havaanga tamayanik MLA-mi, talvanga pingahunik ukiunik igluqpiliurniq uumani Goose Uyarakhiurvinga aulapkaidjutikhanik. Piyuq uumunnga Uuktuutikhaq, hivulliqpaaq ukiunga piliurninnganik taiyauyuq “Ukiunga 1”. Piliurninnga (Aulapkaininnganik) piniaqtuq 10nik ukiunik talvanga Umikvikhaq hulilukaarutit (8nik ukiunik). Naunaiqhimayukhaq tamna Aulapkaininnganik nuutiqtauniaqtuq avataanit 10nik ukiunik taimaa aadlamik uyarakhiurvik ilakungit maniliurutiuliqqata. Sabina pihimmaaqniaqtuq Umikvikhatinnagu munariniq taimaa umikvikhaq tikinnahuarutauyut pigumi.

Tamna munariniqmut tunngavinga tuniyauyuq uumani Nunavut Angirutinga (Angirutinga), *Nunavut Havauhikhaq unalu Ihumaliuqtuq Naunaiyainiq Maligaq* (NuPPA) unalu *Nunavut Imanga unalu Nunavut Qaangalu Pilaarutingit Ihuarhaiyiit Maligaq* (NWNSRTA Maligaqluuniit) pikaidjutiyuq tadjakaffuk, akuniraalungittumik angirutinik uumunnga Imaqmik aturninnga piyut qinirhiagiami pivallianiq havaaq tukhiutimut titiraqhimayumi uumani pivallianiq pilaqutinga ihivriuqniq. Tamna NWB pittailingittuq tunigiami tadjakaffuk, akuniraalungittumik Imaq laisikhaq uumunnga pivallianiq havaaq piyut havauhikhamut. Tuniyuq aktikkulaanga havaanik ihumagiyauyuq uumunnga pivallianiq havaat ihumagiyauyuq NIRB-kunnit ilanganik ihivriurutinganik Havauhikhamut. Sabina qangannuaq iniqtiqtait inuknut katimapkainiq piyut uumunnga avatiliriniqmut ihivriuqniq naunaiyaininngalu una Havauhikhaq unalu NIRB pitquyauyut tuniyauyuq Ministamut. Ministait ihumaliuqtangit utaqqiyauyuq.

Igluqpiliurniq naunaiyainiq iniqtirninngalu Havauhikhamut inmikkuuqtuq talvunga, pittailihimayuqlu uumannga, havaknaqhigaangat umikkuurniq ikayuriami aturninnga tamayanik hanalrutiniklu. Iniqtiriami pivallianiq laisiliqininnganut, Sabina unalu Havauhikhaq piliuqtaaqtuq angiyumik naunaiyainiqmut piyainnik. Pigiami B-mik Imaq Laisikhat pipkaidjutiniaqtuq pivallianiq, igluqpiliurniq, nayuganganik upalungaiyarniq, timiqutigiyangit havaaq piniaruknaqhiuq uumani Q1 2018mi, hapkuat tuniqhaininnga Havauhikhaq Naunaitkutaq utaqqitillugu A-mik Imaq Laisikhat. Unalu, Sabina utaqqiyut atauhiqmik ukiumik pigiamikni A-mik Imaq Laisikhat igluqpiliurtinnagit piqaqtuq akhuurutauyuq pilaqutinga tamainnit havauhikhaq naunaitkutaq maniliurniqmullu piniaruknaqhiuq Havauhikhaq.

ᐃᓇᐃᓐᓴᖅᓯᒪᔪᖅ

ᓴᓐᓂᖏᓚᔨ ᑯᖏᓂ ᐱᓕᕆᐊᖅ (ᐱᓕᕆᐊᖅ) ᑐᒃᓯᕋᐅᑕᐅᔪᖅ ᒍᑐᒧᑦ ᐱᓕᕆᐊᖅ ᓇᖏᒥᓂᕆᓴᐅᔪᖅ ᓴᐋᓇᒃᑯᓐᓄᑦ (ᓴᐋᓇ) ᐱᖏᑎᓇᖏᓂᓕ ᖃᑎᖅᑎᐅᓂᕐ ᓂᑎᖅᓯᓯᐊᓂᕐ ᐱᖏᑎᓇᖅᓯᓯᐊᓕᕐᑐᖅ ᓄᓇᕗᑦ. ᐃᓂᐅᔨᒋᑐᑐᖅ 400 ᑭᓯᒥᑦᓗᐊᓂᒃ ᐅᖏᓪᓗᑎᒋᔨᒥᑦ ᓂᑎᖅᓯᓯᐊᓂᕐ ᐱᖏᑎᓇᖅᓯᓯᐊᓂᕐ ᐃᓕᓴᕆᐊᓂᕐ, 95 ᑭᓯᒥᑕᓂᒃ ᐅᖏᓪᓗᑎᒋᔨᖅ ᓂᑎᖅᓯᓯᐊᓂᕐ ᑲᓇᖏᖅᓯᓯᐊᓂᕐ ᐃᓕᓴᐊᓂᕐ Bathurst Inlet, ᐊᒻᒪᓗ 520 ᑭᓯᒥᑕᓂᒃ ᐅᖏᓪᓗᑎᒋᔨᖅ ᓂᑎᖅᓯᓯᐊᓂᕐ ᑲᓇᖏᖅᓯᓯᐊᓂᕐ ᓴᓗᓇᐃ, ᓄᓇᕗᑎᐊᖅᑎᒥ. ᐱᓕᕆᐊᖅ ᐃᓂᐅᔨᒋᑐᓗᐊᖅᑐᖅ Queen Maud Gulf ᐃᒪᖏᓂᕐ (ᓄᓇᕗᓴᒥ ᐃᒪᖅᔪᒥ ᒪᓕᕆᓚᓪᓂ, ᑎᑎᖅᑲᖅ 4) (ᑎᑎᖅᑲᔪᒥ ᐃᓕᒋᕆᐅᔨᖅ A, ᐊᕐᓇ 1).

ᐱᓕᕆᐊᖅᑎᒋᑐᒥ ᒪᖅᑭᒃ ᐃᓂᐅᓗᐊᖅᑐᒥ ᑲᑎᕐᓂᖅᑎᑦ ᐅᑭᐅᓂᔪᓕ ᐊᐠᖅᑯᔪᕐᑎᓂ (WIR) (ᑎᑎᖅᑲᖅ ᑎᑎᖅᑲᔪᒥ ᐃᓕᒋᕆᐅᔨᖅ A, ᐊᕐᓇ 2): Goose ᐱᒋᕆᐅᔨᖅ (ᑎᑎᖅᑲᔪᒥ ᐃᓕᒋᕆᐅᔨᖅ A, ᐊᕐᓇ 3) ᐊᒻᒪᓗ ᓄᓴᒥᑦ ᓄᖅᑲᖏᖓᕐᕕᒃ (MLA) (ᑎᑎᖅᑲᔪᒥ ᐃᓕᒋᕆᐅᔨᖅ A, ᐊᕐᓇ 4) ᐃᓂᐅᔨᒥᑦ ᐱᖏᑎᓇᖅᓯᓯᐊᓂᕐ ᓄᓴᖅᓯ ᓂᑎᖅᓯᓯᐊᓂᕐ Bathurst Inlet. ᑕᒪᖁᖅᑲᓴᐃᑦ ᐅᒥᐊᕐᔪᐊᑲᓄᑦ ᑎᑭᑎᑕᐅᖅᑲᑕᖅᑐᑦ ᐱᐊᓂᖏᓂᐊᖅᑐᑦ ᐊᑐᕐᓗᑎᒃ MLA-ᒥᒃ, ᐃᓂᐅᔨᒥᑦ Bathurst Inlet, ᐊᒻᒪᓗ 160 ᑭᓯᒥᑕᓗᑦ ᐅᑭᐅᓄᑦ ᐊᕐᓇᓄᑎᕆᐊᖅ ᑲᑎᓂᖅᑎᓂᐊᖅᑐᖅ ᑕᕐᔪᓄᓐᓃᑦ ᐃᓂᐅᔨᓄᓕᕐ.

ᐃᓕᐊᕋᖏᓐᓇᓕᓪᓗᑦ ᖃᑲᐃᓴᕿᐃᓂᖅ ᐱᓕᕆᐊᖓᒪᑦ, ᐱᐊᓂᓕᐅᖅᑐᖅ ᕿᓂ 2015-ᒥᑦ, ᐱᐅᕿᕿᓂᒃ ᖃᑲᐅᓴᓕᐅᖅᑐᑦ ᐱᑕᖅᑭᑦᓕᐊᑎᑎᕐᔪᓐᓇᖅᓯᓐᓂᓕᑦ ᐊᒻᒪᓗ ᐱᑎᐊᑕᓐᓇᖏᖅᓯᓐᓂᓕᑦ ᓴᓐᓂᖏᓚᔨ ᑯᖏᓂ ᐱᓕᕆᐊᖅ. ᐅᓴᖅᑕᕆᓚᐊᖓᒪᑦ ᐸᖅᓇᐅᑎ ᑕᑯᐠᓴᐃᐅᑎᑎᕐᔪᖅ ᓇᓕᐅᑦᑕᖅᑕᐅᕐᒥᐠᒃ ᖃᑯᓕᓂᑦ ᐅᑭᐅᓂᑦ ᐊᐅᓪᓛᖅᓯᓂᕆᓇᓕᖅᑕᓐᓄ ᐅᓴᖅᑕᕆᓚᐊᖅ ᐊᑐᖅᓴᓂᒃ ᒧᓐᓄᐅᓇᓕᖅᑕᐅᕐᒥᐠᓇᖅᑐᓂᑦ, ᑲᑎᖅᓴᑦ ᐅᓴᖅᑕᕆᓚᐊᖅᑕᐅᕐᒥᐠᓇᖅᑐᓂᑦ 19.8 ᒥᓕᓐᓄ ᑕᓐ-ᓂᒃ ᐊᑕᐅᔪᖃᑦ ᐱᓕᐅᓐᓇᓕᐊᖓᓐᓂᑦ Goose-ᒥᑦ ᐱᑎᓴᐅᕐᒥᑦ. ᐊᐅᓪᓛᖅᓯᓂᓕᐊᖅᑕᓐᓇ ᓴᓐᓂᖏᓚᔨ ᑯᖏᓂ ᐱᓕᕆᐊᖅᑎᒥᑦ, ᐊᐅᓪᓛᖅᓴᓕᐊᖅᓂᖅᑎᒥᑦ ᐊᒻᒪᓗ ᓴᓇᓴᐅᑦᓕᕐᓂᐊᓂᓕᑦ ᐊᐅᓪᓛᖅᓴᓂᖅᑐᑦ ᐊᒻᒪᓗ ᐅᐱᑯᖅᓯᕆᓕᕐᓂᐊᓂᖅᑐᑦ, ᐊᒻᒪᓗ ᐅᐱᑯᖅᓯᒪᓕᖅᑎᓪᓗᒍ, 27 ᐅᑭᐅᖓᔪᓕ.

ᐊᐅᓪᓛᖅᓴᓂᖅᑎᒥᑦ ᐊᒻᒪᓗ ᓴᓇᓴᐅᑦᓕᕐᓂᐊᓂᓕᑦ ᖃᓄᐃᓕᓴᐅᑦᓂᐅᔨᓕᑦ ᐱᑎᐊᑕᖓᓇᖅᑐᑦ 2018-ᒥᑦ ᐃᓕᐅᖅᑲᐃᓗᑎᒃ ᐱᖁᑯᓂᒃ MLA-ᒥᑦ, ᑭᖓᔪᓂᐊᓪᓗ ᐱᖏᓕᓂᒃ ᐅᑭᐅᓂᒃ ᓴᓇᓴᐅᓂᖓᓐ Goose ᐱᖁᑯᐊᓐᖓᑭᓂᒃ. ᐱᓵᐋᑎᑦᓗᒍ ᑐᒃᓯᕋᐅᑎ, ᓯᕐᓕᓕᖅᑉᖅ ᐅᑭᐅᖅ ᐱᓕᕆᓚᐊᓂᓪᓗᑦ ᐅᖃᐅᔨᓕᕆᖅ “ᐅᑭᐅᖅ 1”-ᑎᑐᑦ. ᐱᓕᐅᓐᓇᕆᓚᐊᓂᖅ (ᐊᐅᓪᓛᖅᓴᓂᖅᑎᓪᓗᒍ) ᐅᑭᐅᓄᑦ ᖃᓕᓚᓂᐊᓂᖅᑐᖅ ᑭᖓᔪᓂᐊᓪᓗᑦ ᐅᑦᓂᓪᓗᒋᑦᑎᐊᖅᑐᑦ (ᐅᑭᐅᖅ 8-ᓄᑦ ᑎᑭᑐᖓᓇᖅᑐᖅ). ᖃᐅᔨᓪᓚᕆᐅᔨᓕᖅᑕᕐᓂᖅᑐᖅ ᐊᐅᓪᓛᖅᑲᖅᑎᑎᓂᐅᓚᐅᖅᑐᖅ ᐅᐃᒍᑎᐊᖅᑕᐅᕐᒥᐠᓇᖅᑐᖅ ᖃᓕᓚᑦ ᐅᑭᐅᑦ ᐅᖓᑖᓄᓕᐊᖅᑐᓗᒍ ᐊᐅᓪᓛᖅᑲᓂᖅᑐᑦ ᐅᑦᓂᓪᓗᒋᑦᑎᐊᖅᑐᑦ ᐱᖏᓕᓂᒃ ᐅᑭᐅᖅᑕᐅᕐᒥᐠᓇᖅᑐᓂᒃ ᐱᑕᖅᑕᓂᖅᑐᓂᒃᓴᖅᑕᕐᓂᖅᑐᒃ ᑭᓯᐊᓂ ᐅᑦᓂᓪᓗᒋᑦᑎᐊᖅᑐᑦ ᐱᓵᖅᖁᑦ ᐅᑎᖅᑕᐅᓂᖅᑐᖅᓴᖅᓯᒪᓕᖅᑐᓗᒍ ᖃᐅᔨᓴᕆᐊᖅᑐᑦ ᐅᑦᓂᓪᓗᒋᑦᑎᐊᖅᑐᑦ.

ᒪᓕᒐᓕᕆᓂᕐᒧᑦ ᐋᖅᑭᐅᒪᔪᖅ ᑕᐃᒪᐅᔪᖅ ᓄᓇᕗᒻᒥ ᐊᖏᕈᑎᒥᑦ *(ᐊᖏᖅᑲᑎᒌᒍᑎ), ᓄᓇᕗᒻᒥ ᐱᓕᕆᐊᖅ ᐊᒻᒪ ᐸᕐᓇᐃᓂᕐᒥᒃ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐱᖁᔭᖅ* (NuPPA) ᐊᒻᒪ *ᓄᓇᕗᒻᒥ ᐃᒪᕐᓄᑦ ᐊᒻᒪ ᓄᓇᕗᒻᒥ ᓄᓇᒥᑦ ᐱᔪᓐᓇᐅᑎᖃᕐᓂᕐᒧᑦ ᐱᖁᔭᖅ* (NWNSRTA ᐅᕝᕙᓘᓐᓃᑦ ᐱᖁᔭᖅ) ᐃᓂᖃᖅᑎᑦᑎᔪᖅ, ᓇᐃᑦᑐᒥᒃ ᓈᒻᒪᒋᔭᐅᔪᓂᒃ ᐃᒪᕐᒥᒃ ᐊᑐᕐᓂᕐᒧᑦ ᐱᔾᔪᑎᓕᖕᓂᒃ ᕿᓂᖅᓴᐃᓂᕐᒧᑦ ᐅᕝᕙᓘᓐᓃᑦ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᑐᒃᓯᕋᐅᑎᒥᒃ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᐊᒃᑐᖅᓯᓂᕐᒥᒃ ᕿᒥᕐᕈᓂᒃᑯᑦ. ᓄᓇᕗᒻᒥ ᐃᒪᓕᕆᔨᒃᑯᑦ ᑭᒡᓕᖃᙱᑦᑐᑦ ᑐᓂᓯᓂᕐᒧᑦ ᐃᓂᖃᕐᓂᕐᒥᒃ, ᓇᐃᑦᑑᔪᒥᒃ ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯᒥᒃ ᐱᕙᓪᓕᐊᓂᕐᒧᑦ ᐱᔾᔪᑎᓕᖕᒥᑦ ᐱᓕᕆᐊᕐᒧᑦ. ᐃᓱᒪᒋᔭᐅᑎᓪᓗᒋᑦ ᖃᓄᐃᓐᓂᓕᖕᒪᑕ ᐱᕙᓪᓕᐊᓂᖅ ᐊᕙᑎᓕᕆᔾᔪᑎᖕᓄᑦ ᐃᓚᒋᔭᐅᑉᓗᓂ ᕿᒥᕐᕈᓂᖅ ᐱᓕᕆᐊᕐᒥᑦ. ᓴᐲᓇᒃᑯᑦ ᒫᓐᓇᓵᖅ ᐃᓄᓗᒃᑖᓂᒃ ᑲᑎᒪᑎᑦᑎᓂᖃᓚᐅᖅᑐᑦ ᐱᔾᔪᑎᖃᖅᑐᒥᒃ ᐊᕙᑎᒥᒃ ᕿᒥᕐᕈᓂᕐᒧᑦ ᐊᒻᒪ ᖃᐅᔨᓴᐃᓂᕐᒧᑦ ᐱᓕᕆᐊᕐᒥᑦ ᐊᒻᒪ ᐊᕙᑎᓕᕆᔨᒃᑯᑦ ᐃᒪᓐᓈᖅᑑᑎᖏᑦ ᑐᓂᐅᑕᐅᑉᓗᓂ ᒥᓂᔅᑕᒧᑦ. ᒥᓂᔅᑕᐅᑉ ᐃᓱᒪᓕᐊᖓ ᐅᑕᖅᑭᔭᐅᔪᖅ ᓱᓕ.

ᓴᓇᔭᐅᓂᖓᓄᑦ ᖃᖓᒃᑰᓕᕆᓂᖅ ᐊᒻᒪ ᐊᑐᓕᖅᑎᑦᑎᓂᖅ ᐱᓕᕆᐊᕐᒧᑦ ᐊᑐᕐᓂᐊᖅᑐᑦ, ᐊᒻᒪ ᑭᒡᓕᖃᖅᓱᓂ, ᐊᐅᔭᒃᑯᑦ ᐅᒥᐊᖅᔪᐊᒃᑯᑦ ᑎᑭᑎᑕᐅᓇᔭᖅᑐᓄᑦ ᐱᖁᑏᑦ ᐊᒻᒪ ᐊᑐᖅᑕᐅᓂᐊᖅᑐᑦ. ᐊᑐᓕᖅᑎᑦᑎᑉᓗᓂ ᐱᕙᓪᓕᐊᓂᕐᒥᑦ ᐱᑎᑕᐅᔪᖕᓇᕐᓂᕐᒥᒃ ᐊᑐᕐᓗᓂ, ᓴᐲᓇᒃᑯᑦ ᐊᒻᒪ ᐱᓕᕆᐊᖅ ᓄᖅᑲᖓᑎᑦᑎᔪᖕᓇᖅᑐᑦ ᐊᖏᔪᒥᒃ ᖃᖓᒃᑰᖓᔪᓕᐊᖑᔪᖕᓇᖅᑐᓂᒃ. ᐋᖅᑭᒃᑕᐅᓂᖓ Type B ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯ ᐱᕙᓪᓕᐊᑎᑦᑎᔪᖕᓇᖅᑐᖅ, ᓴᓇᕙᓪᓕᐊᓂᕐᒥᒃ, ᐃᓂᐅᔪᒥᒃ ᐸᕐᓇᐃᓂᕐᒥᒃ, ᐊᐅᓚᔾᔭᒃᑎᑦᑎᓗᓂᓗ ᐱᓕᕆᐊᕐᒥᒃ ᐱᒋᐊᕈᓐᓇᖅᑐᒥᒃ Q1-ᒥᑦ 2018-ᒥᑦ, ᑐᓂᔭᐅᖅᑳᖅᑎᓪᓗᒍ ᐱᓕᕆᐊᕐᒧᑦ ᓇᓗᓇᐃᑯᑎ ᐅᑕᖅᑭᑎᓪᓗᒋᑦ Type A ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯᒥᒃ. ᐊᓯᐊᒍᑦᑕᐅᖅ, ᓴᐲᓇᒃᑯᑦ ᐅᑕᖅᑭᓗᑎᒃ ᐊᑕᐅᓯᕐᒥᒃ ᐅᑭᐅᒥᑦ ᐱᓂᐊᕐᓗᒍ Type A ᐃᒪᕐᒧᑦ ᓚᐃᓴᓐᓯᒥᒃ ᓴᓇᕙᓪᓕᐊᒋᐊᕐᓂᐊᓵᖅᑎᓪᓗᒋᑦ ᐊᖏᔪᒥᒃ ᐊᒃᑐᖅᓯᓂᖃᖅᑐᖅ ᑕᒪᐃᓄᑦ ᐱᓕᕆᐊᑉ ᖃᖓᒃᑰᖓᓂᓇᔭᖓᓂᒃ ᐊᒻᒪ ᐱᕈᖅᐸᓪᓕᐊᓂᕐᒧᑦ ᐃᓱᐊᕐᓂᖓᓂᒃ ᐱᓕᕆᐊᑉ.

Résumé

Le projet de la rivière Back (projet) est un projet aurifère proposé par Sabina Gold & Silver Corp. (Sabina) dans la région ouest de Kitikmeot, dans le sud-ouest du Nunavut. Le projet est situé à environ 400 kilomètres (km) au sud-ouest de Cambridge Bay, Nunavut, à 95 km au sud-est de la partie la plus au sud de Bathurst Inlet et à 520 km au nord-est de Yellowknife, dans les Territoires du Nord-Ouest. Le projet est situé principalement dans le bassin hydrographique du golfe de Queen Maud (Règlement sur les eaux du Nunavut, annexe 4) (annexe A, figure 1).

Le projet est composé de deux zones principales entrecoupées de routes de glace de l'hiver interconnectées: propriété Goose Property et l'aire de déchargement maritime située le long de la rive ouest de l'entrée méridionale de Bathurst Inlet. La majorité du réapprovisionnement annuel sera effectuée à l'aide de l'aire de déchargement maritime, située à Bathurst Inlet, et une route de glace d'hiver d'environ 160 km de long assurera la liaison entre ces sites.

L'étude de faisabilité du projet, achevée en juin 2015, a confirmé la viabilité économique et le potentiel du projet de la rivière Back. Le plan de la mine laisse présager une durée de vie de la mine estimée à 10 ans en fonction des réserves de minerai actuellement identifiées, s'élevant actuellement à 19,8 millions de tonnes destinées à une seule usine de traitement de la propriété Goose Property. La durée de vie du projet de la rivière Back, de la mobilisation et la construction en passant par les activités d'exploitation jusqu'à la fermeture et même à la post-fermeture, est de 27 ans.

Les activités de mobilisation et de construction pourraient commencer en 2018 avec la mise en place des matériaux à l'aire de déchargement maritime, suivies de trois années de construction des infrastructures de la propriété Goose Property. Aux fins de la présente demande, la première année de production est appelée « Année 1 ». La production (phase d'exploitation) se poursuivra pendant 10 ans, suivie des activités de clôture (jusqu'à huit ans). Il convient de noter que la phase d'exploitation peut être prolongée au-delà de 10 ans dans le cas où l'exploitation d'autres gisements s'avérerait économiquement viable. Sabina maintiendra ses activités de surveillance après la fermeture jusqu'à ce que les objectifs de fermeture aient été atteints.

La planification et la mise en œuvre de la construction pour le projet dépendent du transport maritime saisonnier pour soutenir la mobilisation des fournitures et du matériel et en sont limitées; attendre jusqu'à un an pour obtenir le permis d'utilisation des eaux de type A avant de commencer la construction a une répercussion considérable sur le calendrier global du projet.

Le cadre réglementaire prévu dans l'Accord du Nunavut (accord), la *Loi sur l'aménagement du territoire et l'évaluation des projets au Nunavut* (*LATEPN*) et la *Loi sur les eaux du Nunavut et le Tribunal des droits de surface du Nunavut* (LENTSN ou Loi) autorise les approbations provisoires à court terme pour les utilisations de l'eau liées aux travaux d'exploration ou de mise en valeur rattachés à une proposition dont les répercussions sur le développement sont en cours d'étude. L'OEN n'est pas restreint de délivrer un permis d'utilisation des eaux provisoire à court terme pour les travaux de mise en valeur liés au projet, à condition que la portée des travaux envisagée pour les travaux de mise en valeur soit prise en compte par la CNER dans le cadre de l'examen du projet. Sabina a récemment participé à des audiences publiques liées à l'examen des questions environnementales et à l'évaluation du projet et la recommandation de la CNER a été transmise au ministre. La décision ministérielle est en instance.

La planification et la mise en œuvre de la construction pour le projet dépendent du transport maritime saisonnier pour soutenir la mobilisation des fournitures et du matériel et en sont limitées. En adoptant une approche permissive à l'égard du développement, Sabina et le projet pourraient profiter d'une avance importante sur l'échéancier. L'obtention d'un permis d'utilisation des eaux de type B permettrait potentiellement le début des travaux de développement, de construction, de préparation du site et de mobilisation au premier trimestre de 2018, suite à la délivrance du certificat de projet, en attente du

permis d'utilisation des eaux de type A. Autrement, attendre jusqu'à un an pour obtenir le permis d'utilisation des eaux de type A avant de commencer la construction a une répercussion considérable sur le calendrier global du projet de Sabina de même que sur la viabilité économique du projet.

BACK RIVER PROJECT

Main Application Supporting Document

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Acronyms

ARD	acid rock generation
CCME	Canadian Council of Ministers of Environment
CRA	commercial, recreational, or Aboriginal
DFO	Fisheries and Oceans Canada
ECCC	Environment and Climate Change Canada
EIS	Environmental Impact Statement
EMPP	Environmental Monitoring and Protection Plan
EMS	Environmental Management System
FA	Framework Agreement
FEIS	Final Environmental Impact Statement
IIBA	Inuit Impact Benefit Agreement
INAC	Indigenous and Northern Affairs Canada
IOL	Inuit Owned Land
KIA	Kitikmeot Inuit Association
LSA	Local Study Area
ML	Metal Leaching
MLA	Marine Laydown Area
NIRB	Nunavut Impact Review Board
NRCan	Natural Resources Canada
NuPPA	*Nunavut Planning and Project Assessment Act*
NWB	Nunavut Water Board
NWNSRTA	*Nunavut Waters and Nunavut Surface Rights Tribunal Act*
OPEP	Oil Pollution Emergency Plan
PDA	Potential Development Area
PSIR	Project Specific Information Requirements
RSA	Regional Study Area
Sabina	Sabina Gold & Silver Corp. or the Company
SIG	Supplemental Information Guide
the Project	Back River Project
TK	Traditional Knowledge
TSF	Tailings Storage Facility
WIR	Winter Ice Road
WRSA	Waste Rock Storage Area

1. Introduction

The Back River Project (the Project) is a proposed gold project owned by Sabina Gold & Silver Corp. (Sabina) within the West Kitikmeot region of southwestern Nunavut. It is situated approximately 400 km southwest of Cambridge Bay, 95 km southeast of the southern end of Bathurst Inlet, and 520 km northeast of Yellowknife, Northwest Territories. The Project is located predominantly within the Queen Maud Gulf Watershed (Nunavut Water Regulations, Schedule 4) (Appendix A, base Figure 1).

The Project is comprised of two main areas with interconnecting winter ice roads (WIR): Goose Property and the Marine Laydown Area (MLA) situated along the western shore of southern Bathurst Inlet. The majority of annual resupply will be completed using the MLA, and an approximately 160 km long WIR will interconnect these sites.

The Feasibility Study for the Project, completed in June 2015, positively identified the economic viability and potential of the Project. The mine plan reflects an estimated 10 year operating mine life based on currently identified ore reserves, with a total ore feed of 19.8 million tonnes to a single Process Plant at the Goose Property. The life of the Project, from Mobilization and Construction to Operations and Closure, and Post-Closure, is 27 years as indicated in Table 1.

Mobilization and Construction activities could begin in 2018 with the staging of materials at the MLA, followed by three years of construction of the Goose Property infrastructure. For the purpose of this assessment, the first year of production is termed "Year 1". Production will carry on for 10 years followed by Closure activities (up to eight years). It should be noted that the Operations Phase may be extended beyond 10 years should additional mineral deposits become economical to be developed. Sabina will continue Post-Closure monitoring until closure objectives have been achieved.

Table 1. Summary Life of Mine

Phase	Project Year	Activities	Approximate Duration (years)
Mobilization and Construction	-4 to -1	Mobilization, earthworks, facilities, equipment, mine development	4
Operations	1 to 10	Mining, processing, progressive reclamation	10
Closure	10 to 18	Deconstruction, decommissioning, reclamation, waste rock storage area closure, water treatment	8
Post-Closure Monitoring	18 to 23	Monitoring of water quality, geotechnical, terrestrial and aquatic effects	5

The Project includes several mineral deposits at the Goose Property: Umwelt, Llama, Echo, and Goose Main. Ore will be mined using conventional open pit and underground methods, and trucked to the Process Plant. Waste rock will be stored in several designated waste rock storage areas (WRSAs) on the surface or backfilled in mined out workings. Tailings from the Process Plant will first be stored in a Tailings Storage Facility (TSF) located near the Process Plant, and then backfilled in mined out open pits.

Alternatives within the Project have been evaluated according to the following criteria: technical feasibility, economic validity, potential impacts to the environment, and amenability to reclamation.

Input received during community and government engagement and consultation has been considered in the alternatives assessments. As the Project planning advances, alternatives assessment criteria will also include community acceptability or preference, as well as the potential for enhancing socio-economic effects.

The Project will create significant socio-economic benefits. The total GDP impact is estimated to be over $500 million during the Construction Phase, and $2.5 billion over the 10 years of production. The Project will substantially benefit Nunavut, and will contribute as much as $44 million in GDP to Nunavut during the two years of construction, and as much as $380 million in GDP during the Operations Phase. Construction is estimated to result in a total of about 4,300 person-years of direct, indirect, and induced employment across Canada, and approximately 21,000 person-years over the 10-year Operations.

Sabina intends to build a mine that is safe, environmentally responsible, and beneficial to all parties involved. Sabina will balance good stewardship in the protection of human health and the natural environment with the need for economic growth. The Project will bring much needed training and employment opportunities, as well as increased investment in services to the people of the Kitikmeot region and Nunavut as a whole.

Both Project locations will have self-sufficient operating infrastructure including: accommodations, administration, laydown areas, diesel-fired power generation, emergency and medical facilities, maintenance shops, warehousing, and water and waste management facilities.

Sabina has completed Nunavut Impact Review Board (NIRB) Final Hearing on the Environmental Impact Statement (EIS) to identify and assess potential environmental and social effects resulting from the Project. On July 18, 2017, the NIRB concluded in their Revised Final Hearing Report (the Report) that the Project should now be allowed to proceed to the regulatory stage, and provided the Report with recommendations to the responsible Ministers. A ministerial decision is pending. Upon a decision from the Minister of Indigenous and Northern Affairs Canada (INAC), it is expected that the NIRB will issue a Project Certificate confirming the Terms and Conditions outlined in the Report.

Sabina has prepared a Type B Water Licence Application (Application) that meets the requirements outlined in the *Nunavut Land Claim Agreement* (Nunavut Agreement or Agreement), the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* (NWNSRTA), the Nunavut Water Board (NWB or Board) General Information Guide 4 – Completing and Submitting a Water Licence Application for a New Licence (NWB 2010a), and the NWB Mining and Milling Supplemental Information Guideline (SIG) for Mine Development MM-3 (NWB 2010b).

1.1. APPLICATION INFORMATION

Sabina is a public Canadian mining company (SBB: TSX) that is focused on the development of its 100%-owned Project. The Certificate of Incorporation is provided in Appendix C. Company contact details are as follows:

Sabina Gold & Silver Corp.
#1800 – 555 Burrard Street
P.O. Box 220 Vancouver, BC V7X 1M9
Tel: 604-998-4175 or 888-648-4218
Fax: 604-998-1051

The Project is 100% owned by Sabina. All rights, title, interests, liabilities, and obligations for the Project rest with Sabina.

Taking into account Sabina's past performance, Sabina confirms in this Application:

- it has the financial responsibility adequate to satisfy section 57 of the NWNSRTA, to complete the undertaking from Construction to Closure;
- measures are in place and will be put in place to mitigate any adverse impacts; and
- it is committed to ongoing maintenance and restoration of the proposed Back River mine site in the event of future closing or abandonment of the undertaking. Sabina is confident in assuming its position, taking into account their current, ongoing, and past performance in the Kitikmeot Region, Nunavut, and Canada.

A current list of officers of the company is provided in Appendix D.

Sabina intends to build a mine with integrity — one that is safe, environmentally responsible, and beneficial to all parties involved. To meet this commitment, Sabina has commissioned consultants and experts to contribute the development of the Application. A list of consultants and experts is provided in Appendix D.

Sabina intends to balance good stewardship in the protection of human health and the natural environment with the need for economic growth.

A copy of Sabina's audited financial statements for 2016 fiscal year can be found in Appendix E or at the following link: Financial Statements.

1.2. PROJECT SUMMARY

Provided below is an overall summary of the Project. Refer to Section 3 for specific information related to development works for Project components.

Location
Located in the western Kitikmeot Region of Nunavut at approximately 65° north latitude and 106° west longitude. About 400 km south of Cambridge Bay and 525 km northeast Yellowknife. Primary communities: Kingaok, Omingmaktok, Kugluktuk, Cambridge Bay, Gjoa Haven, Kugaaruk, and Taloyoak. The closest community areas to the Project are Kingaok, located approximately 160 km north of the Goose Property, and Omingmaktok, located approximately 250 km northeast of the Goose Property.
Reserves
Four mining areas within the Goose Property: Umwelt, Llama, Goose Main, and Echo.
Production
Ore production: 19.8 million tonnes of mill feed over the life of mine. Projected annual 350,000 ounces of gold for about up to 10 years.
Processing
Processing plant throughput of 6,000 tonnes per day. Standard gravity separation and cyanide leaching circuit. Tailings storage facilities in Goose Potential Development Area but purpose-built TSF on Crown land.
Transport
Gold doré bars shipped out by aircraft.
Roads
All-weather roads within Goose and MLA properties. Winter ice road between Goose and MLA properties. Winter ice road connection to George Exploration Camp.

Resupply
Marine supply via open water seasonal shipping (approximately 3 to 5 vessels per year). Year-round by aircraft. Winter ice road to connect the Goose and MLA properties.
Environment and Traditional Knowledge
Extensive baseline studies including terrestrial environment, wildlife (particularly caribou), marine environment, freshwater environment, air quality, human environment, and resource utilization. Traditional Knowledge information collected and analyzed through an Inuit-owned major study – Naonaiyaotit Traditional Knowledge Project. Baseline and Traditional Knowledge information formed the foundation of Environmental Impact Statement and provided information for development of mitigation and management plans.
Socio-Economics
Inuit Impact Benefits Agreement and other compensation to be finalized with the Kitikmeot Inuit Association. Employment opportunities at the site. Opportunities for local businesses. Royalties and taxes to governments.
Closure and Reclamation
Closure will ensure that the former operational footprint is both physically and chemically stable in the long-term for protection of people and the natural environment. Post-Closure environmental monitoring will continue until it has been verified that reclamation has successfully met closure and reclamation objectives.

1.3. MINE PLAN SCHEDULE

Mine development activities will occur in five phases: Development works, Construction, Operations, and Closure, with additional monitoring and mitigation continuing into Post-Closure.

Development works is defined as any construction activities as defined in Section 1.5 but specific to activities allowed under the provision of the Nunavut Agreement Article 13, Section 13.5.5 or the NWNSRTA. This phase will commence after receipt of the NIRB Final Hearing Report on the FEIS or earlier (if possible), the (new or amended) Type B Water Licence from the NWB, and the land use permits from the Kitikmeot Inuit Association (KIA) and INAC where needed.

Construction is defined as any activities undertaken for the purposes of establishing or constructing components, infrastructure, and facilities required for development of a mine. Full mine site construction will commence following receipt of a Type A Water Licence from the NWB and Land Use Permit from the KIA. Construction is proposed to take approximately four years.

Operations is defined as the period that the Process Plant is operating and producing a commodity (i.e., gold). The mine is expected to operate for 10 years.

Closure (Abandonment, Reclamation, and Closure) and **Post-Closure** is defined as an Operator ceasing operations at a facility without the intent of resuming mining activities. The expectation will be that the site will be reclaimed and post-closure monitoring will continue until it can be demonstrated that the mine site is both chemically and physically stable. As indicated in Table 1, Closure is expected to take 8 years and Sabina proposes at this time 5 years Post-Closure monitoring.

1.4. EXISTING SITE INFRASTRUCTURE

Existing site infrastructure is regulated by the NWB under water licenses:

- Water Licence 2BE-GOO1520 Goose Lake Exploration Type B licence (expires February 18, 2020)
- Water Licence 2BE-GE01520 George Lake Exploration Type B licence (expires May 29, 2020)

For additional information on existing water licenses held by Sabina refer to Section 2.3.1.

Current infrastructure on-site that is pre-existing or approved is as follows for 2BE-GOO1520:

- Camp operations at Goose Lake and small seasonal camps;
- Exploration including prospecting, geophysical surveys, geological mapping, geophysical airborne surveys, trenching, drilling on land and on ice, quarrying, and all-weather airstrip;
- All-weather single lane road connecting airstrip to Goose Lake camp;
- Operation of on-site incinerator and segregation of waste for disposal off-site;
- Operation of existing quarry;
- Hazardous material management;
- Raw water intake and use from Goose Lake, Llama Lake, Umwelt Lake, and sources proximal to drill targets; and
- Bulk Fuel Storage Facility.

The Goose Exploration Camp is located on the slope of the western shore of Goose Lake. It has the capacity to support up to 120 people and is accessible by air only using Goose Lake (ice and open water), a gravel airstrip north of Goose Lake, and an all-weather airstrip and road west of the camp. The lakeshore is approximately 50 m towards the north, and the regional topographical gradient surrounding the camp ranges from 2 to 6% towards the north. The camp is approximately 300 m in length from east to west, and 100 m wide from north to south, covering an area of 30,000 m^2. The camp facilities are located on natural tundra underlain by a 10 cm organic layer overlying silt-sand parent material. Ongoing exploration is an essential component to supporting a long-term mining operation through the identification of potential future reserves.

Current infrastructure on-site that is pre-existing or approved is as follows for 2BE-GEO1520:

- Camp operations at George Lake and small seasonal camps (Split Temporary Camp and Bathurst Inlet Temporary Camp);
- Exploration including prospecting, geophysical surveys, geological mapping, drilling on land and on ice, and quarrying;
- Operation of on-site incinerator and segregation of waste for disposal off-site;
- Hazardous material management;
- Raw water intake and use from George Lake, and sources proximal to drill targets; and
- Bulk Fuel Storage Facility.

The George Lake camp is located 400 km south of Cambridge Bay. On May 12, 2017, in accordance with Part E, Item 2 of 2BE-GEO1520, Sabina provided notification of temporary seasonal camp at the MLA.

Sabina has minimized Project footprint, reduced potential impacts to the environment, and reduced infrastructure requiring reclamation by using as much as possible, current infrastructure on-site at the Goose and George properties to support development works.

Sabina has in place the following monitoring, management, and mitigation plans in compliance with Water Licence 2BE-GOO1520 and 2BE-GEO1520:

- Abandonment and Restoration Plan (September 2012)
- Transportation Management Plan (January 2013)
- Hazardous Materials Management Plan (January 2012)
- Waste Management Plan (January 2013)
- Quarry Management Plan (January 2012) and 2013 Addendum (June 2013)
- Spill Contingency Plan (March 2014)

For clarification on application of the existing monitoring, management, and mitigation plans to the development activities refer to Section 6.

1.5. DEVELOPMENT WORKS SUMMARY

Sabina is requesting a Type B Water Licence to allow for the mobilization of equipment and materials, construction of initial infrastructure, and/or to undertake development works in support of future mine development of the Project. Refer to Table 1.5-1.

Table 1.5-1. Development Work Activities

GOOSE PROPERTY
Goose Exploration Camp Operation
Ice Airstrip Construction and Operation
Mobilize Fuel, Equipment, and Supplies
Winter Ice Road Construction and Operation
Operate Airstrip Quarry
Operate Umwelt Quarry
Locate Temporary Fuel Storage
Construct All-weather Service Roads and Water Crossings
Construct Goose Plant Site and Fuel Storage Area Pad
Airstrip Extension
Rascal Stream Re-alignment
Relocate Explosives Storage Area
Water Intake Installation
MARINE LAYDOWN AREA
Ice Airstrip Construction and Operation
Mobilize Fuel, Equipment, and Supplies (Air)
Upgrade Temporary Exploration Camp
Operate MLA Quarry
Construct All-weather Service Roads, Laydown Areas, and Fuel Storage Area
Mobilize Additional Fuel, Equipment, and Supplies (Vessels)
Install One Steel Bulk Fuel Tank
Water Intake/Discharge Installation

For additional detail on proposed development works refer to Section 3 and base Figures 2 and 3.

1.6. DEVELOPMENT WORKS SCHEDULE

Sabina estimates that development work could be initiated as early as Q1 2018. By implementing a development permitting approach, Sabina, and the Project, could yield substantial scheduling gains considering the very small construction season in the Arctic each year. The securing of a Type B Development Water Licence would allow construction, site preparation, and mobilization work to begin in Q1 of 2018, following of issuance of the NIRB final hearing decision report, and Project Certificate while awaiting the Type A Water Licence. A highlevel work schedule is provided in Table 1.6-1.

Table 1.6-1. Highlevel Work Schedule

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
GOOSE PROPERTY								
Goose Exploration Camp Operation	■	■	■	■	■	■	■	■
Ice Airstrip Construction and Operation	■	■	■					
Mobilize Fuel, Equipment and Supplies	■	■	■					
Winter Ice Road Construction and Operation	■	■	■					
Operate Airstrip Quarry (Quarry A)	■	■	■	■	■	■	■	■
Operate Umwelt Quarry			■	■	■	■	■	■
Locate Temporary Fuel Storage a		■	■	■				
Construct All-weather Service Roads and Water Crossings		■	■	■	■	■	■	■
Construct Goose Plant Site and Fuel Storage Area Pad		■	■	■	■	■	■	■
Airstrip Extension	■	■	■	■	■	■	■	■
Rascal Stream Re-alignment	■	■						
Relocate Explosives Storage Area	■	■						
Water Intake Installation					■	■		
MARINE LAYDOWN AREA								
Ice Airstrip Construction & Operation	■	■	■					
Mobilize Equipment, Equipment, and Supplies (Air)	■	■	■					
Upgrade Temporary Exploration Camp		■	■	■	■	■	■	■
Operate MLA Quarry		■	■	■	■	■	■	■
Construct All-weather Service Roads, Laydown Areas, and Fuel Storage Area		■	■	■	■	■	■	■
Mobilize Additional Fuel, Equipment, and Supplies (Vessels)						■	■	■
Install One Steel Bulk Fuel Tank					■	■	■	
Water Intake/Discharge Installation							■	■

2. Legislative and Regulatory Requirements

In accordance with the NWNSRTA and Nunavut Water Regulations, Sabina is required to submit a Type B Water Licence Application to the NWB to undertake development works in support of eventual mining of the Project under a Type A Water Licence (currently pending submission). Note: development works as authorized under the Nunavut Agreement (s. 13.5.5) or the NWNSRTA (s. 39(2)) for the purpose of this Application includes: site preparation, development works, and development works in advance of a Type A Water Licence.

On July 18, 2017 the NIRB concluded the Project could proceed to the regulatory stage. The INAC Ministerial decision and final NIRB Project Certificate are pending. The Project is subject to the land and resource management processes established by the Nunavut Agreement and more recently requirements clarified in the *Nunavut Planning and Project Assessment Act* (NuPPA). Additional provisions of the Nunavut Agreement apply with regard to the nature and interests in the land with respect to Inuit Owned Land (IOL) (surface and subsurface) and Inuit Water Rights.

This Application has been prepared in accordance with specific legislative requirements outlined in the Nunavut Agreement, the NWNSRTA, the Nunavut Water Regulations, and where applicable the NuPPA. The Application also takes into account the detailed guidance provided by the Board in Guide 4 – Completing and Submitting a Water Licence Application for a New Licence (NWB 2010a), and the Supplemental Information Guide for Mineral Exploration/Remote Camp (SIG-MM1 Guide) (NWB 2010b) modified to accommodate development works (i.e., addition of monitoring section). A copy of the concordance assessment is provided in Appendix B.

In preparing this Application, Sabina is required to satisfy the NWB minimum information requirements as follows:

Table 2-1: Nunavut Water Board Application Checklist

	Requirement	Concordance
✓	General Water Licence Application	General Application Form refer to Attachment A
✓	Supplemental Information Guidelines	Concordance Assessment Appendix B
✓	Executive Summary	Main Application Supporting Document
✓	Translated Executive Summary	Main Application Supporting Document
✓	Application Fee	Application fee paid as per Attachment B2.
✓	Water Use Fee	297 m^3 water requested. Water Use fees paid to the NWB. Water Use Fee paid as per Attachment B2.

For a full listing of regulatory permits, authorization, or licenses for the Project development refer to Appendix F.

2.1. NUNAVUT PLANNING COMMISSION

Mine development, exploration, and associated activities in Nunavut are subject to land use planning conformity determination by the Nunavut Planning Commission in accordance with Article 11 of the Nunavut Agreement and the NuPPA. The Project is in a designated area where no land use plan exists; therefore, a conformity determination from the Nunavut Planning Commission is not required.

2.2. NUNAVUT IMPACT REVIEW BOARD

In accordance with Article 12 of the Nunavut Agreement and the *Nunavut Planning and Project Assessment Act* (Part 3) the Project is subject to development impact review.

Sabina commenced the Environmental Assessment of the Project on June 14, 2012 with the submission of a Project Proposal to the NIRB (NIRB File No. 12MN036). A summary of the procedural history for the Project is provided in Appendix G.

In brief, the NIRB issued a screening decision report in September 2012 to the Minister recommending the Project proceed. The Minister issued a decision in support of the NIRB screening report in December 2012. The NIRB provided Project Guidelines for the production of an EIS on April 30, 2013. In January 2014, Sabina submitted a conformant DEIS which included a Draft Type A Water Licence Application for Mine Development for consideration by the NIRB and NWB, respectively.

Initially and early in the review process, Sabina requested that the Project be considered by the NIRB and NWB concurrently, consistent with the Detailed Coordinated Process Framework for NIRB Reviews and NWB Licensing (April 2012).

Technical Meetings, a Community Round-Table and Pre-hearing Conference on the Draft Environmental Impact Statement were completed on November 20, 2014. Following an information request and technical review period, on December 19, 2014, the NIRB issued a Technical Meeting/Prehearing Conference Report Decision that included the NWB Technical Review requirements for a Type A Water Licence.

Following receipt of the NIRB's Pre-hearing Conference Report Sabina submitted the Final Environmental Impact Statement (FEIS) on November 23, 2015, which was deemed conformant to the Project Guidelines. Of note, Sabina advised NIRB that moving forward in development of a FEIS that the Project scope was reduced to remove activities associated with development of George Property. In addition, Sabina no longer requested the NIRB and NWB process the application concurrently.

The Final Hearing concluded on April 30, 2016 with the KIA, Government of Nunavut, and all selected representatives of the Kitikmeot communities recommending that the Project should be allowed to proceed. In addition, the departments of INAC, Fisheries and Oceans Canada (DFO) and the Canadian Coast Guard, Environment and Climate Change Canada (ECCC), Natural Resources Canada (NRCan), and Transport Canada all confirmed that they had no outstanding issues to be addressed at the Environmental Assessment phase. On June 15, 2016 the NIRB released their Final Hearing Report to the Minister of INAC (the Minister), which recommended that the Project should not be approved to proceed at this time. On January 12, 2017 the Minister directed the NIRB to reconsider the Project under section 12.5.7(e) of the Nunavut Agreement due to deficiencies in the NIRB Final Hearing Report.

On February 15, 2017 Sabina submitted an FEIS Addendum to the NIRB in response to the NIRB direction letter to address issues and concerns identified by the Board, and address particular issues highlighted within the Minister's (January 12, 2017) referral letter.

A subsequent Technical Meeting was held by NIRB on May 24, 2017 (via telecom) with Final Hearing held on May 31 to June 2, 2017 in person in Cambridge Bay, Nunavut. The NIRB Revised Final Hearing report was issued on July 18, 2017 recommending the Project be approved to proceed. The INAC Ministerial decision and final issuance of a Project Certificate by NIRB are pending.

Documentation supporting the environmental assessment and review of the Project are available on the NIRB public registry.

2.3. NUNAVUT WATER BOARD

This section outlines current active water licenses issued to Sabina, Sabina's future needs, and the recent regulatory history related to this Application. Refer to Appendix G for regulatory history.

2.3.1 Existing Water Licences

Table 2.3-1 provides a summary of existing exploration permits for the Project area. Sabina intends to retain Type B Licence 2BE-GOO1520, 2BE-GEO1520, and 2BE-MLL1217 for ongoing exploration activities.

Table 2.3-1. Existing Permits for the Project

Licence	Expiry	Activities/Scope	Sabina Consideration
2BE-GOO1520	February 18, 2020	Exploration on Goose Property	Request permit be maintained as stand-alone Type B
2BE-GEO1520	May 29, 2020	Exploration on George Property	Request permit be maintained as stand-alone Type B
2BE-MLL1722	June 29, 2022	Exploration on Wishbone-Malley Property	Request permit be maintained as stand-alone Type B
8BC-BRP ___	XX (Pending)	Mobilization/Site Preparation	To be determined

For all development activities, Sabina has revised the 8BC-BRP--- application submitted to the NWB for consideration in October 2014. The revised application form is provided as attachment A to the cover letter submitted with the Application.

Looking forward, Sabina intends to submit a Type A Water Licence for mining and supporting infrastructure for the Project. Sabina expects that if this application is issued and approved by the NWB, any appropriate terms and conditions will be incorporated where appropriate into the Type A Water Licence when issued.

All current licenses are in good standing with no compliance issues identified.

2.4. NATURE OF INTEREST IN THE LAND AND WATER

Nunavut mining and exploration activities are regulated by INAC. This federal department ensures compliance with the Canada Mining Regulations across the territory. There are three main types of mineral interests under the Canada Mining Regulations: a mineral claim, a prospecting permit, and a mineral lease, also referred to as mining lease. Surface rights on Crown Land are vested in the federal government and in the department of INAC. Access to and use of these surface lands requires a land use permit, licence, or commercial lease issued by the department of INAC.

Under the Nunavut Agreement enacted in 1993, the mineral rights for about 2% of the territory have been entrusted to the Inuit. Under the Agreement, the Designated Inuit Organization is Nunavut

Tunngavik Inc.; it negotiates terms and conditions for those blocks that are not under federal jurisdiction. The deposits at the Goose Property lie on grandfathered lease claims and on IOL sub-surface. Surface rights for IOL are vested in the KIA, which administers the access and management of the lands for the benefit of the Inuit of the region. Access to and use of surface lands requires an Inuit Land Use permit, licence, or commercial lease issued by the KIA. Table 2.4-1 provides a list of current authorizations and permits held by Sabina as of August, 2017.

Table 2.4-1. Current Authorizations and Permits (as of August 2017)

Permit	Expiry (year-mo-day)	Agency	Description
KTL204C012	2017-12-12	KIA	Boulder: Staking/prospecting, exploration (ground/air geophysics), geophysical survey, gridding and drilling.
KTL204C020	2017-12-12	KIA	Boot: Exploration (air/ground geophysics), staking, prospecting, fly/survival camp and drilling.
KTL304C017	2017-12-12	KIA	Goose: Staking/prospecting, exploration (ground/air geophysics), drilling, bulk sampling, bulk fuel storage, camp, winter road, all-weather airstrip and connecting road.
KTL304C018	2017-12-12	KIA	George: Staking/prospecting, exploration (ground/air geophysics), drilling, bulk sampling, bulk fuel storage, camp, winter road, all-weather airstrip.
KTL312C004	2017-12-12	KIA	Wishbone/Malley: Exploration (air/ground geophysics), staking, prospecting, fly/survival camp and drilling
KTL304F049	2017-12-12	KIA	Winter road connecting Bathurst Inlet - Goose and George.
KTP11Q001	2017-12-12	KIA	Goose rock quarry.
KTP12Q001	2017-12-12	KIA	Goose Airstrip borrow area.
KTP12Q002	2017-12-12	KIA	George borrow quarry.
N2011F0029	2018-12-13	INAC	Winter Road connecting George-Goose.
N2017F0016	2022-07-20	INAC	Winter Road connecting Bathurst Inlet - Back River Project.
N2012C0003	2019-02-06	INAC	Wishbone-Malley Mineral Exploration activities on Crown Land
N2016C0011	2021-10-26	INAC	Back River Exploration activities.
2BE-GOO1520	2020-02-18	NWB	Goose water licence.
2BE-GEO1520	2020-05-29	NWB	George water licence.
2BE-MLL1722	2022-06-29	NWB	Wishbone-Malley water licence.

Sabina holds six claim groups in the region. These are a mix of federal mining leases and federal mineral claims, as shown in Figure 2.4-1 with land tenure provided in Appendix H. All leases and claims are 100% owned by Sabina, and are currently in good standing. Sabina's mineral tenure is divided into two distinct areas: Back River and Wishbone. There are also four exploration prospects: Boot, Boulder, Del, and Bath, which cover an area of 133,470 acres or 54,040 hectares.

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February 2017

340000 380000 420000

7360000 7320000 7280000 7240000

N

Marine Laydown Area

Bath

Tahikafalok (Bathurst Lake)

George

BACK RIVER

Tikigak

WISHBONE

Boulder

Boot

Tahikafalok Nahik (Propeller Lake)

Goose

Hanningayuk (Back River)

Hanningayuk (Beechey Lake)

Del

Malley

Needle

Mineral Tenure
- Claim
- Lease

Inuit Owned Land
- Surface
- Surface and Subsurface

1:500,000

Projection: NAD83 UTM ZONE 13N

0 10 20

Kilometers

Sabina GOLD & SILVER CORP.

Back River and Wishbone Mineral Tenure

2.4.1. Inuit Owned Land and Inuit Water Rights

Inuit Beneficiaries in the Kitikmeot Region are represented by the KIA. The Project is located predominantly on IOL; the Project can only proceed with the full consent of the Inuit as provided by the KIA working with Nunavut Tunngavik Inc. As required under Article 26 of the Nunavut Agreement, Sabina must have an Inuit Impact and Benefits Agreement (IIBA) with the KIA prior to the commencement of the full Project construction. In 2016, Sabina formally commenced its negotiations with the KIA on land tenure and IIBA terms for the Project. The parties continue to advance a detailed non-binding term sheet, which will form the basis to finalize definitive agreements once completed. Sabina is committed to working with the KIA to complete the term sheet and the definitive agreements with an objective of formally outlining Sabina's social, economic, and environmental commitments to the people of the Kitikmeot Region. Sabina believes that it is reasonable to expect, assuming that progress on the negotiations continues at the current pace, that these agreements will be successfully completed before the end of 2017, and in any event no later than prior to issuance of the Type A Water Licence.

On Oct. 18, 2017, Sabina and the Kitikmeot Inuit Association announced the execution of a binding term sheet setting forth the principle terms that are to be included in a definitive Framework Agreement (FA). The FA, upon completion, would be a comprehensive agreement which would set out rights and obligations with respect to surface land access on Inuit owned land and will include an IIBA as well as a water compensation agreement, among other obligations required by the Nunavut Agreement. Under the binding term sheet, the parties have agreed to negotiate in good faith towards completing the FA and the other definitive agreements contemplated in the term sheet. Work is ongoing on the FA and definitive agreements, which are targeted to be completed by early in 2018.

Key terms of the binding term sheet include:

- Surface land rights tenure and obligations, including commercial lease parameters;
- Reclamation obligations and security;
- Payments terms for surface land rights and IIBA;
- Payment terms for water and wildlife compensation;
- IIBA implementation process and ongoing communication and monitoring;
- Inuit employment objectives;
- Inuit labour relations, including employment rotation, health and safety and language objectives;
- Inuit training and education objectives, including scholarship funding objectives;
- Inuit community and cultural objectives;
- Inuit business and contracting objectives, including subcontractors; and
- Inuit environmental monitoring objectives, including identification, protection and conservation of archaeological sites and specimens.

Concurrent with the IIBA, Sabina will also need to reach a Water Compensation Agreement for the Project with the KIA in accordance with the requirements of Article 20 of the Nunavut Agreement. The Water Compensation Agreement will address Inuit Water Rights for the Construction, Operations, and Decommissioning of the proposed Mine site. Sabina is aware that the NWB is precluded from issuing a water licence for the Project if a water compensation agreement has not been reached with the KIA. Therefore, consistent with development of the IIBA, Sabina intends to finalize the Water Compensation Agreement prior to a final Type A Water Licence hearing on the Application.

The financial compensation associated with quarry and borrow material extraction will be negotiated confidentially and defined with the KIA during the regulatory process.

The Project Specific Information Requirements (PSIR) Tab 9 in Appendix B Concordance assessment outlines agreed upon Terms & Conditions and Commitments made by Sabina as part of the Environmental Assessment Process by NIRB. The PSIR identifies where Sabina has addressed the applicable KIA terms and conditions or conditions specific to this Application.

2.4.2. Crown Land

INAC manages and regulates surface and subsurface land on areas defined as "Crown" lands. In addition INAC has a role to play in water management and water quality protection of water in Nunavut as water is vested in the Crown. Permits and/or leases held by INAC are shown in Table 2.4-1.

The PSIR Tab 9 in Appendix B Concordance assessment outlines agreed upon Terms & Conditions and Commitments made by Sabina as part of the Environmental Assessment Process by NIRB. The PSIR identifies where Sabina has addressed the applicable INAC terms and conditions or conditions specific to this Application.

2.4.3. Existing or Other User Water Rights

Presently, there are no properties adjacent to the proposed Mine or MLA that have any influence on the Project. No trap lines have been identified within or directly adjacent to the proposed Mine or MLA footprint. No third party or individuals have been identified, or have come forward as existing or other fresh water users with rights that might be impacted by the Project. Sabina knows of no other freshwater water rights that must be secured for the Project.

2.5. OTHER AUTHORIZATIONS

A full list of applicable acts, regulations, and guidelines that govern the Project are provided in Appendix F.

Additional authorizations and/or submissions may be required to the following organizations:

- Fisheries and Oceans Canada;
- Environment and Climate Change Canada;
- Natural Resources Canada;
- Transport Canada; and
- Canadian Coast Guard.

2.5.1. Fisheries and Oceans Canada

Fisheries protection and pollution prevention measures for the Project are subject to the requirements of the *Fisheries Act* s.35(1), which states that no person shall carry on any work, undertaking, or activity that results in serious harm to fish that are part of a commercial, recreational, or Aboriginal (CRA) fishery, or to fish that support such a fishery. The list of development work activities within this Application is not expected to cause serious harm to fish that are part of CRA fisheries, or to fish that support the CRA fisheries; however, Sabina will work with DFO through the Self-Assessment and Request for Review processes for these activities. Sabina will follow DFO measures to avoid causing harm to fish and fish habitat (formerly "operational statements") with respect to project planning, erosion and sediment control and shoreline stabilization, and avoidance of in-water construction during sensitive life

stages for fish for proposed water works for development activities; where activities within this application include construction below the high water mark on two fish-bearing streams (i.e., culvert crossings for Rascal Stream East, and Gander Outflow). It is not anticipated that an authorization will be required under the *Fisheries Act* for the proposed development activities undertakings, works, or activities.

Note that a *Fisheries Act* Authorization application will be prepared during the permitting phase of the Project upon continued engagement with DFO and the KIA, and concurrent with the water licence regulatory review for activities with the potential to result in Serious Harm to Fish. These activities may include the fish-out and dewatering of Llama and Umwelt lakes, and the future diversion of flows from Rascal Stream East to Rascal Stream West. In addition, Sabina is required to comply with s.36(3) of the *Fisheries Act*, where subject to deposits authorized by regulation, no person shall deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water.

Sabina is also aware that under the NWNSRTA s.73 where the NWB issues a licence in respect of any water to which regulations made under subsection 36(5) of the *Fisheries Act* apply, any conditions in the licence relating to the deposit of waste in those waters shall be at least as stringent as the conditions prescribed by those regulations.

A number of commitments made during the review of the Project but not explicitly addressed in this application will be addressed during the regulatory process stages of the Type A Water Licence Application review. The PSIR Tab 9 in Appendix B Concordance assessment outlines agreed upon Terms & Conditions and Commitments made by Sabina as part of the Environmental Assessment Process by NIRB. The PSIR identifies where Sabina has addressed the applicable DFO terms and conditions or conditions specific to this Application.

2.5.2. Environment and Climate Change Canada

Environment and Climate Change Canada's mandate under the *Department of Environment Act* is to preserve and enhance water, air and soil quality, conserve and protect: migratory birds, species at risk, flora and fauna, and water resources, provide meteorological information, and coordinate federal environmental policies and programs. In fulfilling their mandate, ECCC is responsible for the *Canadian Environmental Protection Act*, the *Fisheries Act* – pollution prevention measures, and the *Fisheries Act – Metal Mining Effluent Regulations*.

Commitments made during the review of the Project will be addressed during the regulatory process stages of the Type A Water Licence Application review. Development activities are not expected to require authorization or approvals from ECCC.

Sabina has agreed to design and implement a stand-alone marine monitoring program at the MLA to identify potential impacts of the Project on the marine environment, and inform adaptive management actions. The monitoring program shall be in line with the proposed monitoring in the Aquatic Effects Monitoring Plan for the Type A Water Licence Application (pending September 2017).

Sabina intends to continue ongoing marine monitoring data collection under development works in support of the Project.

The PSIR Tab 9 in Appendix B Concordance assessment outlines agreed upon Terms & Conditions and Commitments made by Sabina as part of the Environmental Assessment Process by NIRB. The PSIR

identifies where Sabina has addressed the applicable ECCC terms and conditions or conditions specific to this Application.

2.5.3. Natural Resources Canada

Natural Resources Canada is the established leader in science and technology in the fields of earth sciences, energy forests, and minerals and metals. Their mandate is to enhance the responsible development use and competitiveness of Canada's natural resources and products. For the Project, NRCan has a regulatory role as the responsible authority for the *Explosives Act* and Regulations. In addition, NRCan has provided scientific expertise on surficial geology, permafrost and terrain conditions and hydrogeology throughout the environmental assessment review of the Project.

Commitments made during the review of the Project will be addressed during the regulatory process stages of the Type A Water Licence Application review. Development activities are not expected to require authorization or approvals from NRcan. Development works related to quarry and blasting will be done under existing authorization from NRcan.

Sabina is committed to compliance with the *Explosives Act* and Regulations. An Explosives Management Plan will be provided to NRCan for review and approval when required.

The PSIR Tab 9 in Appendix B Concordance assessment outlines agreed upon Terms & Conditions and Commitments made by Sabina as part of the Environmental Assessment Process by NIRB. The PSIR identifies where Sabina has addressed the applicable NRCan terms and conditions or conditions specific to this Application.

2.5.4. Transport Canada and Canadian Coast Guard

The Project may be subject to the *Navigation Protection Act*. Sabina has met with Transport Canada to explore the implications of applying the *Navigation Protection Act* to the Project. The *Navigation Protection Act* which came into force on April 1, 2014, is the result of the 2012 amendments made to the *Navigable Waters Protection Act*.

At this time, Sabina does not believe that the small lakes, ponds, and streams within the Project's footprint are navigable waterbodies. Transport Canada has recommended that Sabina submit a Notice of Works to the Navigation Protection Program for any dewatering so a navigation assessment can be completed on both Umwelt and Llama lakes. In addition, Sabina will also submit a notice of works to the Navigation Protection Program for MLA lightering barge infrastructure. Sabina acknowledges that any infrastructure within the marine environment is outside the jurisdiction of the NWB. Sabina is committed to providing the requested information when final design details for Project components are available.

Sabina will continue to work with Transport Canada to determine appropriate mitigation measures and strategies to protect navigable waterbodies and ensure compliance with the *Navigation Protection Act*. The TSF and the WRSAs are not sited within any waterways, and therefore do not have the potential to affect navigation.

Transport Canada and the Canadian Coast Guard have the expertise, jurisdiction, and mandate to advise on shipping and marine spill response, in accordance with the *Canada Shipping Act* and its regulations, which include numerous specific requirements relating to shipping in the Canadian Arctic and marine spill prevention and response.

Sabina notes that the Canadian Coast Guard is the lead federal agency for all ship-source spills or pollution incidents in water under Canadian jurisdiction. Sabina recognizes its responsibility to manage

the risks effectively and to be prepared to respond in the event of a spill. Response to spills that occur during the act of shipping will be covered under the vessel's Shipboard Oil Pollution Emergency Plan. The Shipboard Oil Pollution Emergency Plan is a required document that must be reviewed and approved by Transport Canada.

The *Canada Shipping Act,* 2001, stipulates that operators of designated oil handling facilities must have an Oil Pollution Emergency Plan (OPEP). An OPEP outlines potential spill scenarios, and provides specific procedures for responding to spills while minimizing potential health and safety hazards and environmental damage. It provides instructions to guide all personnel in emergency spill response situations, defines the roles and responsibilities of management and responders, and outlines the measures taken to prevent spills, the related exercise and evaluation program, and the mechanism for regular updates to the plan. An OPEP must be reviewed and approved by Transport Canada. Since the FEIS Final Hearing, Sabina has updated the OPEP to include more detail on bulk fuel transfer spill prevention measures (OPEP Section 11.3.2), marine mammal and fish sensitivities (OPEP Section 5.3.6), spill response kit locations at the MLA (OPEP Annex 2), guidelines for responding to multiple emergencies (OPEP Section 7.7), large spills (OPEP Section 10.1), and unexpected ice conditions (OPEP Section 5.3.5).

Sabina proposes mobilization of fuel equipment and supplies for storage at the MLA. As such the OPEP will be provided to Transport Canada prior to any shipping to site, and the Shipboard Oil Pollution Emergency Plan will be on hand with the proposed shipping vessel.

Commitments made during the review of the Project will be addressed during the regulatory process stages of the Type A Water Licence Application review. Development activities are not expected to require authorization or approvals from Transport Canada.

The PSIR Tab 9 in Appendix B Concordance assessment outlines agreed upon Terms & Conditions and Commitments made by Sabina as part of the TC/Canadian Coast Guard terms and conditions or conditions specific to this Application.

2.6. CONSULTATION

Public consultation and engagement is a legal requirement in Nunavut, an industry best practice, and an important corporate commitment. Effective public consultation and engagement helps ensure that community members are informed and knowledgeable about proposed projects, that community support for those projects is more readily obtained, and sustainable development goals are achieved. A key goal of Sabina's public consultation and engagement program has been to ensure the Company obtains a "social licence to operate", by securing the support of a majority of residents from potentially impacted local communities.

To obtain this goal, a number of process goals have been followed:

- identification and prioritization of communities and community stakeholder groups;
- developing an understanding of key community and stakeholder views regarding the Project;
- addressing community and stakeholder issues and expectations; and
- continuous improvement.

The establishment of open, respectful, and jointly beneficial relationships with local communities and stakeholders has been, and will continue to be, key priorities for Sabina. Sabina further recognizes the unique characteristics of the Inuit lifestyle and has strived to engage local communities in a culturally sensitive and appropriate manner. The Company is committed to maintaining ongoing dialogue with local

communities and will continue to be open to suggestions as to how its public consultation and engagement activities can be improved.

Sabina has, and will continue to engage with the KIA, which is the primary Inuit organization with rights and responsibilities in the Project area. Kitikmeot Region communities have also been a key focus of Sabina's public consultation and engagement activities. Various levels of consultation and engagement were employed by Sabina depending upon a community's proximity to the Project. The communities that have been the focus of Sabina's public consultation and engagement program include:

- Cambridge Bay (Ekaluktutiak);
- Kugluktuk (Coppermine);
- Kingaok (Bathurst Inlet);
- Omingmaktok (Bay Chimo);
- Gjoa Haven (Ursuqtuq);
- Taloyoak (Spence Bay);
- Kugaaruk (Pelly Bay);
- Yellowknife; and
- Iqaluit.

Sabina's public consultation and engagement program is multi-faceted; it includes a commitment to cultural sensitivity and inclusiveness, and the use of various community engagement methods and tools. These include public meetings, meetings with key stakeholders and stakeholder groups, meetings with community advisory groups in Cambridge Bay and Kugluktuk, Project site visits, social media (e.g., websites and Twitter/email/RSS feeds), a Project newsletter, other distribution materials, establishment of a Cambridge Bay office, use of local employees and contractors including a Cambridge Bay-based Community Liaison Officer, execution of Traditional Knowledge (TK) studies in partnership with the KIA and Kugluktuk Hunters' and Trappers' Organization, execution of various socio-economic/environmental studies, the eventual negotiation of an IIBA with the KIA, other forms of community engagement (e.g., radio shows, trade show participation, cross-cultural training, and community advertisements), and community donations.

Sabina began its public consultation and engagement program in June 2012. Since that time, 329 meetings and major correspondences with Project stakeholders have occurred (Table 2.6-1). Meeting minutes were taken during many of Sabina's public consultation and engagement activities, and have been incorporated into a public consultation database that contains 165 topic directories. This database has been analyzed to identify key issues and concerns amongst communities and stakeholders, which can be categorized under three main themes: community benefits and engagement, employment and training, and environmental management and monitoring.

Table 2.6-1. Community Meetings and Major Correspondence, as of July 17, 2017

	Meetings	Major Correspondences	TOTAL
Cambridge Bay	64	9	73
Kugluktuk	61	11	72
Bathurst Inlet & Bay Chimo	11	7	18
Gjoa Haven	19	5	24
Taloyoak	23	4	27
Kugaaruk	18	4	22
Other (e.g. northern trade shows & conferences, SEMCs, newsletters)	39	13	52
Yellowknife / Other Locations in the NWT	16	25	41
TOTAL	**251**	**78**	**329**

Key issues identified through public consultation and engagement, and Sabina's commitments to addressing these issues can be found in FEIS Volume 3, Chapter 1, Section 1.6.3, and FEIS Volume 3, Chapter 1, Table 1.6-1.

3. Development Works

Development works associated with the Goose Property and MLA are summarized below. Sabina believes the development works are appropriate as the activities:

- Facilitate the limited transport and storage of equipment and materials related to the Project, in recognition of the seasonal constraints imposed by the Arctic conditions. This includes the transport of fuel, equipment, and supplies, construction of WIRs and airstrips, establishment of laydown areas, all-weather services roads, and related use of existing or new quarry and borrow sources.
- Facilitate scientific research and ongoing baseline data collection within the defined project area to support where possible commitments made for the Project under Review.
- Will support continued exploration and additional sampling.

3.1. GOOSE PROPERTY DEVELOPMENT WORKS

Activities and works already scoped and approved under the existing NWB Type B Water Licence 2BE-GOO1520 include:

- Goose Exploration Camp and infrastructure operation;
- Ice airstrip construction and operation;
- Equipment, fuel, and supplies mobilization;
- Winter ice road construction and operation;
  - Goose Exploration Camp to Airstrip Quarry Winter Ice Road;
- Airstrip Quarry operation; and
- Temporary fuel cache storage.

These approved activities have been included within this Application document to provide clarity on overall proposed activities; however, do not require additional authorization. For existing permits, authorizations, and approvals refer to Section 2.3.1.

Proposed new development works being requested for consideration in this Application include:

- Winter ice road construction and operation;
  - Goose Exploration Camp to Umwelt Quarry Winter Ice Road;
  - Goose Exploration Camp to Explosives Storage Winter Ice Road;
- Umwelt Quarry operation and expansion of the Airstrip Quarry;
- All-weather service road construction and operation, including associated water crossings;
- Goose Plant Site and Fuel Storage Area Pad initial construction;
- Airstrip extension;
- Rascal Stream re-alignment;
- Relocate Explosives Storage Area; and

- Water Intake installation.

3.1.1. Approved Activities and Works under 2BE-GOO1520

3.1.1.1. Goose Exploration Camp and Infrastructure

The operation of the Goose Exploration Camp and associated infrastructure will be required for the duration of the development works. Operation, maintenance, and minor enhancements of the Goose Exploration Camp and associated infrastructure is currently a permitted activity under 2BE-GOO1520, and all planned activities will be consistent with activities undertaken in previous years. No additional water usage or waste management is requested for camp services under 2BE-GOO1520 (Part C, Item 1). Refer to Table 3.3-1 for summary of water use.

3.1.1.2. Ice Airstrip

The construction and operation of the Goose Lake ice airstrip will be required to supply development works, as well as resupply ongoing exploration activities and baseline data collection. Construction and operation of the ice airstrip is currently a permitted activity under 2BE-GOO1520, and all planned activities will be consistent with activities undertaken in previous years. No additional water usage is currently anticipated.

3.1.1.3. Fuel, Equipment, and Supplies Mobilization

Fuel, equipment, and supplies to support development works, as well as ongoing exploration and baseline data collection, will be brought to Goose Property via the ice airstrip and/or all-weather airstrip. Mobilization is currently a permitted activity under 2BE-GOO1520, and all planned activities will be consistent with activities undertaken in previous years. No additional water usage or waste management is currently anticipated.

Consistent with water licence 2BE-GOO1520, Arctic-grade diesel fuel required for activities will be flown to site using a Boeing 737 or smaller aircraft equipped with a fuel bladder or utilizing drums. All fuel to be used during the development works will be stored within existing fuel storage located at the Goose Exploration Camp. The Goose Exploration Camp fuel storage area is currently comprised of thirteen 75,000 L double-walled fuel tanks in tertiary containment and one 40,000 L fuel bladder.

Prepackaged explosives will continue to be delivered by air transport. Two magazines are currently located at the Goose Exploration Camp; it is anticipated that additional magazines will be required. The design of all explosive storage facilities will meet government regulations and will be located according to required separation distances as regulated by the Explosives Regulatory Division of NRCan. For additional information, see Section 2.5.3.

Existing equipment available at the Goose Exploration Camp will be used to support development activities (Table 3.1-1). Additional equipment of similar nature to that currently on-site may be mobilized.

Table 3.1-1. Existing Inventory

Quantity	Description
1	Loader - Cat 966H
1	Dozer - Cat D6N
1	Powerscreen - Mobile Crusher
1	Powerscreen - Mobile Screener
1	Powerscreen - Crusher Jaw
1	Fuel Truck
2	289 Caterpillar skidsteers
1	Loader - Cat IT 28
1	Telehandler – JCB
2	Low bed trailers
1	Challenger - Cat 755B
1	Tractor / Trailer
3	Ford Pick-ups
2	Dozer - Cat D7
1	Excavator - Cat 320E
2	Articulated Trucks - Cat 730C
1	Grader - Cat 140M
1	Packer - Cat CS563
1	Water Truck
2	Camp Genset - 125kw
2	Primary generator (500kW)
1	Auxiliary generator (400kW)
31	Snowmobiles
2	ATVs
1	Kubota
8	Boats + motors
1	Waste incinerator

3.1.2. Proposed New Development Works at Goose Property

3.1.2.1. Winter Ice Roads

Winter ice roads, totaling approximately 9 km in length, will be required to connect and access the proposed quarries at the Goose Property. These WIRs will allow development works to commence in the winter season, reducing potential environmental effects by avoiding any potential overland rutting or gouging. Short land based portages may be developed to support winter ice road development, Sabina will confirm all appropriate land use permits are in place prior to construction. For additional information related to environmental baseline and effects refer to Section 5. Efforts will be made to limit distances developed by utilizing one WIR to access multiple locations, or by utilizing other infrastructure (i.e., the permanent airstrip) to shorten distances. The WIRs would be used to temporarily connect three key areas (base Figure 2):

1. Goose Exploration Camp to Airstrip Quarry (Winter Ice Road 1): This WIR will provide continued access to the existing quarry and source material needed for development works. Construction and operation of this WIR is currently a permitted activity under water licence 2BE-GOO1520, and all planned activities will be consistent with activities undertaken in previous years. No additional water usage is currently anticipated.
2. Goose Exploration Camp to Umwelt Quarry/Goose Plant Site (Winter Ice Road 2a/2b): This WIR will provide new access to Umwelt Quarry/Goose Plant Site and source material needed for development works.
3. Goose Exploration Camp (or other WIR) to Explosives Storage (Winter Ice Road 3)

Consistent with WIR construction under 2BE-GOO1520, all WIRs will be constructed using the Government of Northwest Territories published Northern Land Use Guidelines (GNWT 2015). For overland construction, equipment with low ground bearing pressure is initially used to travel the route to clear excess snow from the alignment if required and to build an initial cover of ice and snow on top of the tundra; this creates a frozen road base upon which heavier equipment can travel without affecting the natural ground surface. Once this frozen road base is established, equipment is used to build up the road base into a smooth-running ice surface using consecutive thin layers of snow and water as fill. Where feasible, the road base is built up to a level that is above the grade of the surrounding tundra. Constructing this elevated road base will greatly assist in subsequent maintenance by preventing loose, blowing snow from accumulating on the roadway. The Land Use Guidelines (GNWT 2015) require a minimum of 10 cm compacted ice and snow coverage on the winter road travel way to adequately protect the tundra.

Construction on ice involves three main steps. The first step is the initial measurement (profiling) of ice thickness. This profiling should be carried out using Ground Penetrating Radar ice profiling. Based on the ice thickness measured, load calculations are conducted to ensure that the ice will support the weight of the snow clearing and construction equipment. Depending on the equipment to be used, normally a minimum ice thickness of 40 to 50 cm is required to begin construction. Sufficient width also assists in preventing the travel way from being "blown in" with snow during storms and high wind events, thereby reducing repeated snow clearing efforts and operational delays for freight traffic. Once the ice has been cleared of snow along the route, the ice thickness will increase naturally at an enhanced rate due to direct exposure to cold ambient air temperatures. The rate of ice growth can also be enhanced by flooding the ice sheet. Regular ice profiling will be conducted throughout the WIR construction and operations to monitor ice growth and to maximize the safe loading capacity of the ice.

To support this work, water use for construction will be necessary. Water use required for construction of WIR No. 1 is currently permitted under 2BE-GOO1520 (Part C, Item 1; miscellaneous industrial use); no additional water volume is requested under this Application for WIR No. 1. Water use required for construction and operation of WIRs No. 2 and No. 3 are estimated at 297 m^3/day total. All water will be sourced from Goose Lake. For the purpose of the development works, a maximum water usage of 297 m^3/day for WIR construction and maintenance is requested in this Application. Refer to Table 3.3-1 for summary of water use requirements.

3.1.2.2. Quarries/Borrow Sources and Overburden

Two quarries have been identified for use at the Goose Property: the existing quarry next to the airstrip (Airstrip Quarry) incorporated within 2BE-GOO1520, and a new quarry located within the footprint of the future Umwelt open pit (base Figure 2). Up to 625,000 m^3 of rock will be required to support development works and this material will be extracted from one or both of these quarries. Sabina does not anticipate the total volume of rock extracted from one or both quarries to exceed 625,000 m^3.

Sabina currently holds a Quarry Permit Agreement (KTP11Q001) with the KIA for the existing Airstrip Quarry at the Goose Property. The coordinates of the existing and proposed quarries are presented in Table 3.1-2. An amendment will be sought from the KIA for the Goose Property's Airstrip Quarry Permit Agreement, and a new agreement will be sought to develop a rock quarry at the Umwelt deposit.

Table 3.1-2. Summary of Existing and Proposed Quarries

Aggregate Source	Permit	Material	Approved Volume (m^3)	Maximum Requested Volume (m^3)[(a)]	Permit Area Boundaries
Airstrip Quarry (Existing Quarry)	KTP11Q001/ Type B Water Licence 2BE-GOO1520	Rock	125,000	625,000	See QMP
Umwelt Quarry	In application	Rock	0	625,000	See QMP

(a) Combined maximum volume from Airstrip Quarry and Umwelt Quarry not to exceed total volume of 625,000 m^3

Detailed geochemical characterization studies to assess the metal leaching/acid rock generation (ML/ARD) potential of quarry rock associated with the Goose Property have been carried out; results can be found in the Geochemical Characterization Report (FEIS Volume 2, Appendix V2-7D). The testing program included acid-base accounting and trace element analyses on 40 samples from the Airstrip Quarry, and 16 samples from the proposed Umwelt Quarry.

The Airstrip Quarry is mainly comprised of turbiditic meta-sedimentary rocks (greywacke and mudstone) with minor amounts of banded iron formation, large intrusive gabbro dykes, and smaller felsic to intermediate dykes. Results indicate that rock from the Airstrip Quarry has a variable potential for ARD. Based on these results, Sabina has committed to complete further testing within the existing quarry footprint to further delineate potentially acid generating materials in advance of, or concurrent with, sourcing additional material from this quarry. Only non-potentially acid generating quarry rock will be used for construction. For additional information, refer to the Quarry Management Plan.

The location of the Umwelt quarry was selected as it was the closest source of suitable material to the development works. Geochemical characterization indicates that the majority of upper greywacke samples representing the proposed quarry areas within the Umwelt pit are classified as non-potentially acid generating or low-sulphur material with a limited potential for acid rock generation. Additionally, based on low solid phase arsenic concentration, ML is unlikely.

The existing Airstrip Quarry has minimal overburden and the same condition is expected in the expansion area. Any overburden generated and not used by the Project will be placed in stable stockpiles either above the highwall or along the toe of the quarry. To develop the Umwelt Quarry, it will be necessary to strip and stockpile the overburden for potential use in Project closure efforts. Though the ground is relatively flat across the deposit, the stockpile will be positioned on the up gradient side of the quarry so that the finished quarry can serve to collect runoff from the stockpile. Since the overburden may be frozen and therefore blasted during removal, some slumping is expected as water is released from the soil. The overburden stockpile will likely be constructed in a windrow fashion to an approximate maximum height of 6 m and sloping outward. This configuration could be modified based on observations in the field.

As stated in Section 3.1.1.3, prepackaged explosives will continue to be delivered by air transport. Two magazines are currently located at the Goose Exploration Camp; it is anticipated that additional magazines will be required. Sabina proposes to relocate the currently approved explosive storage area identified in 2BE-GOO1520 to the Explosives Storage Area spur road (see base Figure 2). The design of all explosive storage facilities will meet government regulations and will be located according to required

separation distances as regulated by the Explosives Regulatory Division of NRCan. For additional information, see Section 2.5.3.

3.1.2.3. All-weather Service Road and Associated Water Crossings

Sabina proposes to construct all-weather service roads for development works (base Figure 2). The road alignment, totaling approximately 7.4 km in length, is required to connect the existing Airstrip Quarry, Explosives Storage Area spur road, the new Umwelt Quarry, the Goose Plant site pad, with the existing Goose Exploration Camp.

The service roads will be constructed with run-of-quarry rock placed directly onto the tundra to preserve the permafrost. A layer of graded surfacing material will be placed to provide a protective trafficking layer. Construction materials will consist of geochemically and geotechnically suitable rock sourced from the existing quarry (Airstrip Quarry) and/or Umwelt Quarry.

Stream flow through the service roads will be conveyed using appropriately sized culverts. Preliminary typical cross-sections of all-weather service roads and watercourse crossings are shown in Figure 4.1-1 of the Road Management Plan. The following design criteria will be used for the service roads:

- Minimum width of travelling surface: up to 4.5 m for single-lane or 8 m for double-lane;
- Design speed: 50 km/h;
- Side slopes: 2H:1V;
- Maximum grade: 10%;
- Safety berms for fills greater than 3 m in height: 0.55 m; and
- Drainage: major culverts to be designed to a 1-in-100-year event.

Sabina is requesting that the 297 m^3/day of water required to build and maintain the WIRs during winter season be available for dust suppression and compaction of placed construction materials during the summer season. Water remains the most readily available means of controlling dust in Nunavut. It is common to apply water through fantail sprayers or spray bars attached to a haul truck or equivalent fitted with a large tank. Sabina recognizes that water is only a temporary measure, and reapplications could be necessary to achieve the desired dust control efficiency. Refer to Table 3.3-1 for summary of water use requirements.

3.1.2.4. Temporary Fuel Cache Storage

Sabina will strive to complete construction of the all-weather service road from the existing Airstrip Quarry to the Goose Exploration Camp prior to the end of the WIR season. However, as a contingency should this not occur, Sabina may relocate temporary double-walled steel fuel tanks to facilitate continued development works. Caching of fuel will be consistent with activities undertaken in previous years under existing land use authorizations. Any temporary fuel storage would be located at a distance of at least 31 m from the ordinary high water mark of any adjacent waterbody and inspected on a regular basis.

3.1.2.5. Goose Plant Site and Fuel Storage Area Pad

Once service roads to the Goose Plant Site area are established, construction material will be sourced by cutting bedrock material to create a suitable area for the Goose Plant Pad and Fuel Storage Area Pad (base Figure 2); it is estimated that up to 300,000 m^3 of rock fill material will be required.

Ground conditions for design and engineering of Goose Plant Site infrastructure has been informed by four geotechnical investigations from 2010 to 2015 including test pits, drill holes, thermistor installations, and a variety of laboratory and in-situ testing. Geotechnical design is also supported by ERM Rescan's 2014 Cumulative Permafrost Baseline Data Report, which includes observations on active layer freeze-thaw cycle and active layer depth from 2007 to 2014. Refer to the Site-Wide Geotechnical Properties Report (FEIS Volume 2, Appendix V2-7C) for more detail.

It will be necessary to strip and stockpile the overburden. Overburden materials at the Goose Property generally consist of poorly sorted till material (glacial sediments) that appear highly weathered and contain mostly refractory minerals. Though the ground is relatively flat across the deposit, the stockpile will be positioned on the up gradient side of the pad so that the finished pad can serve to collect runoff from the stockpile. Since the overburden may be frozen and therefore blasted during removal, some slumping is expected as water is released from the soil. The overburden stockpile will likely be constructed in a windrow fashion to an approximate maximum height of 6 m and sloping outward. This configuration could be modified based on observations in the field.

One 15 ML field erected fuel tank will be constructed at the Goose Fuel Storage Area Pad. Construction of the fuel tank and the fuel storage area and transfer facilities is proposed to occur under this Application. The Goose Fuel Storage Area will be constructed in conformance with the Canadian Council of Ministers of the Environment (CCME) Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (CCME 2003), and the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* (2008). Project fuel storage facilities will be designed to have bermed spill containment with capacity equal to the volume of the largest tank plus 10% of the volume of the remaining tanks, or 110% volume of the largest tank, whichever is greater. The fuel tank storage areas embankments (or bund) will be lined with HDPE for spill containment. The fuel storage areas will be provided with standard instrumentation and controls to monitor and safely manage the inventory in the tanks. For additional information related to the design of the fuel storage facilities, please see the Fuel Management Plan. Sabina is committed to provide detailed designs for construction of the 15 ML fuel storage and fuel transfer facilities at the Goose Property to the NWB at least 60 days prior to construction.

3.1.2.6. Airstrip Extension

The Goose Property currently has a 914-m all-weather gravel airstrip that can be used year-round, and during the winter months, January to May, a 2,000-m (6,564 ft.) ice airstrip can be established on Goose Lake. The current airstrip will be extended to allow for servicing passenger and cargo aircraft in support of ongoing year-round exploration and development works. This airstrip will serve as the main air access to the Goose Property throughout the life of the Project. The all-weather airstrip will be designed to Transport Canada standard TP 312 Aerodrome Standards and Recommended Practices (2015). The airstrip will be extended to be approximately 1,524 m long and 45 m wide.

The airstrip extension will require installation of two culverts (base Figure 2). Preliminary typical cross-sections of watercourse crossings are shown in Figure 4.1-1 of the Road Management Plan. The culvert crossings will be designed to convey flows of Rascal Stream East and also to maintain suitable conditions (such as depths and velocities) for passage of Arctic Grayling (see Section 3.1.2.7). For water quality monitoring information refer to the EMPP.

3.1.2.7. Rascal Stream Re-alignment or Fish Bearing Culverts

Rascal Stream East, one of the two Rascal Lake outflows (Rascal Stream East and Rascal Stream West), will intersect the extended airstrip footprint. Both streams provide spawning and rearing habitat for Arctic Grayling from Goose Lake. Presently there are two options to mitigate potential effects to fish

habitat on the stream; these options are designed to maintain the migration of Arctic Grayling from Goose Lake (through Rascal Stream East and Rascal Stream West) to natural spawning and rearing habitat located in upper Rascal Stream East, south of the planned airstrip. This will be achieved by constructing two culverts to convey flows and provide passage for fish underneath the airstrip extension, or by realigning the natural channel of Rascal Stream East and diverting the water currently flowing from Rascal Lake directly to Goose Lake, to flow through Gosling Pond 1 and 2, and then downstream to Gander Pond and Goose Lake (base Figure 2). The latter option is described in Addendum Appendix V6-6F of the FEIS.

The preferred mitigation option for this application is to maintain fish habitat and existing downstream flows of Rascal Stream East prior to the development and operation of the Goose Main Pit. Although the re-alignment and diversion of Rascal Stream East may be required during later stages of construction and operation, it is recommended that those measures are postponed to minimize downstream effects to Arctic Grayling habitat in Rascal Creek East (including Goose Inflow South).

As part of Fisheries and Oceans Canada's Request for Review process, site-specific engineering design drawings with detailed construction, mitigation and monitoring plans for the culvert crossing will be provided to Fisheries and Oceans Canada prior to construction to determine if regulatory approvals under section 35(2) of the Fisheries Act are required for the crossing. The monitoring plan will include details on methods for evaluating the effectiveness of the culverts in providing fish passage, including appropriate measurement indicators such as water depths, water velocities, and migration success. During the regulatory phase, Sabina will continue to engage Fisheries and Oceans Canada, the Kitikmeot Inuit Association, and other interested parties to determine the optimal long-term solution on the design, construction, and operation of fish passage mitigation, and fully intends to undertake the appropriate Fisheries and Oceans Canada review as required and comply with NIRB Term and Condition #26 (NIRB 2017). This condition requires Sabina to engage Fisheries and Oceans Canada, the Kitikmeot Inuit Association, and other interested parties during the regulatory phase on the design, construction, and operation of measures to maintain fish passage of Arctic Grayling from Goose Lake to spawning and rearing habitat located in upper Rascal Stream East, south of the planned airstrip.

3.1.2.8. Relocate Explosives Storage Area

Sabina proposes to relocate the currently approved explosive storage area identified in 2BE-GOO1520 to the Explosives Storage spur road (base Figure 2). The design of all explosive storage facilities will meet government regulations and will be located according to required separation distances as regulated by the Explosives Regulatory Division of NRCan. For additional information, see Section 2.5.3.

3.1.2.9. Water Intake Installation

In recognition of the seasonal constraints imposed by Arctic conditions and the current construction and permitting schedule, Sabina needs to mobilize and install the water intake for the Goose Property under this Application. All water intakes and discharges will be designed in accordance with DFO guidelines, including adequately screening to prevent impingement and entrainment of fish.

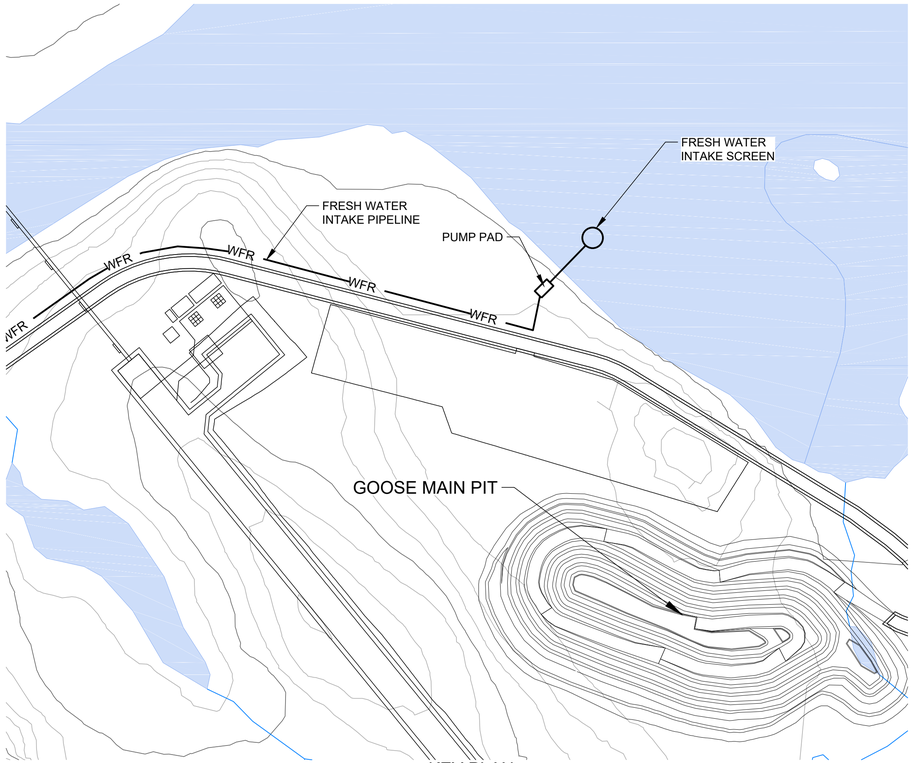
The structures will consist of PVC pipe installed on a rockfill base within the lake to keep the pipe above the lake bottom. See Figure 3.1-1 for a typical plan and section of the fresh water intake pipeline. Rock armouring will protect the pipeline from ice scour.

Construction of these intakes will involve in-water works. To limit disruption to aquatic resources, the following practices will be implemented:

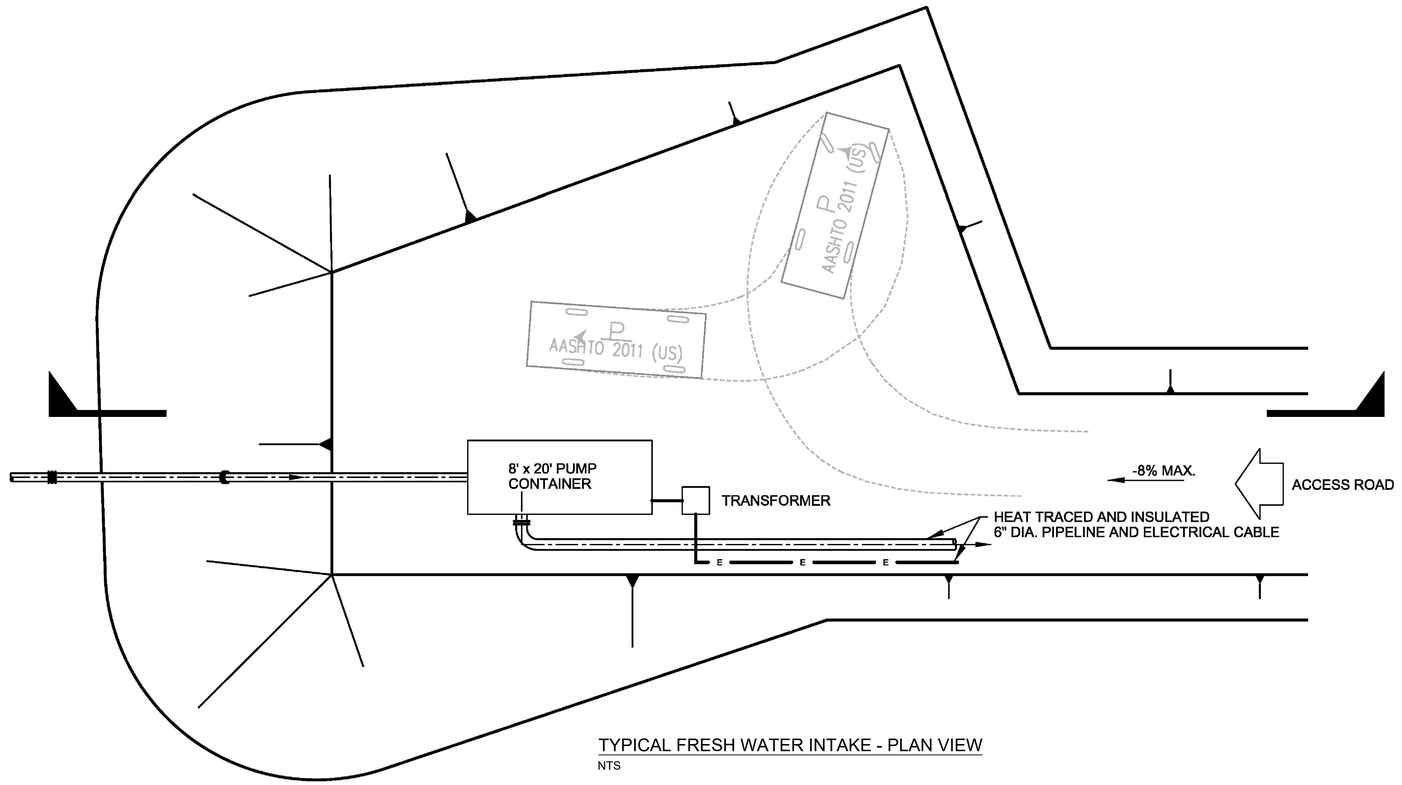
- Only NPAG armour rock that is free of sediment will be placed in the water during construction to minimize acid generation and turbidity;
- Work will be isolated using silt curtains;
- Work will be carried out during calm water periods to minimize any turbidity effects due to the re-suspension of sediment; and
- Total suspended solids (TSS) and turbidity levels will be monitored throughout construction and work will be delayed if TSS levels and turbidity become too high.

In-water blasting is not planned for the construction of the water intakes.

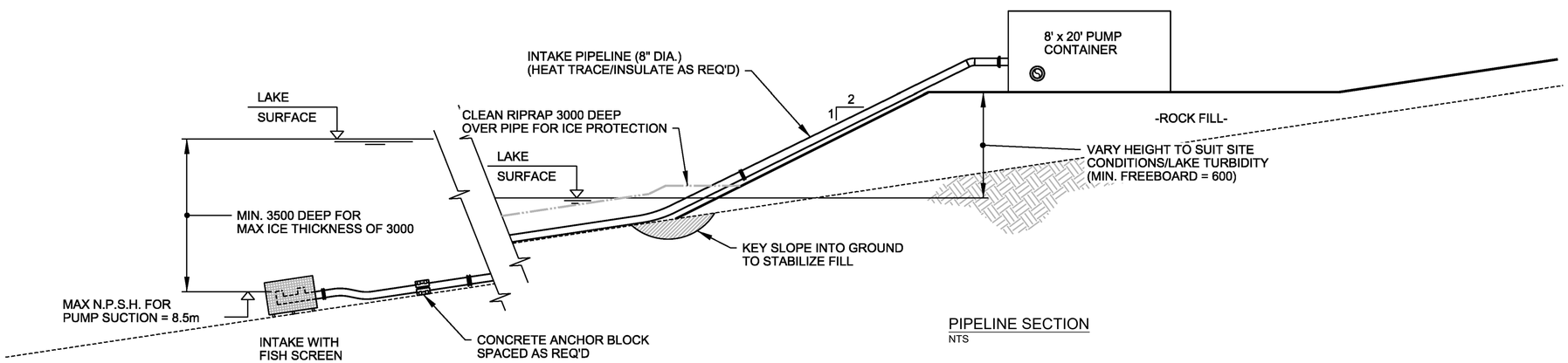
If water is sourced from the new water intake under the proposed Type B, Sabina confirms that the total water usage for development works will remain within the maximum proposed water usage of 297 m^3/d (Table 3.3-1).



KEY PLAN
NTS



TYPICAL FRESH WATER INTAKE - PLAN VIEW
NTS



PIPELINE SECTION
NTS

LEGEND

WFR — FRESH WATER INTAKE PIPELINE

WATER BODIES

NOTE(S)

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
2. ENGINEERING DESIGN IS CONSISTENT FOR ALL FRESHWATER INTAKES (GOOSE LAKE AND BIG LAKE).

REFERENCE(S)

1. BASE DRAWING OBTAINED FROM SRK CONSULTING.
   FILE NAME: 1CS020.011_WMP_FIGURE_A-18.DWG.
   RECEIVED DATE: 2017-06-02

ISSUED FOR PERMITTING

YYYY-MM-DD	2017-10-03
DESIGNED	SRK
PREPARED	EA/AF
REVIEWED	DRW
SIGNED AND SEALED	

CLIENT: Sabina GOLD & SILVER CORP.

CONSULTANT: Golder Associates

PROJECT
BACK RIVER PROJECT
WATER LICENCE PHASE
NUNAVUT, CANADA

TITLE
FRESH WATER INTAKE
TYPICAL PLAN AND SECTION

PROJECT NO.	FIGURE	REV.
1776921	3.1-1	

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI D

0 — 25 mm

Path: \\golder.gds\gal\burnaby\CAD-GIS\Client\Sabina Gold and Silver\Back River_Gold\WATER_LICENCE\09_PROJECTS\02_PRODUCTION\1776921\WO003\D003\D003 | File Name: 1776921-W003-WMP-A-18.dwg

3.2. MLA DEVELOPMENT WORKS

Activities and works at the MLA already scoped and approved under the existing NWB Type B Water Licence 2BE-GEO1520 include:

- Temporary Exploration Camp and infrastructure operation;
- Equipment, fuel, and supplies mobilization via cat-train; and
- Temporary fuel cache storage.

These approved activities have been included within this Application document to provide clarity on overall proposed activities; however, they do not require additional authorization. For existing permits, authorizations, and approvals refer to Section 2.3.

Proposed new development works at the MLA being requested for consideration in this Application include:

- Ice airstrip construction and operation;
- Equipment, fuel, and supplies mobilization (air);
- Upgrade Temporary Exploration Camp;
- Operate MLA Quarry;
- All-weather service road, laydown area, and bulk fuel storage area construction and operation;
- Additional equipment, fuel, and supplies mobilization (vessels);
- Install one steel bulk fuel tank; and
- Water intake/discharge installation.

3.2.1. Approved Activities and Works under 2BE-GEO1520

3.2.1.1. Temporary Exploration Camp

Sabina is currently authorized and operates a temporary exploration camp at the MLA, in accordance with NWB Water Licence 2BE-GEO1520. One of the first priorities of development works at the MLA will be to upgrade this existing temporary camp and its associated services and utilities. An approximate 40-person soft walled camp will be established. The MLA camp will continue to employ Pacto or incinerating toilets, and Pacto-waste, as well as acceptable food waste, paper waste and untreated wood products will continue to be disposed of in an incinerator. All greywater will continue to be discharged at a distance of at least 31 m above the ordinary high water mark of any waterbody, at a location where direct flow into a waterbody is not possible. These measures for management of waste are consistent with those authorized under Sabina's current water licence 2BE-GEO1520. No additional water usage or waste management is requested for camp services under 2BE-GEO1520 (Part C, Item 1).

3.2.2. Proposed New Development Works at MLA

3.2.2.1. Ice Airstrip

The construction and operation of an ice airstrip on southern Bathurst Inlet will be required to supply development works at the MLA. The MLA ice airstrip will be located as close to the MLA as possible; however, the final location will depend on ice conditions and possible seal lair locations. Consistent with ongoing ice airstrip construction and operation experience at Sabina's Goose and George Properties, it

is anticipated that minimal water will be needed for ice airstrip construction at the MLA. If water is needed for construction and operation, it will be sourced from the marine environment of Bathurst Inlet.

Although it is Sabina's understanding that the marine environment is outside the jurisdiction of the NWB, Sabina intends to utilize equivalent environmental protection measures which are in place for all on ice works at the Goose and George Properties. Water intakes, if required, will be equipped with screens to prevent the entrainment or impingement of fish in accordance with DFO Measures to Avoid Causing Harm to Fish and Fish Habitat (DFO 2013). If the construction commences in the seal pupping season, the procedures described within the Wildlife Mitigation and Management Plan will be adhered to (Section 14.2 of the WMMP; Version 7, submitted with FEIS Addendum February 2017).

Equipment required for the construction of the MLA ice airstrip will likely be mobilized to the MLA via cat train from either the Goose or George Property. Cat train operations are currently permitted under KIA LUP KTL304F049 and INAC LUPs N2017F0016 and N2011F0029, and all planned activities will be consistent with activities undertaken in previous years. Equipment may also be initially mobilized to the MLA by aircraft equipped to land with skis on the unprepared marine ice.

3.2.2.2. Fuel, Equipment, and Supplies Mobilization by Air

Fuel, equipment, and supplies for development works, as well as ongoing exploration and baseline data collection, will be brought to the MLA via the ice airstrip.

The equipment, materials, and fuel will be offloaded and initially stored at a temporary laydown area at the MLA prior to construction of the all-weather laydown area (base Figure 3). The fuel will be initially mobilized to the MLA in nine approximately 70,000 L double walled fuel tanks. These tanks will be installed within tertiary Arctic-grade Insta-berms, and may be refilled throughout the development works. This temporary storage of fuel is required as permanent storage tanks are under construction. As built drawings will be provided within 90 days following installation.

A crusher, as well as supporting equipment, will be mobilized to allow for the initial development of all-weather service roads, laydown areas, and bulk fuel storage areas prior to the first sealift. A more detailed list of material and equipment can be found in a Table 3.2-1.

Table 3.2-1: Air Mobilization Inventory

Equipment / Material	Quantity
40 Person Soft Walled Camp	1
Camp Genset – 125kw	2
70,000 Fuel Tanks	9
Fuel Berms (80,000 L capacity)	9
Diesel Fuel	800,000 L
Incinerator	1
Mobile Crusher	1
Soft Walled Shop/Warehouse	1
Explosive Magazine – 20ft	3
Excavator	1
Haul Truck	2
Dozer – Cat D6T	1
Grader – Cat 140H	1
Air Track Drill	1
Compactor	1
Geomembrane Liner for Bulk Fuel Containment	1
Swamp Mats (if Required)	75

3.2.2.3. Quarries/Borrow Sources and Overburden

Quarry operations (cut and fill) at the MLA will be completed by cutting bedrock material in the same area as the MLA Bulk Fuel Storage Area. It is estimated that up to 400,000 m^3 of aggregate sourced from the cut/fill balance will be required for development work, which is referred to as the MLA Quarry (base Figure 3). The extracted material will be used to build the all-weather service roads, laydown areas, and bulk fuel storage area.

Cut and fill operations will use explosives and the design, shape, and size of the blasts will be planned with safety and potential environmental effects being the most important consideration. Prior to the blast, all personnel and equipment will be moved to a safe distance and a check for wildlife will be completed. The blast will not be initiated until all setback requirements are met. For additional information refer to the Quarry Management Plan appended to this Application.

Preliminary geochemical characterization has been completed on surface outcrop samples and sandy gravel representing quarry material that will be excavated during initial development of the MLA Quarry. These samples were described as weathered quartzite conglomerate, quartz arenite/quartzite (sandstone) and sandy gravel. The test results showed that the materials have a negligible potential for ML/ARD. Sabina intends to complete additional sampling and testing in advance of, or concurrent with, development to characterize materials from greater depths. Only geochemically appropriate material will be used as construction material.

To develop the MLA Quarry, it will be necessary to strip and stockpile the overburden for potential use by the Project closure efforts. Though the ground is relatively flat across the top of the MLA Quarry, the stockpile will be positioned on the up gradient side of the quarry or beside the quarry so that the finished quarry can serve to collect runoff from the stockpile. Since the overburden may be frozen, and therefore

blasted during removal, some slumping is expected as water is released from the soil. The overburden stockpile will likely be constructed in a windrow fashion to an approximate maximum height of 6 m and sloping outward. This configuration could be modified based on observations in the field.

3.2.2.4. All-weather Service Roads, Laydown Areas, and Bulk Fuel Storage Area

The development works require the construction of approximately 1 km of all-weather service roads, laydown areas, as well as the bulk fuel storage area (base Figure 3). Sabina intends to utilize, wherever possible, the same footprint for the development works as the full-scale MLA site layout as presented in the FEIS. Pending the outcome of a planned 2017 geotechnical program at the MLA (which will be completed after Application submission), and completion of Detailed Engineering work, the MLA layout may be further enhanced. Although the layout may alter due to construction limitations or efficiencies, the activities at the MLA as presented will not change. Should significant alterations be required to the proposed MLA layout, Sabina will provide the portions of the revised layout, and any other relevant enhancements, to the NWB 60 days prior to construction.

The all-weather service roads will be constructed with run-of-quarry rock placed directly onto the tundra to preserve the permafrost. A layer of graded surfacing material will be placed to provide a protective trafficking layer. Preliminary typical cross-sections of all-weather service roads are shown in Figure 4.1-1 of the Road Management Plan. The following design criteria will be used for the service roads:

- Minimum width of travelling surface: up to 4.5 m for single-lane or 8 m for double-lane;
- Design speed: 50 km/h;
- Side slopes: 2H:1V;
- Maximum grade: 10%;
- Safety berms for fills greater than 3 m in height: 0.55 m; and
- Drainage: major culverts to be designed to a 1-in-100-year event.

There are no streamflow interactions, and therefore, no proposed water crossings at the MLA. Sabina will require construction of one all-weather service road within 31 m of the ordinary high water mark of Bathurst Inlet to facilitate access to the barge landing area. Sediment and erosion control measures shall be implemented prior to and maintained during the construction and operation of all-weather service roads where necessary to prevent entry of sediment into marine water.

Ground conditions for design and engineering of MLA Site infrastructure has been informed by four geotechnical investigations from 2010 to 2015 including test pits, drill holes, thermistor installations, and a variety of laboratory and in-situ testing. Geotechnical design is also supported by ERM Rescan's 2014 Cumulative Permafrost Baseline Data Report which includes observations on active layer freeze-thaw cycle and active layer depth from 2007 to 2014. Refer to the Site-Wide Geotechnical Properties Report (FEIS Volume 2, Appendix V2-7C) for more detail.

Construction of the MLA Fuel Storage Area is discussed in the below section (3.2.2.5), as well as the Fuel Management Plan.

Sabina is requesting that the 297 m^3/day of water required to build and maintain the WIRs during winter season be available for dust suppression and compaction of placed construction materials during the summer season. Water remains the most readily available means of controlling dust in Nunavut. It is common to apply water through fantail sprayers or spray bars attached to a haul truck or equivalent fitted with a large tank. Sabina recognizes that water is only a temporary measure, and reapplications

could be necessary to achieve the desired dust control efficiency. Refer to Table 3.3-1 for summary of water use requirements.

3.2.2.5. Additional Fuel, Equipment, and Supplies Mobilization

During the open water season, up to five vessels will be utilized to bring additional supplies, equipment, and fuel to the MLA for development work. Sabina will limit their shipping period to the open water season and not ship within the Nunavut Settlement Area after October 15 (except under unforeseen and exceptional events including consideration for vessel safety). All vessels utilized will be appropriate as defined by Transport Canada's Zone/Date System. Each vessel will be appropriately sized and will utilize lightering barges to bring the material from the vessel to the barge landing location.

An initial sealift will mobilize additional fuel to be stored in the already positioned nine 70,000 L fuel tanks mobilized via air (refer to Section 3.2.2.2), as well as steel for one 15 ML fuel tank. Additional supplies and equipment required for development works (i.e., MLA camp maintenance and quarry operations) will also be mobilized. Except for large equipment and fuel, materials arriving at the MLA will generally be housed in sea containers. If the all-weather service road to the MLA barge landing area is not constructed prior to vessel arrival, the MLA will be accessed using swamp mats provisionally placed directly onto the tundra to preserve the permafrost and protect the tundra from rutting and gouging. Once the equipment is stored on the all-weather laydown area, the swamp mats along the access corridor will be removed and stored for future use, or transported offsite with the outgoing barges.

One 15 ML field erected fuel tank will be constructed at the MLA. Construction of the fuel tank and the fuel storage area and transfer facilities is proposed to occur under this Application. The MLA Fuel Storage Area will be constructed in conformance with the Canadian Council of Ministers of the Environment (CCME) Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products (CCME 2003), and the *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations* (2008). Project fuel storage facilities will be designed to have bermed spill containment with capacity equal to the volume of the largest tank plus 10% of the volume of the remaining tanks, or 110% volume of the largest tank, whichever is greater. The fuel tank storage areas embankments (or bund) will be lined with HDPE for spill containment. The fuel storage areas will be provided with standard instrumentation and controls to monitor and safely manage the inventory in the tanks. For additional information related to the design of the fuel storage facilities, please see the Fuel Management Plan. Sabina is committed to provide detailed designs for construction of the 15 ML fuel storage and fuel transfer facilities at the MLA to the NWB at least 60 days prior to construction.

After the initial sealift, additional vessels (up to 5 total) will arrive at the MLA between late August and early October carrying fuel and materials required for ongoing development work. Limited equipment and supplies required for future Project activities, such as the first WIR construction and construction of the Goose Property, will additionally be mobilized. The mobilization of this equipment and supplies is included in this Application; however, Sabina intends for the activities associated with this equipment to be completed under the future Type A Water Licence.

A more detailed list of materials to be mobilized to the MLA via the open water sealift can be found in Table 3.2-2.

Table 3.2-2: Additional Sealift Vessel Inventory

Equipment / Material	Quantity
Diesel Fuel	~5,000,000 L
Camp Modules	15
Steel for 15 ML Steel Tank	1
Dozer – Cat D6T	1
Grader – Cat 140H	1
Air Track Drill	1
Compactor	1
Articulated Hauler	1
Excavator	1
Caterpillar Loader 966	1
Packer	1
Crew cab truck	1
Desalination Plant	1
Swamp Mats (8'x14')	550

3.2.2.6. Water Intake/Discharge Installation

In recognition of the seasonal constraints imposed by Arctic conditions and the current construction and permitting schedule, Sabina needs to mobilize and install the desalination plant intake/discharge for the MLA under this Application. All water intakes and discharges will be designed in accordance with DFO guidelines, including adequately screening to prevent impingement and entrainment of fish.

An approximate 4" diameter intake will be placed at a depth of 5 m in Bathurst Inlet at the MLA location (base Figure 3). An approximate 4" diameter discharge will also be placed at a depth of 5m with an approximate 10m diffuser. Sabina is committed to provide detailed designs for construction of the intake and discharge to the NWB at least 60 days prior to construction.

Construction of these intakes will involve in-water works. To limit disruption to aquatic resources, the following practices will be implemented:

- Only NPAG armour rock that is free of sediment will be placed in the water during construction to minimize acid generation and turbidity;
- Work will be isolated using silt curtains;
- Work will be carried out during calm water periods to minimize any turbidity effects due to the re-suspension of sediment; and
- Total suspended solids (TSS) and turbidity levels will be monitored throughout construction and work will be delayed if TSS levels and turbidity become too high.

In-water blasting is not planned for the construction of the water intakes.

3.3. WATER MANAGEMENT

Site water is categorized into two types for development works:

1. Non-contact water: surface water that is not impacted by/does not contact site infrastructure; and
2. Contact water: surface water that is impacted by/contacts with site infrastructure (i.e., runoff).

The key water management objectives for the Project include:

- Minimizing the impact of development works on the aquatic environment nearest the area of activity to the greatest reasonable extent;
- Using best management practices, recognizing the unique constraints of each project element;
- Providing a reliable freshwater supply; and
- Managing contact and non-contact water separately.

3.3.1. Water Use

Sabina is requesting a maximum water use of 297 m^3/day for WIR construction and maintenance during the winter season be allocated under this Application. Sabina is also requesting the same 297 m^3/day be allocated for dust suppression and compaction of placed construction materials during the summer season. Development works at both the Goose Property and the MLA will comply with the 297 m^3/day total water usage allocation. Water will be sourced from Goose Lake and lakes proximal to the MLA, and WIR. Water withdrawal for the construction of WIRs will adhere to DFO guidelines from the Protocol for Winter Water Withdrawal from Ice-Covered Waterbodies in the Northwest Territories and Nunavut (DFO 2010). Water intakes will be equipped with screens to prevent the entrainment or impingement of fish in accordance with DFO Measures to Avoid Causing Harm to Fish and Fish Habitat (DFO 2013).

Sabina is not requesting any amendments to water usage conditions under the existing 2BE-GOO1520 or 2BE-GEO1520 water licenses.

A summary of Sabina's water usage under existing and proposed NWB Type B Water Licenses is provided in Table 3.3-1.

Table 3.3-1: Sabina NWB Type B Water Licenses Water Usage

Sabina NWB Type B Water Licenses	Water Use Approved	Additional Water Use Requested	Activities	Source
8BC-BRP----	0 m^3/d	297 m^3/d	Winter ice road construction and maintenance (winter season), dust suppression and compaction (summer season)	Goose Lake, Lakes proximal to MLA and WIR
2BE-GOO1520	297 m^3/d	0 m^3/d	Domestic camp use, drill water, miscellaneous industrial use	See Part C, Item 1, of 2BE-GOO1520
2BE-GEO1520	175 m^3/d	0 m^3/d	Domestic camp use, drill water	See Part C, Item 1, of 2BE-GEO1520

3.3.2. Dust Suppression Using Water

Water remains the most readily available means of controlling dust in Nunavut. It is common at mine sites to apply water through fantail sprayers or spray bars attached to a haul truck or equivalent fitted with a large tank. Sabina recognizes that water is only a temporary measure, and reapplications could be necessary to achieve the desired dust control efficiency. The control efficiency of water applications is dependent on the amount of water applied, the time between re-applications, penetration depth of the water into the road surface, the traffic volume, prevailing weather conditions, and the state of the road surface (e.g., excessive fines over coarse material).

3.3.3. Non-Contact Water Management

Non-contact water will be conveyed around infrastructure as much as feasible to maintain local drainage patterns. Diversion of this clean water and snow will restrict the total volume of contact water at the site. Roads and pads will be designed to have runoff disperse as sheet flow to minimize channelized flow.

3.3.4. Contact Water Management

Contact water management includes managing surface water that is impacted by/contacts with site infrastructure (i.e., runoff). All contact water from the development works will be sampled as part of ongoing monitoring and allowed to discharge to the environment if it meets discharge criteria as defined in the Type B Water Licence. Water quality monitoring applicable to the current scope of development works is provided in the EMPP. The EMPP provides the list of water quality constituents to be monitored, as well as station locations and sampling frequency. Additional monitoring currently undertaken on site in accordance with 2BE-GEO1520 and 2BE-G001520 will be undertaken and reported as required under those specific water licenses.

Sediment and erosion control measures will be implemented prior to, and maintained during, the construction and operation of development works where necessary to prevent entry of sediment into water. This is similar to, and in accordance with, Part E, Item 8 and Part C, Item 6 of 2BE-GOO1520 and 2BE-GEO1520, respectively. Runoff may be managed locally with silt fences, turbidity curtains, interceptor channels, rock check dams, and/or small sedimentation ponds. Where surface runoff may directly or indirectly enter a waterbody, all flow shall meet the following effluent quality limits for total suspended solids presented in Table 3.3-2.

Table 3.3-2: Site Runoff Discharge Criteria for Total Suspended Solids

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of any Grab Sample (mg/L)
Total Suspended Solids	50.0	100.0

Source: Part E, Item 13 of 2BE-GOO1520

With respect to access road, pad construction, or other earthworks, the deposition of debris or sediment into or onto any waterbody is prohibited. In accordance with 2BE-GOO1520 (Part E, Item 4) and 2BE-GEO1520 (Part E, Item 5), these materials shall be disposed of at a distance of at least 31 m (except for the MLA barge access service road, see Section 3.2.2.4) from the ordinary high water mark of any waterbody in such a fashion that they do not enter the water.

A buffer of at least 31 m of undisturbed land will be maintained between quarries/borrow pits and waterbodies, and best management practices will prevent direct drainage. The quarry configuration will consist of a relatively flat surface graded such that water slopes to an area within, or adjacent to, the quarry boundaries. Since no extraction will occur below water level, and the areas will be contoured to

drain positively, there will be no residual ponds once the sites are closed. Any flowing water which may leave the working area will be sampled as part of ongoing monitoring and allowed to discharge to the environment if it meets discharge criteria as defined in the Type B Water Licence. Any problematic water will be directed away from waterbodies, or held if possible. A notification of this discharge will be submitted to appropriate regulatory parties under the land and water authorizations, and also reported within annual reports.

At the MLA, runoff from pads will discharge towards Bathurst Inlet along the same flow paths as the predevelopment topography. Site contact water that reaches the marine environment is predicted to meet the CCME water quality guidelines for the protection of marine aquatic life.

4. Alternatives to the Project

Sabina has investigated the option to pursue the development works or to pursue the "no-go" alternative and wait until the Project Certificate and receipt of the Type A Water Licence. It is anticipated that the Project Certificate will be received with Ministerial Approval in Q4, 2017. If delays in approval of the Project Certificate and subsequent NWB Type A occur, there is a potential to delay the construction by the extent of the approval delay and up to approximately one-year due to the seasonal constraints imposed by the arctic conditions of the Project. Any delay in construction will result in layoffs; up to a year delay could result in significant lay-offs of Inuit employees, which is an unacceptable outcome.

Dependent upon technical, financial, or permitting limitations, Sabina may opt to modify the sequence and timing of the proposed activities. Although timing and sequence may vary, Sabina intends for development activities to commence as early as Q1 2018, and extend until the end of October, 2018. As noted previously, Sabina anticipates receipt of the full construction and operation Type A Water Licence in August, 2018. As such, portions of the proposed development activities may fall under the Type A Water Licence.

It should also be noted that a detailed assessment of project alternatives was provided during the FEIS review process (FEIS Volume 2, Chapter 4), and Sabina will continue to assess alternatives throughout the regulatory process. Some future/ongoing alternatives as presented under the proposed Type B Water Licence may include the following.

Goose

Potentially decreasing the overall scope of development activities at the Goose Property, including the construction of the all-weather road and quarry at Umwelt.

MLA

Sabina may opt not to complete the air resupply portion to support the MLA development work activities as presented in Section 3.2. Alternatively, Sabina could delay most of the proposed activities at the MLA until mid-July when the first sealift vessel can reach the MLA. With this delay, not all activities proposed under this Application would be completed.

Nine 70,000 L double walled steel fuel tanks in tertiary pop up fuel berms will still need to be mobilized and filled with diesel fuel. Refilling of these tanks will occur as required throughout the development work from the sealift activities. Based on current projections for regulatory review delayed receipt of a Type A Water Licence may require building and filling of proposed fuel tanks, installation of additional smaller tanks or freezing in fuel barge at the MLA.

The development works will still require the construction of various all-weather roads and laydown areas as well as the initial construction of at least one of the bulk fuel containment areas. These are required to allow for materials to be more easily and safely mobilized by ocean going vessel and longer-term storage. A crusher will be mobilized as well as supporting equipment to allow for the initial development.

Sabina would not intend to complete the full construction of the initial 15 ML bulk steel fuel tank. Although construction of the containment and commencement of erecting the steel this tank will occur, no fuel will be mobilized into these tanks as part of this alternative.

Except for large equipment and fuel, materials arriving at the MLA will generally be housed in sea containers. The contents of the vessels will be inline, and not exceed the equipment and materials presented in Tables 3.2-1 and 3.2-2. The MLA will be accessed from the barge landing area using swamp mats provisionally placed directly onto the tundra to preserve the permafrost and tundra from rutting and gouging.

It should be noted that although Sabina may alter the sequence and timing of activities, the scope of activities, as presented under the Type B Water Licence if granted, will not change. Management plans may be modified to ensure that environmental considerations of activities occurring in different seasons are properly addressed. Any modified Management Plans will be provided to the NWB prior to commencement of activities.

Exploration activities are on-going on the various Back River properties under existing Water Licenses, and will continue regardless of whether the overall Project is deemed to proceed. The development work activities outlined in Section 3 which currently support on-going exploration, will continue to support on-going exploration in the area.

5. Environmental Setting (Baseline and Effects)

In general, the approach and methods for analysing, assessing, and determining the significance of potential environmental impacts from the Project included defining and describing these key elements:

- valued ecosystem components;
- special and temporal boundaries;
- existing conditions;
- pathway analysis;
- residual effects analysis (includes project specific and cumulative effects);
- prediction confidence and uncertainty;
- residual impact classification and determination of significance; and
- monitoring and follow-up (including steps to be taken to fill gaps where applicable).

Effects attributed to Project activities were assessed in conjunction with the full Environmental Assessment (EA) for the Project as detailed in the FEIS (November 2015) and FEIS Addendum (February 2017). Mitigation that applies to the scope of activities associated with the proposed development works are provided in Section 6 and the stand-alone Mitigation and Monitoring Management Plans appended to this document.

A summary of the environmental impacts of the Project is provided below. A summary of environmental impacts related to development works is provided at the end of key environmental divisions (i.e., physical environment, biological environment, and human environment).

5.1. DESCRIPTION OF PHYSICAL ENVIRONMENT AND SUMMARY OF IMPACTS

5.1.1 Terrain, Permafrost, and Soils

Terrain

The Project is located in an area dominated by gently undulating or rolling landscapes with numerous kettle lakes connected by streams. Terrain elevation ranges between 300 and 700 masl and slope gradients rarely exceed 7%. Uplands are typically covered by morainal materials (51% of the total Potential Development Area [PDA]) deposited on Precambrian, sedimentary, metamorphic or intrusive rocks. Glaciofluvial (14%), organic (6.4%), marine (8.5%), and lacustrine (1.1%) deposits are less common.

Exposed bedrock occurs over 2.6% of the PDA. The thickness of mineral soils overlaying bedrock (overburden) is the highest in plains and very gently sloping areas (average of 10.6 m), and decreases in rolling and undulating landscapes (average of 4.8 m).

A number of distinct landform types, including eskers, morainal rocky ridges, and boulder fields exist throughout the terrestrial regional study area (RSA).

Permafrost

The Project is located within the continuous permafrost region of western Nunavut. A seasonally thawed active layer is present immediately beneath ground surface, with a mean maximum depth of approximately 2 m and a mean annual temperature that averages -6.5°C. Subsurface temperatures are perennially below 0°C at depths up to approximately 500 m below ground surface, except beneath some surface waterbodies. At the Goose Property, open taliks that connect to the deep groundwater are inferred to be present beneath waterbodies with widths greater than 200 m and water depths exceeding 1.3 m. Cryopegs are inferred to be present at the base of the permafrost and adjacent to deep taliks, as the groundwater beneath the permafrost has been shown to be hypersaline.

Soils

Baseline soil samples within the local study area (LSA) and RSA show that most soils have a low proportion of coarse fragments (below 30%) and low surficial stoniness (below 15%), and are moderately coarse (loam, sandy loam, fine sandy loam). Mineral soils in the terrestrial RSA are predominantly acidic (median pH is 5.9, range from 4.7 to 6.8). In general, soil metal concentrations in the LSA do not exceed CCME guidelines.

5.1.2 Air Quality

The air quality in the West Kitikmeot region of Nunavut can generally be classified as pristine. Local emissions are limited to stationary (power generation and heating) and mobile sources (trucks, snowmobiles, all-terrain vehicles, etc.) operated by local residents in the few communities within the West Kitikmeot region. Mines operating in Nunavut and the Northwest Territories outside of the West Kitikmeot region represent the only major industrial emission source. Because of the limited local emission sources, long-range transport of air contaminants is the main influence on ambient air quality. The atmospheric boundary layer in the Arctic is generally stable and surface inversions occur frequently. As a result, dispersion of air contaminants can be less effective in the Arctic than in other regions.

Comprehensive baseline field programs were conducted to support the assessment of the Project. Total suspended particulates matter, particulate matter, respirable particulate matter, nitrogen oxide, sulphur dioxide, and carbon monoxide were all below the relevant federal or territorial ambient air quality standards or guidelines. Acid deposition results were below the critical load guidelines at the majority of monitoring locations.

5.1.3 Noise

The existing noise and vibration environment is pristine with no significant nearby anthropogenic noise or vibration sources. With the exception of readings taken near the current exploration camps, all baseline readings were comparable to estimated baseline levels for quiet, rural areas as given in the Alberta EUB Directive 038 (EUB 2007), which considers a quiet rural area with day-night sound levels due to human-made sounds to be below 45 dBA.

5.1.4 Surface Water Quantity

Surface hydrology is governed by the Arctic nival regime where peak flow discharges during the spring, shortly after air temperature rises above freezing. In small basins, these high flows can last as little as a few days. Peak flow typically occurs immediately after ice break-up in lakes and channel reaches, especially in the smaller basins.

Due to the presence of permafrost, small streams do not receive groundwater contributions, and flow discharges from these basins may cease after freshet until the late summer rains begin. For rivers draining

larger watersheds, the freshet peak may be delayed relative to smaller drainages as snowmelt from upper portions of a watershed is routed through the drainage network.

Precipitation events in the late summer and early fall may lead to a second hydrographic peak, but this is generally of lower magnitude than the freshet peak. Channel freeze-up typically occurs between late October and early November. In smaller drainage basins, stream channels typically freeze to their bottom, with zero flow occurring in winter. In very large catchments and larger lake outlets, flow energy and water turbulence may sufficiently maintain streamflow and prevent downstream reaches from freezing completely.

5.1.5 Surface Water Quality and Sediment Quality

Freshwater Water Quality

The lakes and streams in the Goose Property LSA are typical of Arctic freshwater systems. Surface waters have relatively low quantities of dissolved solids and metals, which is likely due to the geology of the area. The lakes and streams are generally soft and poorly buffered, with pH values ranging from slightly acidic to neutral. Lakes and streams typically have low quantities of suspended solids and are clear. Dissolved oxygen concentrations are often high in streams and lakes, but some environments experience oxygen concentrations less than the CCME water quality guidelines during periods of restricted water mixing under the ice (lakes) and low flow conditions in summer (streams). Similarly, nutrient concentrations are low and most lakes and streams are ultra-oligotrophic to oligotrophic.

Metal concentrations in lakes and stream are usually low, but are occasionally elevated due to the proximity to metal mineralization in the local geology. As a result of naturally elevated metal concentrations and the generally soft waters of the lakes and streams, the concentrations of cadmium and copper are occasionally greater than the CCME water quality guidelines for the protection of freshwater aquatic life.

Freshwater Sediment Quality

The lakes in the Goose Property LSA are comprised of fine materials such as silts and clays (> 89% composition) with generally low levels of organic matter. Streams are composed of coarser materials with the sediments in the LSA made up mainly of sand (43 to 53%), with small proportions of gravel- and silt-sized particles (22 to 29%). Arsenic and copper sediment concentrations are naturally above CCME sediment quality guidelines at several lakes and streams within the Goose Property LSA.

Marine Water Quality

Baseline water quality data are available from southern Bathurst Inlet from 2007, 2008, and 2012 to 2013. Historical information is also available from 2001. The water of southern Bathurst Inlet is typical of pristine Arctic marine waters, with low concentrations of nutrients, suspended solids, and metals. Nutrients are higher in the winter and lower or depleted in the summer when they are being used by phytoplankton. Nitrate concentrations are near or below detection limits in the summer, while phosphorus concentrations are still measurable in surface waters (> 0.01 mg P/L). Southern Bathurst Inlet is considered oligotrophic based on phytoplankton biomass levels. Metal concentrations in southern Bathurst Inlet are generally below the CCME guidelines for the protection of marine aquatic life and often undetectable. Near-shore sites near river outflows or in regions of shallow bathymetry sometimes have elevated levels of suspended material and metal concentrations. Metals which have been found to be naturally elevated above CCME marine guidelines in a small subset of samples include cadmium, chromium, and mercury.

Marine Sediment Quality

The sediment quality in Bathurst Inlet has been sampled in 2001, 2002, 2007, 2010, 2012, and 2013. Sampling near the proposed MLA was conducted in 2013. The sediments of Bathurst Inlet are heterogeneous as a result of local physical processes. Sediments ranged from sandy (>90% sand particles) through loose clay-silt sediments (70% clay with the remainder silt). Sand tends to predominate in the shallower sites (<5 m), with silts and clays become more frequent in the deeper near-shore sites. Marine sediment metal concentrations are generally below the CCME interim marine sediment quality guidelines. However, near-shore sites with high silt/clay content frequently have naturally elevated concentrations of arsenic, chromium, and copper, with elevated levels of arsenic and copper being the most common. Marine sediment metal concentrations have not been found to be greater than the CCME marine probably effect level guidelines which are higher than the marine interim sediment quality guidelines.

5.1.6 Physical Environment Impact Summary for Development Works

A full summary of potential Project effects related to terrain, permafrost, and soils is provided in FEIS Volume 5, Sections 2.4 and 3.4. All development activities are within the footprint of the overall Project and no additional impacts are expected from the footprint of development work activities. In the event the overall Project is not approved to proceed, any development activities not initiated will not proceed, and the closure and reclamation plan will be implemented thereby limiting impacts.

A full summary of potential Project effects related to air quality is provided in FEIS Volume 4, Section 1.5 and 1.10. Traffic along all-weather service roads have the potential to generate dust that can affect air quality. These effects are limited in spatial extent and are likely to occur on dry windy summer days. Sabina proposes to spray water on the services roads to limit effects from dust where required. These effects are reversible in that dust will no longer affect air quality once development activities are complete and project development ceases. Based on the short timeframe of the development works, the spatial and temporal effects of development work activities on air quality are considered low and reversible.

A full summary of potential Project effects related to water quantity/quality is provided in FEIS Volume 6, Sections 1.5, 1.9, 4.5, and 4.10. Development work activities are expected to have a minimal (low, local and short term) impact on surface water quantity, quality, with limited infrastructure proposed for development works (i.e., culvert installations for service roads). Sabina proposes a limited amount of water related activities during development works and will have in place mitigation measures consistent with the full Project. To minimize disturbance to watercourses, development work activities will be conducted in accordance with DFO protocols and best management practices.

5.2. DESCRIPTION OF BIOLOGICAL ENVIRONMENT AND SUMMARY OF IMPACTS

5.2.1 Vegetation

Terrestrial ecosystem mapping and rare plant surveys were conducted in 2012 within the vegetation and terrestrial wildlife LSA. Vegetated ecosystems, constituting 73% of the LSA, are dominated by mesic tundra, dry-sparse tundra, and moist shrub-dominated tundra. The mesic tundra association, comprising nearly one-third of the LSA, is characterized by extensive areas dominated by dwarf woody shrub species, with a highly variable component of herbs, graminoids, mosses, and lichens. Sparsely vegetated ecosystems, constituting nearly 9% of the total LSA, typically occur on thin morainal veneers or exposed bedrock, windswept esker crests, blocky tundra, marine beaches and other barren sites that limit vegetation establishment. Non-vegetated ecosystems, constituting approximately 18% of the LSA, are dominated by freshwater lakes and ponds. Special landscape features, identified for their importance as wildlife habitat or potential to support rare plant species, include esker complexes, cliffs, bedrock

outcrop and lichen-dominated ecosystems, riparian ecosystems, wetland ecosystems, and marine beaches and old beach heads. A total of 890 plant species identifications were made during the TEM and rare plant field surveys within the LSA and RSA. The largest species group in the identified flora is that of the vascular plants, followed by the macrolichens. Ninety rare plant species were identified and were mainly found close to the shoreline of Bathurst Inlet throughout the LSA and RSA. No invasive plant species were found in the LSA during the 2012 field surveys.

5.2.2 Terrestrial Wildlife and Wildlife Habitat

5.2.2.1 Caribou

There are three barren-ground caribou herds whose ranges interact with parts of the wildlife RSA. Information on the moving patterns and range was determined using satellite collaring data, TK, and baseline studies. These sources indicate that the Bathurst herd, the Beverly and Ahiak herds (considered together in this assessment) and the Dolphin and Union herd are found in the terrestrial RSA during portions of the year.

The Bathurst caribou herd calves between the Hood and Burnside Rivers, approximately 240 km northwest of the Project site. Following calving, the Bathurst caribou travel in large groups south-east passing 30 to 60 km to the west of the Project site (their closest approach), on their way to their summer range surrounding Contwoyto and Nose Lakes, 60 to 100 km south-west of the Project site. This herd winters south of the tree line.

The Beverly and Ahiak caribou herds calve and spend their post-calving period in the Queen Maude Gulf area on the coast, 300 to 550 km northeast of the Project site. During the summer, this herd spreads south and west, with some caribou found on site during late summer and fall. The Beverly and Ahiak herd generally winters to the east of the Bathurst herd, both below tree line and as far north on the tundra as Bathurst Inlet. In addition, the river crossing at the east end of Beechey Lake is used by large groups (100 to 200) of caribou during the summer and fall.

The Dolphin and Union herd, also known as island caribou, calve and spend the summer on Victoria Island and winter on the mainland, likely overlapping the marine RSA during the winter. The Dolphin and Union herd is SARA-listed as a species of special concern while the Bathurst herd and the Beverly/Ahiak herd have not been assessed by COSEWIC.

5.2.2.2 Grizzly Bears

Barren-ground populations of grizzly bears are federally listed as species of "Special Concern" (SARA; COSEWIC 2012) and are listed as Sensitive in Nunavut (CESCC 2010). Baseline studies were conducted for bears in 2012 and 2013 using hair stag stations to collect hair to estimate the regional population of bears in a 18,500 km^2 study area. Using a DNA mark-recapture analysis, the regional population of bears was calculated to be 72 females and 54 males in 2012 and 64 females and 54 males in 2013. TK and baseline studies indicate that grizzly bears are found throughout the RSA especially in association with major river systems such as the Western River and coastal areas, including Bathurst Inlet. Four grizzly bear dens were recorded in the terrestrial wildlife RSA between 2007 and 2012 – two located along the Western River corridor in sandy glacial fluvial habitat and two located in moderately sloped, heath tundra habitat. Habitat suitability modeling in the RSA indicates that there is between 57% and 76% high-quality habitat within the RSA during spring, summer and fall seasons, but less than 2% of high-quality denning habitat, which is largely confined to eskers.

5.2.2.3 Muskox

Muskox occur at moderate to low densities across the Canadian Arctic and are valued by the Inuit as a source of food, hides, horns, and wool, as well as for the commercial export of meat. TK and aerial baseline surveys indicate that muskox populations have been undergoing a long-term recovery from previously low numbers and occur throughout and surrounding the RSA at low densities, with concentrations at Bathurst Inlet and Bathurst Lake in the RSA and around Contwoyto Lake and Nose Lake outside the RSA. Habitat suitability modeling in the RSA indicates that roughly one-third of the RSA is high-quality foraging habitat for muskox during both the foraging (summer and fall) and winter (winter and early spring) seasons.

5.2.2.4 Wolverine and Furbearers

Wolverines and grey wolves were selected as representative furbearer species. Wolverines and wolves in Nunavut are both ranked as "Secure" (CESCC 2010), but wolverines are federally listed as a species of "Special Concern" (COSEWIC 2003). Baseline studies estimated the local population of wolverines using hair snag stations and a DNA mark-recapture analysis. During 2012, a 1,692 km2 study area was used surrounding the Goose PDA, where 12 wolverines were identified. During 2013, a second 1,800 km2 study area was added surrounding the MLA, with 19 wolverine identified in the two study areas. Wolverines ranged over an average area of 162 km^2, with similar ranges for male (166 km^2) and females (157 km^2). Habitat suitability modeling for wolverine indicates that there is approximately 44.7% high-quality habitat within the wildlife RSA.

Traditional Knowledge identified eskers as the primary denning habitat for wolves, which habitat suitability modelling calculated covers approximately 1% of the RSA. Denning surveys conducted for grey wolf between 2007 and 2013 supported TK information with eight dens identified in the RSA on eskers, of which five dens produced pups.

5.2.2.5 Migratory Birds

Migratory birds and their nests are protected by the federal *Migratory Birds Convention Act* (1994) and the *Nunavut Wildlife Act* (2003), which prohibit destruction of bird nests when these are being used by birds, and prohibits disturbance to flocks of migratory birds. No species of migratory bird occurring in the RSA is listed as a species of conservation concern under the federal *Species at Risk Act* (SARA 2002). However, three waterbird and ten upland bird species occurring in the RSA are listed as 'Sensitive' under the Canadian Endangered Species Conservation Council designations for Nunavut (CESCC 2010). Aerial surveys for waterbirds conducted between 2007 and 2013 indicate that Canada geese accounted for 80% to 90% of all detections of waterbird species. Several large wetlands, particularly in the southeast portion of the RSA are used by geese as a migration corridor, and as moulting areas. Additionally, a key staging site was identified on the western side of the RSA where large flocks of geese and ducks were consistently observed during both spring and fall staging surveys. Ground-based surveys for upland birds indicated that counts of upland birds (species and individuals) were highest in survey plots along the shoreline of Bathurst Inlet, relative to elsewhere in the RSA. A density estimate of 133 ± 9.8 upland bird pairs per km^2 was recorded in moist to wet lowland habitat, and 94 ± 6.8 upland bird pairs was recorded in dry upland habitat.

5.2.2.6 Seabirds/Seaducks

Seabirds and seaducks include migratory bird species that may use marine areas during any time of year and encompass a diverse group of avian species including eiders, scoters, geese and swans, dabbling ducks, diving ducks, loons, and gulls. Seabirds and seaducks and their nests are protected by the federal *Migratory Birds Convention Act* (1994). The following three seabird and seaduck species are listed as

"Sensitive" under the Canadian Endangered Species Conservation Council designations for Nunavut: common eider, glaucous gull, and long-tailed duck (CESCC 2010).

In spring, staging areas appeared to occur in open-water areas and near major river drainages such as the Burnside River and Western River outflows during the spring when the majority of the inlet is ice covered. In late-summer and fall (mid-July and August), large numbers (> 50 birds) of Canada geese and ducks (greater scaup and red-breasted mergansers) were observed in the shallow bay southwest of the MLA footprint in the LSA. The greatest abundances of seabirds and seaducks were observed in late summer and fall periods.

5.2.2.7 Raptors

Five of the eight raptors (birds of prey) species occurring in the wildlife RSA are species of conservation concern. The cliff-nesting peregrine falcon and the ground-nesting short-eared owl are listed as species of Special Concern on Schedule 1 of the federal *Species at Risk Act* (Government of Canada 2013). Three additional cliff-nesting species – the golden eagle, gyrfalcon, and rough-legged hawk – are listed as "Sensitive" in Nunavut by the Canadian Endangered Species Conservation Council SARA (CESCC 2010). Ground-based surveys for upland birds confirmed that ground-nesting raptors occur relatively rarely within the wildlife RSA. Thus, baseline studies for raptors were focused on mapping the location of cliff-nesting raptor nests, and measuring the productivity of breeding pairs. Aerial surveys of cliffs were conducted between 2002 and 2013 over approximately 80% of the wildlife RSA. A total of 147 raptor nest sites were mapped; nests of the peregrine falcon were the most abundant of all raptor species. Two nest sites occur within the PDAs, and an additional seven raptor nest sites occur within a 12 km radius of the PDAs.

5.2.2.8 Ringed Seals

Ringed seal abundance is spatially variable in Bathurst Inlet, with moderate densities present in most parts of the inlet, except in the southern RSA south of Kingaok where very low densities of adult and 8 to 10-week-old pups were found. Ringed seal lairs were only found in the northern RSA during surveys; no lairs were observed in the southern RSA or the LSA. The low ringed seal abundance in southern Bathurst Inlet and the absence of lairs may be due to the ice having fewer cracks and pressure ridges as these are often used by seals for lairs and access points for breathing holes. During the summer, ringed seal density is anticipated to be very low in Bathurst Inlet based on incidental recordings during other baseline studies conducted in the marine RSA and evidence from literature elsewhere.

5.2.3. Fish and Other Aquatic Organisms

5.2.3.1 Freshwater Fish

Habitat

The freshwater fish/aquatic habitat comprises both the physical habitat and the biological resources that sustain the productivity of freshwater fisheries species and the diversity of freshwater fish communities. Within the Goose Property LSA, there are permanent barriers to fish migration along the stream between Pond A and Giraffe Lake and along the stream between Umwelt Lake and Goose Lake. Habitat quality for rearing and spawning Arctic Grayling *(Thymallus arcticus)* is generally best in the reaches immediately upstream and downstream of lakes. High quality habitat is present at Rascal Stream East and Goose Inflow South, the stream system connecting Rascal and Goose lakes. This stream contains small cobble and gravel that supports Arctic Grayling spawning and rearing, as well as providing a migratory corridor between lakes with overwintering habitat.

Large lakes such as Propeller and Goose lakes provide the majority of year-round fish habitat for locally abundant fish species such as Lake Trout (*Salvelinus namaycush*) and Arctic Grayling within the LSA. These deep lakes have sufficient oxygenated water to sustain fish populations during the ice-covered season. In contrast, shallow lakes (< 2 m) and streams freeze completely during the winter and are unavailable as overwintering habitat.

Freshwater Fish Communities

The freshwater fish communities in the Goose Property LSA are typical of inland, headwater regions of the Canadian Arctic. Lake Trout (*Salvelinus namaycush*) was the dominant species, followed by Round Whitefish (*Prosopium cylindraceum*), Arctic Grayling (*Thymallus arcticus*), Slimy Sculpin (*Cottus cognatus*), and Ninespine Stickleback (*Pungitius pungitius*). Other species found within the LSA include Burbot (*Lota lota)* and Lake Whitefish (*Coregonus clupeaformis*). No Arctic Char (*Salvelinus alpinus*) have been captured within the Goose Property LSA, although they are likely present within the freshwater RSA.

5.2.3.2 Marine Fish

Habitat

The marine fish/aquatic habitat comprises both the physical habitat and the biological resources that sustain the productivity of marine fisheries species and the diversity of marine fish communities. The shoreline of the LSA and the southern section of the RSA are dominated by a shallow water shelf, which extends to a depth of approximately 10 m and a distance of 120 m offshore. Beyond this, the bottom descends steeply to depths greater than 40 m. The substrate in the intertidal zone is dominated by cobble and gravel, while deeper areas feature more mud and silt. Based on nearshore surveys and TK, potentially important habitat areas for marine and anadromous fish were identified in the LSA and RSA. The outlet of some rivers are important habitat for Arctic Char (*Salvelinus alpinus*), with some of these areas acting as migratory pathways for anadromous Arctic Char. Intertidal gravel beaches and shallow gravel beds are important spawning habitats for Capelin (*Mallotus villosus*).

Marine Fish Community

The marine fish community of Bathurst Inlet is characteristic of Arctic marine ecosystems and includes marine, anadromous, and freshwater/estuarine species. Many of these species play important roles in the ecological and cultural health of the area. Dominant species include Fourhorn Sculpin (*Myoxocephalus quadricornis*), Capelin (*Mallotus villosus*), Pacific Herring (*Clupea pallasii*), and Starry Flounder (*Platichthys stellatus*). None of the species sampled during the baseline studies are threatened or endangered. Arctic Char (*Salvelinus alpinus*) were not captured during baseline studies, but are presumed to occur in the LSA due to the presence of char spawning rivers and streams in the marine RSA.

5.2.4. Biological Environment Impact Summary for Development Works

Physical loss of vegetation population and communities as a result of construction period will remain during the life of the mine. It is unlikely that there will be permanent changes in vegetation community composition due to the development work activities or the overall Project. Development activities are not considered significant as vegetation quantity and quality will remain self-sustaining and ecologically effective wildlife habitat. A full summary of potential effects related to vegetation is provided in FEIS Volume 5, Section 4.5 and 4.9.

A full summary of potential effects related to Terrestrial Wildlife and wildlife habitat is provided in FEIS Volume 5, Sections 5.5, 6.5, 7.5, 8.5, 9.5, and 10.5.

Minimal impacts are expected to fish and fish habitat from development activities as limited activities are related to water management infrastructure. Sabina will follow best practices and protocols provided by Fisheries and Oceans Canada (DFO) such that there will be no measurable effects. Prior to construction, Sabina will provide more detailed information to DFO with respect to final crossing designs, fish habitat present, site-specific mitigation measures and monitoring, to address the information requirements necessary to make a regulatory decision under section 35(2) of the *Fisheries Act*. A full summary of potential effects related to fish and other aquatic organisms is provided in FEIS Volume 6, Section 6.5 and 7.5.

5.3. DESCRIPTION OF HUMAN ENVIRONMENT AND SUMMARY OF IMPACTS

5.3.1 Archaeology

Recent site-specific baseline studies have been conducted within the Project PDAs, and the archaeological LSA and RSA in 2001, 2002, 2004, 2007, and 2010 to 2014. Some historical information within the RSA is available from the 1970s and 1990s.

Potential Project-related effects on the VSEC archaeological sites included the disturbance of archaeological sites. During Engineering and Construction, Project activities that could have potential effects on archaeological sites include: clearing and grading for roads and pipeline rights-of-way; clearing, grading, and excavation for foundations and building footings; earth moving and blasting for mine construction; and tailing and waste rock deposition. Residual effects are anticipated to sites located within 50 m of the PDAs and the road rights-of-way. These sites have a high probability of being directly affected from disturbance due to ground altering activity by construction. Archaeological sites between 50 m and 1,000 m from Project developments have the potential to be indirectly affected during Engineering and Construction and Operations through increased human presence in the area.

There are 269 known archaeological sites within the archaeology RSA. There are 64 known archaeological sites within 1,000 m of the PDAs and the road rights-of-way that may be impacted either directly or indirectly by the Project. Of the 64 sites within 1,000 m, 38 are between 150 m and 1,000 m and are considered to be at low risk of indirect impacts during Engineering and Construction and Operations. There are 5 sites between 50 and 150 m from the PDAs and the road rights-of-way that are considered to be at moderate risk of indirect impact through increased human presence during Engineering and Construction and Operations. The 21 archaeological sites within 50 m of the PDAs and the road rights-of-way are considered to be at high risk of direct impact during Engineering and Construction.

5.3.2 Traditional Land Use

The assessment of potential effects of the Project on land use considers two VSECS: 1) non-traditional land and resource use; and 2) subsistence economy and land use. A total of three potential effects were identified acting on each VSEC, resulting in a total of six potential effects. All of the potential effects were identified as negative residual effects. Negative residual effects were further evaluated for determination of significance.

Non-traditional Land and Resource Use

Commercial land use consists primarily of sport hunting, tourism, mineral exploration, and transportation and shipping. In 2012, there were 22 active exploration projects in the Kitikmeot Region. This is a reduction from 95 active exploration projects in the Kitikmeot in 2011, including 35 within the western Kitikmeot. Currently, there are no active mines in the Kitikmeot. There is one exploratory licence for an Arctic char fishery located within the land use RSA near the community of Bathurst Inlet; the fishery is not yet active primarily due to difficulties of transporting catch to a processing facility. Sport hunting in

Nunavut is usually organized through the community HTO office. Species typically targeted for sport hunting include caribou, muskox, grizzly bear, polar bear, and wolf (Back River Project Research Program 2012; Nunavut Tourism 2012). Seasonal lodges and adventure tourism companies operate throughout the Kitikmeot Region. One is located near the community of Bathurst Inlet (the Bathurst Inlet Lodge). Operating from June to September of each year, the lodge can accommodate 30 people and occupies an old Hudson Bay Company post. Ecotourism activities include boating in Bathurst Inlet, hiking, sightseeing, and culture and nature interpretation (Back River Project Research Program 2012).

The only interaction between the Project and non-traditional land and resource use is predicted for ecotourism activities potentially affected by: changes in access to land and resources; changes to the experience of the natural environment; and changes to the abundance and distribution of resources. More specifically, there is one operator, the Bathurst Inlet Lodge, known to sometimes use an area adjacent to the MLA within the land use LSA, as well as other areas within the RSA, during the summer season. There are several best practice management and mitigation measures in place which serve to reduce potential adverse effects of the Project, while maximizing the potentially beneficial outcomes as they relate to non-traditional land and resource use. The management and mitigation measures can be found in both built-in Project design components, as well as specific additional measures that were developed based upon identified needs. Mitigation has been identified as it specifically applies to noise and vibration, and air quality in the Noise Abatement Mitigation and Monitoring Program, within the Wildlife Mitigation and Monitoring Plan (FEIS Volume 10, Chapter 20), as well as the Air Quality Monitoring and Management Plan (FEIS Volume 10, Chapter 17).

Subsistence Economy and Land Use

The Inuit culture and way of life are intrinsically connected with the land. The Inuit people of the Kitikmeot have always depended on Inuit Qaujimajatuqangit, or knowledge of the land and environment. Subsistence land use such as hunting, fishing, trapping, and gathering, take place throughout the land use RSA. Approximately 10 to 20 active hunters continue to hunt in the Bathurst Inlet area (Omingmaktok/Bathurst Inlet Hunter Focus Group 2012). Caribou, wolf, and wolverine were the most commonly hunted species; however, marine harvesting for seal and other species was also common. Beechey Lake is a preferred destination for hunters who are active in this area and is reported to have rich wildlife, scenic nature views, and availability of camps and cabins. While there are main travel routes within the area, land users follow animals and may take different routes at any time depending on weather conditions, the purpose of the trip, and other variables. Fishing also takes place throughout the land use RSA in Bathurst Inlet and various lakes and rivers. Species of focus include Arctic char, lake trout, whitefish, cod, wolffish, and Arctic grayling. Other species harvested from Bathurst Inlet include clams, mussels, sea urchin, starfish, and crab. Cloudberries, sweet leaves, bearberry, blueberries, mahok, bog cranberry, crowberry, and cloudberry are harvested throughout the RSA (Omingmaktok/Bathurst Inlet Hunter Focus Group 2012; Cambridge Bay Hunter Focus Group 2012). There are a number of cabins located in the region, including personally owned cabins, trapper cabins, and campsites with permanent poles or tent posts.

Traditional Knowledge can be defined as a "cumulative body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission" (NIRB 2007). Traditional Knowledge studies provide a valuable way of documenting spatial and temporal patterns of hunting, harvesting, fishing, habitation, and travel in a given area. They can also provide detailed information on local ecological processes, socio-cultural patterns and institutions, spirituality, ethical, and other matters.

Sabina recognizes the inherent value of TK and the importance local communities place on its use in the environmental assessment of proposed developments. As such, Sabina has made significant efforts to

engage local communities through incorporation of their TK into the Project's planning and design. Volume 3 of the FEIS describes Sabina's approach to TK and the methods used to collect and interpret it. Specific details as to how TK has been incorporated into these activities are summarized in Volume 3, Table 3.1-1 - Uses of Traditional Knowledge in the FEIS for the Project.

Sabina has utilized six primary sources of TK:

1. a Naonaiyaotit Traditional Knowledge Project (NTKP) database report for the Project;
2. theme-based TK workshops;
3. a report on existing and publically available Northwest Territories TK;
4. the results of public consultation and engagement activities;
5. a TK study on the Bernard Harbour Arctic char fishery; and
6. other sources (i.e., local land users and field assistants).

Likewise, Inuit Qaujimajatuqangit (IQ) values have helped guide Sabina's decision making for the Project and have been incorporated into the design of the Company's overall Project management approach. Inuit Qaujimajatuqangit consists of Inuit values, preferences, and what they consider significant; it is about the relationships between humans, animals, and the environment. It is location specific and reflects the particular conditions in specific geographic locations. Inuit Qaujimajatuqangit, although normally undocumented, is shared information within the community, and maintains the means and knowledge of living off the land, continues traditional land use activities, and promotes a cultural life style, all of which sustained Inuit for generations.

It is also important to highlight that Sabina partnered with the KIA in two key elements of its TK work – preparation of the NTKP database report and execution of the theme-based TK workshops. The basis of this partnership was a TK Agreement signed between Sabina and the KIA in May 2012. Signing of this agreement provided Sabina with access to TK held by the KIA in the NTKP database. The agreement also outlines the terms and conditions pertaining to Sabina's use of the TK. Sabina and the KIA additionally cooperated in the collection and reporting of new (or otherwise unrecorded) TK in the Project area.

Sabina has considered available TK for all baseline studies, effect assessments, and associated mitigation and monitoring plans.

Sabina will continue active engagement with local communities and Inuit organizations, and will include additional TK, as it becomes available, in updates to the design and implementation of Project environmental programs, as the Project advances through permitting, and if approved, into, Construction, Operations, and Closure phases. This will ensure that the combination of science and TK leads to monitoring that meets the expectations of Inuit organizations, local communities, and government.

5.3.3 Socio-economics

The assessment of potential effects of the Project on socio-economics considers five VSECs: 1) economic development; 2) business opportunities; 3) employment; 4) education and training; and 5) health and community well-being. A total of 10 potential effects were identified, resulting in seven positive residual effects, two negative residual effects, and one effect with both positive and negative residual effects. Positive residual effects were described but were not evaluated for significance or carried in to potential cumulative or transboundary effects assessment. Negative residual effects were further evaluated for

determination of significance, and were also included in potential cumulative and transboundary effects assessments.

Economic Development

The Kitikmeot Region has a mixed economy, focusing on public sector services, private sector market economies, and traditional activities. Formal economic sectors of particular importance include: government administration, health care and social services, education, retail, construction, transportation, tourism services, arts and crafts, and mineral exploration and development. The service sector is the base of the Kitikmeot economy, providing employment to around 80% of the employed labour force. In contrast, primary and secondary industries–including resource-based industries and construction–account for about 15% of local employment. Nunavut's Gross Domestic Product (GDP) experienced an overall increase of approximately 57.1%, from $1,327 million to $2,085 million between 2007 and 2014. Opportunities to develop mineral-based deposits are expected over the next 25 years, leading to continued economic growth in the region and its communities.

Project activities have the potential to result in positive changes to economic growth, diversity, and performance. The economic impacts of the Project are a result of direct procurement and workforce employment, which are expected to also have indirect and induced effects to employment, personal income, GDP, and government revenues. The Business Development Plan and Human Resources Plan detail enhancement measures that together aim to increase the benefits of the Project on local and regional development (see FEIS Volume 10, Chapters 24 and 28). Benefits will be enhanced through experience with the Project, support for local Inuit and northern businesses, capacity building, and community investment.

Business Opportunities

The Government of Nunavut dominates the service sector and is the major economic driver of the Kitikmeot communities. Government employment and income support provides the main source of income for residents and this, in turn, supports the presence of the private sector in each community. Dependence on the public sector results from multiple conditions, such as the harsh climate, geographic remoteness, small population, and underdeveloped infrastructure systems, as these conditions have constrained private sector economic development. Private sector businesses prominently include accommodation and retail, as well as a range of smaller-scale goods and service providers in each community. Cambridge Bay, and to a lesser extent Kugluktuk, stands out as a community where the private sector has a more important role in the economy. There are multiple investment support programs offered by the Government of Nunavut to encourage the development of local business. Funding to small businesses, individuals, organizations, and municipal governments is provided by the Nunavut Department of Economic Development and Transportation and is administered by the regional office based in Kugluktuk. The four main funding programs include: the Small Business Support Program, Arts and Crafts Program, Strategic Investment Program, and Policy on Program Partnership (NDEDT 2011).

The Project has the potential to result in changes in the growth and diversity of Inuit and northern businesses. This effect is defined as the potential for new businesses and the ability of existing businesses to expand or diversify and as a result of local Project procurement and the expenditure of Project-related income of workers. Measures to enhance business opportunities are detailed in the Business Development Plan (FEIS Volume 10, Chapter 24).

Employment

The potential labour force[1] within the Kitikmeot communities was approximately 3,925 in 2011. The active labour force among these same communities was approximately 2,410 individuals, indicating an average participation rate of 61.4%. Unemployment rates were considerably higher in Gjoa Haven and Kugluktuk (34.0% and 30.9%, respectively) as compared to the rate for the Canadian Aboriginal population (15.0%). In terms of unemployment among the Aboriginal identity population in Nunavut, the Kitikmeot remains highest of the three regions (29.9%) being above the territorial average of 23.3%. All Kitikmeot communities exhibit high participation in the education, business, retail, and other services sectors. These labour trends are typical for small, relatively isolated northern communities. The Government of Nunavut is also a notable employer in the Kitikmeot Region. Cambridge Bay reported the highest median household income among the Kitikmeot communities ($85,543), which is approximately 12.3% more than the community with the second highest household income (Gjoa Haven at $76,204) and almost 26.9% more than the Nunavut average. In general, all communities reported high proportions of part-time or seasonal work, ranging from approximately 18.8% in Cambridge Bay to 28.4% in Kugluktuk.

Overall, the employment and income effects of the Project are highly beneficial and have the potential to enable increased standards of living for Kitikmeot families. Direct Project employment and procurement are expected to increase the capacity of the labour force, specifically the skills and experience of Kitikmeot workers. Increased capacity is predicted to lower unemployment rates, promote economic growth, and enhance ability of the regional workforce to support future projects. Changes in income and employment levels, as well as changes in the capacity of the labour force, are anticipated to have positive residual effects on the VSEC employment.

Education and Training

Each of the study communities, with the exception of Bathurst Inlet and Omingmaktok, is provided with kindergarten, elementary, and secondary schooling. Students are provided with the opportunity to obtain their high school certificate (or equivalent) within their home community. In general, high school completion rates remain low in all communities. Kugaaruk residents exhibited the lowest level of educational attainment in the region, with over 69.1% of the population aged 25 to 64 lacking high school or other certificates/diplomas. In contrast, Cambridge Bay residents had the highest level of educational attainment among the communities, with approximately 37.7% of residents aged 25 to 64 without high school or other certificates/diplomas. Among the Kitikmeot communities, Cambridge Bay had a relatively high proportion of the population with a university certificate/diploma (18.9%) or a college degree or diploma (17.6%) compared with the other communities. Attainment levels for apprenticeship and trade certifications ranged from almost one-quarter of the population in Kugaaruk (18.2%) to just over one-tenth (10.7%) of the population in Cambridge Bay. Post-secondary education is offered through the Nunavut Arctic College. The college serves Kitikmeot communities through its central campus in Cambridge Bay, which is responsible for all college programming in the region. Programs offered through the Nunavut Arctic College include trade programs, certificate and diploma programs, career development programs, academic studies programs, and continuing education programs. Nunavut Arctic College also provides training programs to support employment in the mining sector.

Changes to the demand for education and training, as well as changes in youth attitudes toward education and training, are predicted to have positive residual effects on the VSEC education and training. The assessment concluded that the Project would have positive effects on the VSEC education and training. As a result, effects to education and training were not subject to cumulative or transboundary effects assessments.

[1] Total population aged 15 years and over.

Health and Community Well-being

Nunavummiut experience lower rates of arthritis, diabetes, asthma, and high blood pressure as compared to Canadians. Fewer Nunavummiut also reported themselves as overweight or obese in 2014 (49%), compared to the Canadian average (54%). However, Nunavummiut typically have higher rates of cancer incidence (381.1 per 100,000) and higher mortality rates as compared to Canadians generally. Particularly, lung cancer is the leading cause of cancer death in Nunavut (33%), causing more cancer deaths than the other three major cancer types combined including breast, colorectal and prostate cancer. Residents of Nunavut can expect a much shorter lifespan than the average Canadian. On average, Nunavut residents have a life expectancy of 72.1 years at birth, 8.5 years lower than Canada (80.6 years). Despite the relatively small populations, there are a wide range of health services and programs available in Kitikmeot communities. Although Cambridge Bay is the only community that provides full-time physician services, visiting doctors see patients in the other communities on a rotational basis. With respect to community health within Kitikmeot communities, relatively high suicide rates are a concern.

General community well-being, as described by AANDC's community well-being indicator, was relatively low within Kitikmeot communities. Cambridge Bay and Kugluktuk scored somewhat higher, on or above the Nunavut average. Taloyoak, Kugaaruk, and Gjoa Haven scored exceptionally low (54, 51, and 55, respectively), particularly on the education component of the index. Income, labour force activity and housing contribute to community health and well-being. Crime rates among Kitikmeot communities are highest in Cambridge Bay, Kugluktuk, and Taloyoak. Kugaaruk typically has low crime rates in relation to other Kitikmeot communities. Although housing challenges exist in all Kitikmeot communities, there are a notably high proportion of crowded homes in Gjoa Haven, Taloyoak, and Kugaaruk (32.1, 25.6, and 35.5%, respectively). Public housing is the most common type of tenure, and dependence on the public sector for housing is likely to continue given severe economic, climatic, and geographic constraints on private sector involvement.

5.3.4 Human Environment Impact Summary for Development Works

Project activities could have potential effects on archaeological sites include: clearing and grading for roads; clearing, grading, and excavation for foundations and building footings; earth moving and blasting for construction. A limited scale of these activities are proposed for development works. Sabina is committed avoidance where possible and if not possible, mitigation of archaeological sites will be conducted prior to construction activities. A full summary of potential effects related to archaeological resources is provided in FEIS Volume 8, Section 1.5 and 1.10.

It is anticipated that the residual effects of traditional land use (fishing and harvesting) will be low in magnitude, local in geographic extent, short term in duration and reversible. A full summary of potential effects related to traditional land use is provided in FEIS Volume 8, Section 4.5 and 4.10.

The development activities and overall effect of continued income, community contributions is expected to have a positive effect on well-being of individuals and communities however it is limited given the proposed scale and scope of development activities. A full summary of potential effects related to Project Socio-economics is provided in FEIS Volume 8, Section 3.5 and 3.10.

6. Environmental Management (Mitigation and Monitoring)

Specific concerns (dust, noise, traffic, erosion, transportation of dangerous goods, waste management, sociological, wildlife protection, etc.) have been addressed through the management plans Sabina has prepared for the Project. The purpose of the management plans is to outline the framework or structure where monitoring and follow-up programs are implemented to verify impact predictions and determine effectiveness of mitigation measures. The management plans will also help identify unanticipated effects, if any, which will be handled though adaptive management. These plans will be updated, as needed, for various planning and regulatory requirements, should the Project proceed. In addition, best management practices will be used for all phases of the Project, and adaptive management will be a priority for environmental indicators.

Sabina's Environmental Management System (EMS) provides a framework for the environmental impacts, mitigation, and monitoring activities to be implemented through the life of the Project. The EMS incorporates the strategies employed for adaptive management using the precautionary principle to pursue the goals of sustainable development. Within this framework, individual management plans have been designed to address all aspects of the company's activities, and contain the detailed mitigation measures and monitoring programs to be implemented throughout the life of the Project in order to eliminate or minimize adverse effects. The EMS also verifies that standard operating procedures reflect legal requirements pertaining to the Project, and that conditions set at the time of the Project's authorizations, as well as requirements pertaining to the relevant laws, regulations, and permits are met. All Project employees and contractors are required to comply with these management plans. The reporting and documentation requirements for these management plans, auditing, and process of management review and revisions are all specified in the EMS. The EMS will offer enough flexibility to respond to the monitoring results in a timely fashion to reduce or eliminate potential adverse residual effects to the natural and socio-economic environments.

Key elements of these plans are execution and accountability within the Company's organization to ensure that the objectives of the plan are met. As the Project advances though its various phases of development (Construction, Operations, and Closure), the on-site organizational structure of the site management team will change; however, the fundamental commitments made by the Company as embodied in the management plans will remain. Furthermore, the process of continual improvement (review and adaptive management) may also introduce occasional changes for some components of the management plans. In essence, the management plans are tools designed to manage change while ensuring that the Company's objectives and environmental commitments are achieved.

Sabina does not expect the core content of these management plans to change significantly over the life of the Project. However, certain sections of each plan will be updated regularly including the following:

- changes in regulations affecting the Project;
- roles and responsibilities - will adapt to the evolving organizational structure on-site and off-site;
- monitoring requirements, objectives, and thresholds will be adapted on the basis of annual review of monitoring information collected in the previous time period (adaptive management); and
- changes in reporting requirements as directed by the licensing authority.

In addition, Sabina may continue to enhance document structure and formatting to align with operational and reporting requirements.

The mitigation measures applied to the Project are based on best management practices and are expected to prevent or minimize adverse effects on the receiving environment; ongoing monitoring will inform Sabina of their effectiveness. If any unforeseen adverse effects are identified during the life of the Project, measures will be taken to correct and prevent them from occurring in the future. Adaptive management is an iterative approach based on a learning process gained from monitoring, which in turn improves long-run management outcomes. Sabina is committed to implementing effective mitigation measures, and to use an adaptive management approach to ensure mitigation measures are optimized.

The list of Management programs and associated management plans under development for the Project Type A Water Licence are presented in Table 6.1.

Table 6.1. List of Management Programs and Associated Management Plans under Development for the Project Type A Water Licence

Document	Construction	Operations and Ongoing Maintenance	Temporary Closure / Care and Maintenance	Final Closure	Post-Closure
Infrastructure and Access Management Program					
Road Management Plan	x	x	x	x	
Borrow Pits and Quarry Management Plan	x	x	x	x	
Water Management Program					
Water Management Plan	x	x	x	x	
Waste Management Program					
Ore Storage Management Plan		x	x		
Mine Waste Rock Management Plan	x	x	x	x	
Tailings Management Plan	x	x	x	x	x
Landfill and Waste Management Plan	x	x	x	x	
Incineration Management Plan	x	x	x	x	
Landfarm Management Plan					
Hazardous Materials Management Plan	x	x	x	x	
Emergency Response Program					
Risk Management and Emergency Response Plan	x	x	x	x	
Fuel Management Plan	x	x	x	x	
Spill Contingency Plan	x	x	x	x	
Oil Pollution Emergency Plan	x	x	x	x	
General and Aquatic Effects Monitoring Program					
Environmental Management and Protection Plan	x	x	x	x	x
Aquatic Effects Management Plan	x	x	x	x	
Conceptual Fish Offsetting Plan	x	x		x	
Marine Monitoring Plan	x	x	x	x	
Quality Assurance / Quality Control Plan	x	x	x	x	x

(continued)

Table 6.1. List of Management Programs and Associated Management Plans under development for the Project Type A Water Licence (completed)

Document	Construction	Operations and Ongoing Maintenance	Temporary Closure / Care and Maintenance	Final Closure	Post-Closure
Interim Closure and Reclamation Program					
Interim Closure and Reclamation Plan (including Interim Closure Cost Estimate)		x	x	x	x
Vegetation Monitoring Plan	x	x			
Conceptual Fish Out Plan	x				

For the purpose of this Application for development works, Sabina has submitted the following mitigation, management and morning plans as supplemental documents:

- Comprehensive Spill Contingency Plan (August 2017);
- Fuel Management Plan (August 2017);
- Road Management Plan (August 2017);
- Borrow Pits and Quarry Management Plan (August 2017);
- Oil Pollution Emergency Plan (August 2017);
- Environmental Management and Protection Plan (August 2017); and
- Interim Closure and Reclamation Plan and cost estimate (August 2017) specific to development works.

The following sections summarize the key management strategies from the management plans submitted in support of this Application. For full details refer to the complete Management Plan provided as appendices to this document. Note key water management strategies outlined in Section 3.3.

6.1. ROAD MANAGEMENT PLAN

The Road Management Plan outlines construction, operation, and management of access and transportation for the Project including construction, operations, and closure of an all-weather airstrip, all-weather roads, and WIRs.

All-weather roads will be constructed at Goose Property and the MLA and will consist of haul and service roads allowing operations to continue year-round. The roads will be designed to protect the permafrost regime. At water crossings, bridges and/or culverts will be designed to handle a 1-in-100-year event.

The proposed all-weather Goose Airstrip will be classified as a "registered aerodrome" and be designed to recommended standards and practices. The design considers environmental and archaeological factors in the airstrip alignment.

Inspection and maintenance of the all-weather roads will include:

- Regular inspections that will look out for:
  - seasonal freeze and thaw (summer months);
  - signs of accumulation of ponded water;

  - grading of gravel roads; and
  - condition of culverts and stream crossings.

- Maintenance and repair of any issues arising from the inspections.
- In areas or times prone to high dust levels, mitigation measures such as grading, placement of coarser gravel, and/or watering of the road surface will be used to reduce dust levels.
- Snow clearing.

Winter ice roads will be constructed over land and ice where environmental conditions permit, and will be designed to carry legal highway loads. The roads will be operational from January to April each year.

Winter ice roads will be inspected and maintained in accordance with the "*Guidelines for Safe Ice Construction*" published by the Northwest Territories Department of Transportation (2015).

Sabina's traffic management and road safety regulations will address:

- General Regulations for Use of the WIRs;
- Rules of the Road, including:
  - speed restrictions;
  - security/policing;
  - drug, alcohol, and firearms;
  - littering and refuse disposal;
  - safety restrictions and equipment;
  - hours of works/log book;
  - designated refuge and rest areas;
  - communications;
  - spills and dangerous/emergency situations;
  - stopping on lakes/water crossings; and
  - wildlife.

Reclamation of the haul and service roads will follow the completion of mining. Where possible, progressive reclamation will lead to roads being reclaimed after they are no longer needed. Decommissioning of the roads will involve restoring natural drainage (removing culverts, bridges, and other obstructions) and stabilizing slopes where there is potential for erosion.

Road management will include consideration for sediment control during construction and operations. Various mitigations and best practices that will be followed during road construction to control sedimentation include:

- Fisheries and Oceans Canada best management practices and environmental approval conditions for construction and operation of waterbody crossing structures, including DFO's Measures to Avoid Causing Harm to Fish and Fish Habitat Including Aquatic Species at Risk (DFO 2016);
- no in-water work will take place from 1 May to 15 July to protect fish spawning and nursery periods of local fish populations; this would apply to all stream crossings;

- sediment and erosion control measures will be implemented prior to the start of work and maintained during the work phase - these measures will be left in place until all disturbed areas have been stabilized;
- isolation methods will be used for work below the high water mark for streams with flowing water at the time of construction;
- temporary clear-span bridges and ice bridge/snow fill (for winter construction) may be used for construction access;
- machinery used near stream crossings or working will arrive on site in a clean condition and be maintained free of fluid leaks to keep contaminants out of the drainage basin;
- the equipment will be re-fuelled, serviced, and washed away from the stream crossings to prevent deleterious substances from entering the water;
- fuel, lubricants, hydraulic fluids, etc., will not be stored within 31 m of the high water mark of any waterbody, and will be kept in an area where spillage can be contained, and in a manner inaccessible to all wildlife;
- an emergency spill kit will be kept at the work site in case of fluid leaks or spills from machinery;
- construction runoff will be captured and managed to minimize suspended solids in the watercourses, where applicable; and
- instream construction work will be avoided, or limited, to the minimum extent possible.

During the Operations Phase, routine periodic inspections of the roads will be conducted. These inspections will include looking to identify areas of ponding, erosion, or sedimentation.

Watercourse crossings will be regularly inspected. The Project inspection and maintenance program includes regular inspection to identify issues relating to watercourse crossings; an event inspection program to track the impacts of large storm events on watercourse crossings; and a culvert location inspection program to ensure that the culvert(s) have been installed in the right location with respect to the watercourse, and that culvert capacity is adequate to ensure that the culvert(s) pass the water under all hydraulic conditions.

6.2. FUEL MANAGEMENT PLAN

Diesel fuel is an essential commodity for the ongoing operation of the Project, and a range of accidents and malfunctions may result in fuel spills. Sabina has developed specific management plans to address transportation and storage of fuel, as well as procedures for field refueling and spill response.

Fuel storage facilities will be constructed at the MLA and Goose Property. Fuel will travel in tanker ships and/or barges to the MLA. Fuel will be transported from the MLA to the Goose Property via the WIR.

Arctic grade diesel fuel will predominantly be used by mining equipment, motor vehicles, and power generation. Limited quantities of propane will be used in maintenance facilities for smaller motorized equipment and machinery, and in the accommodation complex for meal preparation. Environmental protection measures will be employed to the proper transportation, inspection, storage, transfer, and use of all petroleum products.

Several preventive measures are already in place to minimize risk of spills during bulk fuel transfer including:

- The bulk fuel storage facility, pipeline and all related equipment and infrastructures are inspected prior to the bulk cargo transfer, and the inspection methods are documented as a Standard Operating Procedure.
- Complete bulk cargo transfer procedures have been established, a copy of which is found in Annex 5 of the OPEP.
- As required by the applicable legislation, the tanker ship has a comprehensive Shipboard Oil Pollution Emergency Plan and a copy of this plan has been reviewed by Sabina.
- In addition to the legislative requirements, the charterer has implemented a shipboard spill response training program and performs routine exercises in spill response operations.
- The tanker ship carries a compliment of spill response equipment as listed in Annex 6 of the OPEP, and this equipment is ready at the ship's rail at all times for deployment during cargo operations.
- Sabina oil spill response equipment is on the beach, ready for immediate deployment at all times during cargo operations.
- The workboats and trained responders are available at all times during cargo operations for spill equipment deployment.
- Standard transfer procedures include hourly inspections by workboat of the floating hose for leaks or defects.
- During transfer operations the shore manifold is manned at all times.
- A low pressure alarm is installed at the shore manifold that is highly sensitive to differences in pressure during pumping. Any loss in the system will cause a drop in manifold pressure and results in an audible alarm, which is immediately reported by the manifold personnel.
- The bulk fuel storage facility is monitored at all times by Sabina personnel during the transfer.
- The pipeline is inspected hourly on foot during the transfer operation.

The Fuel Management Plan includes detail on the safe handling and storage of fuel. Specifically, information related to roles and responsibilities (Fuel Management Plan Section 4), potential environmental effects (Fuel Management Plan Section 6.6), environmental monitoring (Fuel Management Plan Section 7) and mitigation and adaptive management (Fuel Management Plan Section 8).

The Spill Contingency Plan includes details of emergency response procedures for spills that could occur while transporting bulk fuel over land. Sabina acknowledges that the majority of over land fuel transfer will occur on the WIR, and therefore, the general approach to spills on snow and ice is outlined below. Additional details on spill response can be found in the Spill Contingency Plan.

In general, snow and ice will slow the movement of hydrocarbons. The presence of snow may also hide the oil slick and make it more difficult to follow its progression. Snow is generally a good natural sorbent, as hydrocarbons have a tendency to be soaked up by snow through capillary action. However, the use of snow as a sorbent material is to be limited as much as possible. Snow and frozen ground also prevent hydrocarbons from migrating down into soil or at least slow the migration process. Ice prevents seepage of fuel into the water.

Most response procedures for spills on land may be used for spills on snow and ice. The use of dykes (i.e., compacted snow berms lined with plastic sheeting) or trenches (dug in snow or ice) slow the progression of the fuel and also serve as containment to allow recovery of the fuel. Free product is

recovered by using a vacuum, a pump, or sorbent materials. Contaminated snow and ice is scraped up manually or using heavy equipment depending on volumes.

Should spills enter waterways beneath ice cover, ice augers and pumps will be used when feasible to recover fuel and other materials under ice. Slots may be cut in ice over slow-moving water to contain oil. Tiger torches may be used to burn the fuel in place, if unrecoverable by other methods and when feasible and safe to do so.

The contaminated snow and ice will be placed in containers or within plastic lined berms on land. For contingency purposes, a contaminated snow storage site will to be designated and located in close proximity to each of the main Project work sites to facilitate inspection and monitoring, in an area which will still be readily accessible once it is time to remove the snow (i.e., spring or summer), and at least 31 m away from any waterbody. Once enough snow has melted, the oily water can be removed from the storage site and processed through an oil-water separator that would be mobilized to site. Hydrocarbons recovered will be burned in the camp incinerator or shipped off-site.

6.3. QUARRY MANAGEMENT PLAN

Construction quarry and/or borrow material needed for development and site preparation will be sourced as defined in the attached Borrow Pit and Quarry Management Plan.

Best management practices will be used in the selection, construction, and operation of borrow pits and quarries for the Project, including minimizing the surface area and cuts of quarries and borrow pits, where possible; maintaining the floor of the quarries and borrow pits slightly above the elevation of the surrounding area to promote drainage and avoid creating quarry lakes; preventing erosion and sedimentation through appropriate control measures; and carrying out ARD/ML testing and water quality monitoring in support of mitigation measures.

The quarries and borrow pits selected showed no potential to generate acid drainage. Visual examinations of materials and additional testing will be conducted during construction to confirm that the best available building materials are being used.

6.4. COMPREHENSIVE SPILL CONTINGENCY PLAN

In the unlikely event of a spill, Sabina has prepared a plan to facilitate effective communication and efficient cleanup of spills of potentially hazardous materials. The objectives of the plan are to comply with federal and territorial laws, regulations, and guidelines; identify roles, responsibilities, and reporting procedures; detail plans of action to be followed in the event of a spill; provide readily accessible emergency information to the cleanup crews, management, and government agencies; promote the safe and effective recovery of spilled materials; and minimize the environmental impacts of spills to land, water and/or ice and snow.

During development works, site-preparation, and early construction phases, the Project is supported by the existing exploration facilities. Sabina has in place a single Spill Contingency Plan for all current activities for the Project in compliance with water licence 2BE-GOO1520. Sabina proposes to use the approved Spill Contingency Plan which exists for Goose exploration operations to minimize duplication and streamline emergency response in facilitation of effective communication in the event of a spill. A separate Spill Contingency Plan for full Construction, Operations, and Closure will be submitted with the Type A Application.

Prevention and inspections are proactive components of the spill plan. During orientation, all staff, employees, and contractors will be presented the plan, and will be made aware o*f the locations of spill kits, and trained in using spill equipment and responding to spills.*

Regular worksite inspections will be conducted to identify measures to minimize or prevent the risk of spills. As part of on-site orientation sessions, all staff is to understand the steps to be undertaken in the event of a spill. This includes that all spills are to be reported, and that containment and clean-up is necessary, be they minor or major spills. Following the clean-up of a spill, the Environmental Department will inspect the spill site and, if necessary, collect samples to verify that the clean-up is complete.

All personnel will be trained to be aware of the potential hazards associated with the fuel/chemicals with which they will be assigned to work. In addition to work site inspections conducted by area specific employees, the Environmental Department will conduct weekly inspections to audit facilities where hazardous materials are handled and stored.

The spill plan also includes an action plan in the event of a spill. Specific procedures will vary depending on the season and hazardous materials spilled, as well as on location of the spill (on land, water, ice, or snow). The material safety data sheets for the material spilled will be consulted to ensure that safety procedures are followed.

6.5. CLOSURE, RECLAMATION, AND SECURITY

The overall goal of closure and reclamation is to return the mine site and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and with human activities. The overall closure goal is supported by the four closure principles of physical stability, chemical stability, no long-term active care requirements, and compatibility with future land uses for each component of the Project.

Mine closure is integral to the mine design, thus the Interim Closure and Reclamation Plan will be modified in a series of conceptual plans as the Project progresses. Planning for permanent closure is an active and iterative process, the intent of which is to develop a final plan using adaptive management. Adaptive management will enable closure planning and design to evolve as site-specific information and monitoring data become available through analyses, testing, monitoring, and progressive reclamation.

Monitoring programs will be initiated during development, construction and operations to provide additional baseline information on which to base updates to the closure plan. The adaptive management plans to be used in Closure will follow the actions completed during Operations, and will be coordinated with the existing operational monitoring programs to set appropriate trigger levels, and mitigation plans and actions.

Sabina has prepared an Interim Closure and Reclamation Plan for the development works proposed under this Type B Water Licence Application. A separate Closure and Reclamation Plan and Security Estimate for full Construction, Operations, and Closure will be submitted with the Type A Application.

6.6. ENVIRONMENTAL MANAGEMENT AND PROTECTION PLAN

The Environmental Management and Protection Plan (EMPP) submitted in support of the Type B Application describes the overarching direction for environmental and socio-economic management for the development works phase of the Project. A separate EMPP for full construction, operation, and closure will be submitted with the Type A Application.

A cyclical feedback loop will be employed where activities are planned and implemented, monitoring data are collected and analyzed, and practices are adjusted to promptly reduce or eliminate any observed negative impacts. Continual use of this feedback loop will allow adaptive management decisions to be made on an ongoing basis, and will lead to improvements to the environmental and socio-economic management system as necessary. The EMPP will offer flexibility to respond to changes.

The EMPP seeks to clarify the specific monitoring and inspections to be conducted by Sabina in relation to the development activities proposed in the Application.

7. Water Licence Considerations

7.1. TERM OF LICENCE

Sabina requests a term of at least one year to allow for construction of some basic infrastructure site preparation during the mobilization and development phase of the Project. Sabina is requesting the term of licence expiry be set "upon issuance of the Type A". Sabina is requesting that should a Type A Water Licence be issued for the Project in the future, that the Board incorporate the scope of this Type B Application/Licence into the Type A Water Licence.

7.2. STATEMENT OF FINANCIAL RESPONSIBILITY

The Project is 100% owned by Sabina. All rights, title, interests, liabilities, and obligations for the Project rest with Sabina. In 2009, Sabina acquired the Project from Dundee Precious Metals for a total acquisition cost in the order of $29.3 million.

Taking into account Sabina's past performance, Sabina confirms in this application:

- it has the financial responsibility adequate to satisfy section 57 of the NWNSRTA, to complete the undertaking from Construction to Closure;
- measures are in place and will be put in place to mitigate any adverse impacts; and
- it is committed to ongoing maintenance and restoration of the proposed Back River mine site in the event of future closing or abandonment of the undertaking. Sabina is confident in assuming its position, taking into account their current, ongoing, and past performance in the Kitikmeot Region, Nunavut, and Canada.

A copy of Sabina's audited financial statements for 2016 fiscal year can be found in Appendix E or at the following link: Financial Statements.

In 2014-2015, through the payment of wages and benefits, exploration activities, community support Sabina contributed approximately $1.6M to the economy of Nunavut.

Sabina released a Feasibility Study (Sabina June 2015) on its 100% owned Back River Gold Project which presents a project that has been designed on a fit-for purpose basis, with the potential to produce approximately 350,000 ounces of gold annually for about up to 10 years. At a US$1,200 gold price and a 0.87 exchange rate, the feasibility study proves the Project delivers a potential after tax internal rate of return of approximately 21.7% with an initial CAPEX of $695 million.

It is estimated that the capital cost to construct and bring the proposed Mine into production will be $695 million. The construction workforce is expected to average 650 persons per year, and the average operational workforce will be 8000 persons. Based on an ore production rate of 6,000 tonnes per day, the average operating costs for the Project are $181.9 million per year. Over the Life of Mine, the Project is estimated to generate federal government tax revenue in the order of $409 million, and $45 million at the territorial level.

As shown in the June 2015 Feasibility Study, the Project has Proven and Probable gold reserves of 3,047 thousand ounces for the Goose deposits. The total Measured and Indicated resources for the Back River deposits are 5,333 thousand ounces (October 2014).

Sabina has been subject to a rigorous environmental assessment and review of the Project prior to issuance and approval of licences/permits to authorize the Construction and Operations. This combined with Sabina's commitment to manage, mitigate and monitor throughout all phases of the project confirms measures are, and will be put in place to mitigate any adverse impacts.

This Application includes an Interim Closure and Reclamation Plan for the Development Works. Reclamation costs have been determined as part of the closure planning and Sabina is committed to providing adequate security to cover the cost of reclamation over the life of the mine to ensure the closure criteria can be met. Sabina intends to apply progressive reclamation options during Operations, before Closure, to take advantage of cost and operating efficiencies by using the resources available from mine operations to reduce overall reclamation costs. Progressive reclamation enhances environmental protection and shortens the timeframe for achieving the reclamation objectives and goals, and reduces the financial security requirement (AANDC 2007).

7.3. SECURITY

Sabina intends to fund its reclamation and water licence financial security liability for the Project through guaranteed letters of credit issued by one of the five major Canadian based banks. Security to cover:

- Government of Canada (for water related financial security against reclamation or major accident causing environmental damage as outlined under the Type A Water Licence);
- Kitikmeot Inuit Association (for land and water related financial security against reclamation or major accident causing environmental damage, as outlined under the Commercial and Production land use leases for IOL); and
- Fisheries and Oceans Canada (for financial security against successful implementation of fish compensation measures as authorized by DFO).

Currently Sabina holds letters of credit in the range of $2.2 million pledged for reclamation liability (i.e., land use lease security, etc.) for existing exploration activities. These letters of credit are deducted from Sabina's credit lines held by the banks, and are irrevocable letters of credit.

Sabina is confident that it has the economic preparedness to meet the requirements for reclamation and security for the Project.

Sabina acknowledges that the NWB may require the company to furnish and maintain security with the Minister, in a form determined by the Regulations or satisfactory to the Minister. As such, Sabina has provided an Interim Closure and Reclamation Plan and Security Estimate with the Application. The plan includes an estimate of financial liability for development works and site preparation. Additional financial liability for development works is estimated to be $1,394,653.

For the purpose of the determination of security for this Application, Sabina would propose the NWB defer full consideration of security of project liability to the review of the Type A Water Application to be submitted to the NWB to avoid potential "double bonding".

Looking forward to the Type A Application, Sabina intends to enter into an arrangement relating to security given the proposed mine is located predominantly on IOL. To minimize potential for overbonding of the Project, Sabina proposes a Security Management Agreement (or similar) between the Minister, the KIA, and Sabina be developed for consideration by the NWB in advance of a final hearing on the Type A Application. In addition, Sabina proposes parties consider staged bonding for provision of security.

7.4. ANNUAL REPORTING

Sabina confirms that it will file an annual report with the Board by March 31 of the year following the calendar year being reported as required by the Regulations. The annual report will contain the information as directed by the Board in the water licence.

7.5. RENEWAL OR AMENDMENTS

Sabina does not foresee renewal of a licence related to this Application for development works, but rather the incorporation of this Type B licence into a Type A Water Licence if issued by the NWB for full development of the Project.

8. References

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2002. *Species at Risk Act*, SC. C. 29.

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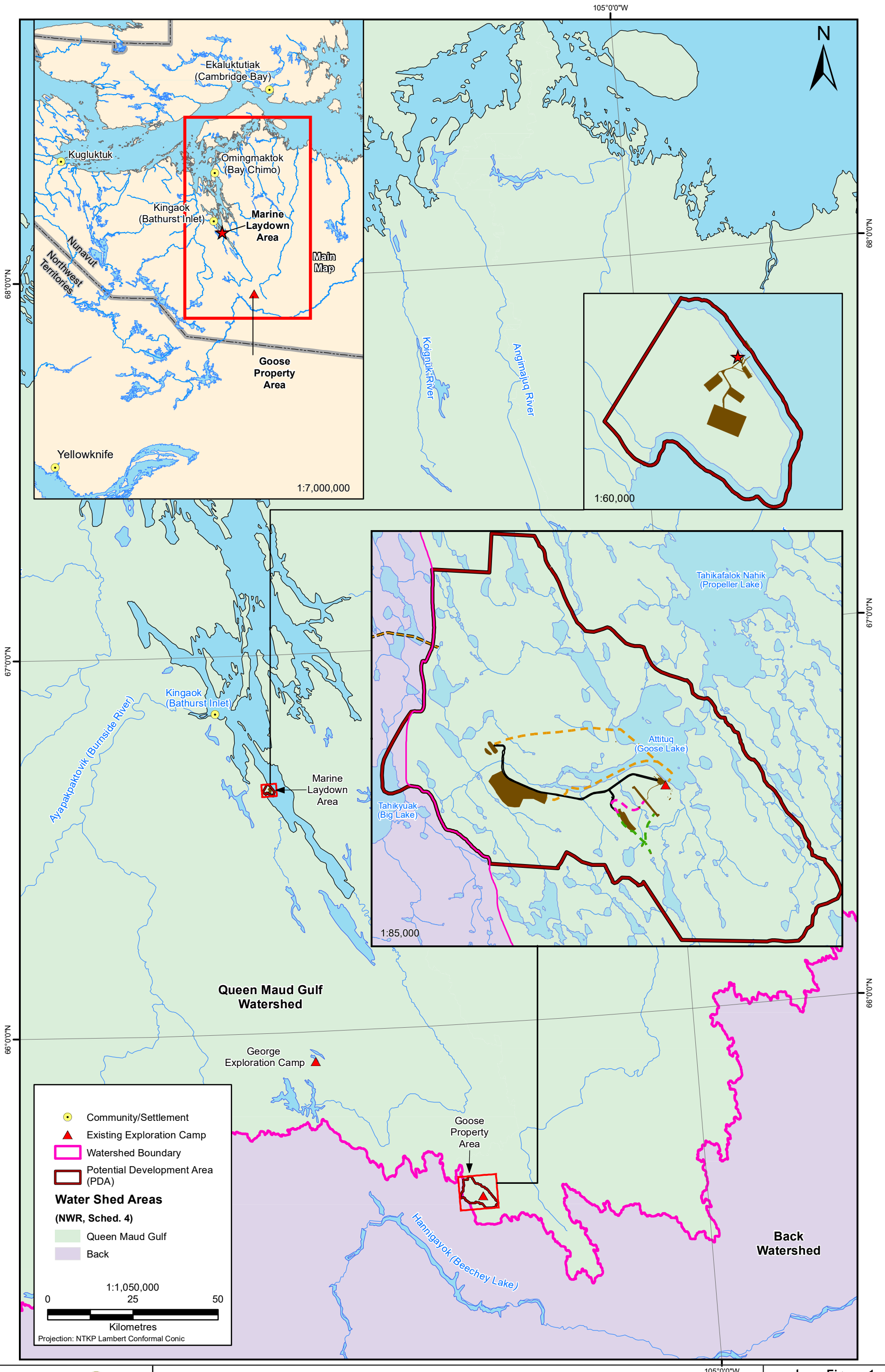
Transport Canada. 2015. Aerodromes Standards and Recommended Practices (TP 312) 5th Edition. Revised July 2015.

Appendix A: base Figures



base Figure 1

Sabina
GOLD & SILVER CORP.

Nunavut Water Shed Areas of the Back River Project Type B Water Licence

GIS # **BaseFigure2_2b**

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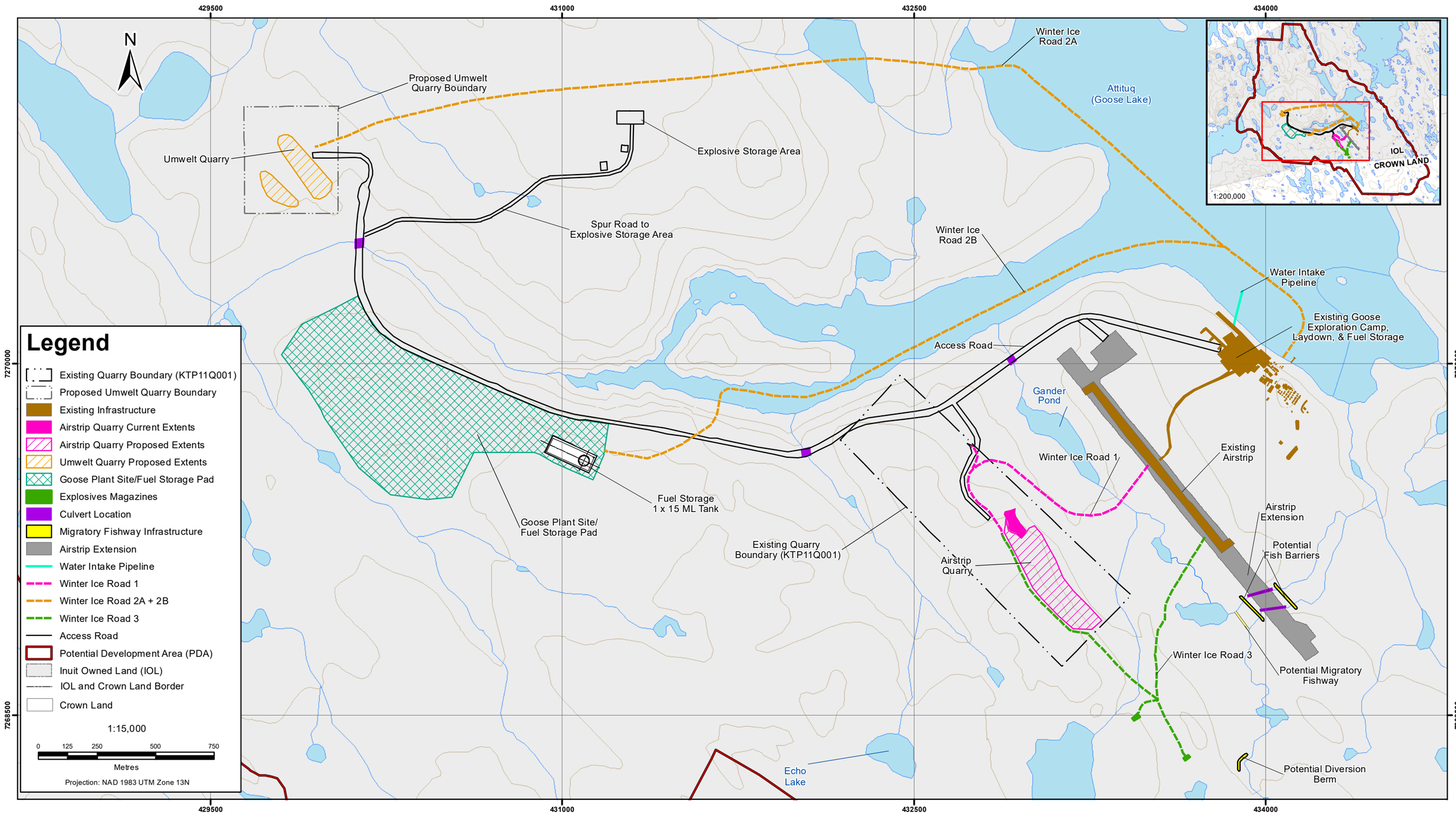
November 10, 2017



Sabina GOLD & SILVER CORP.

Goose Property Area
Potential Development Area and Layout
Type B Water Licence

base Figure 2

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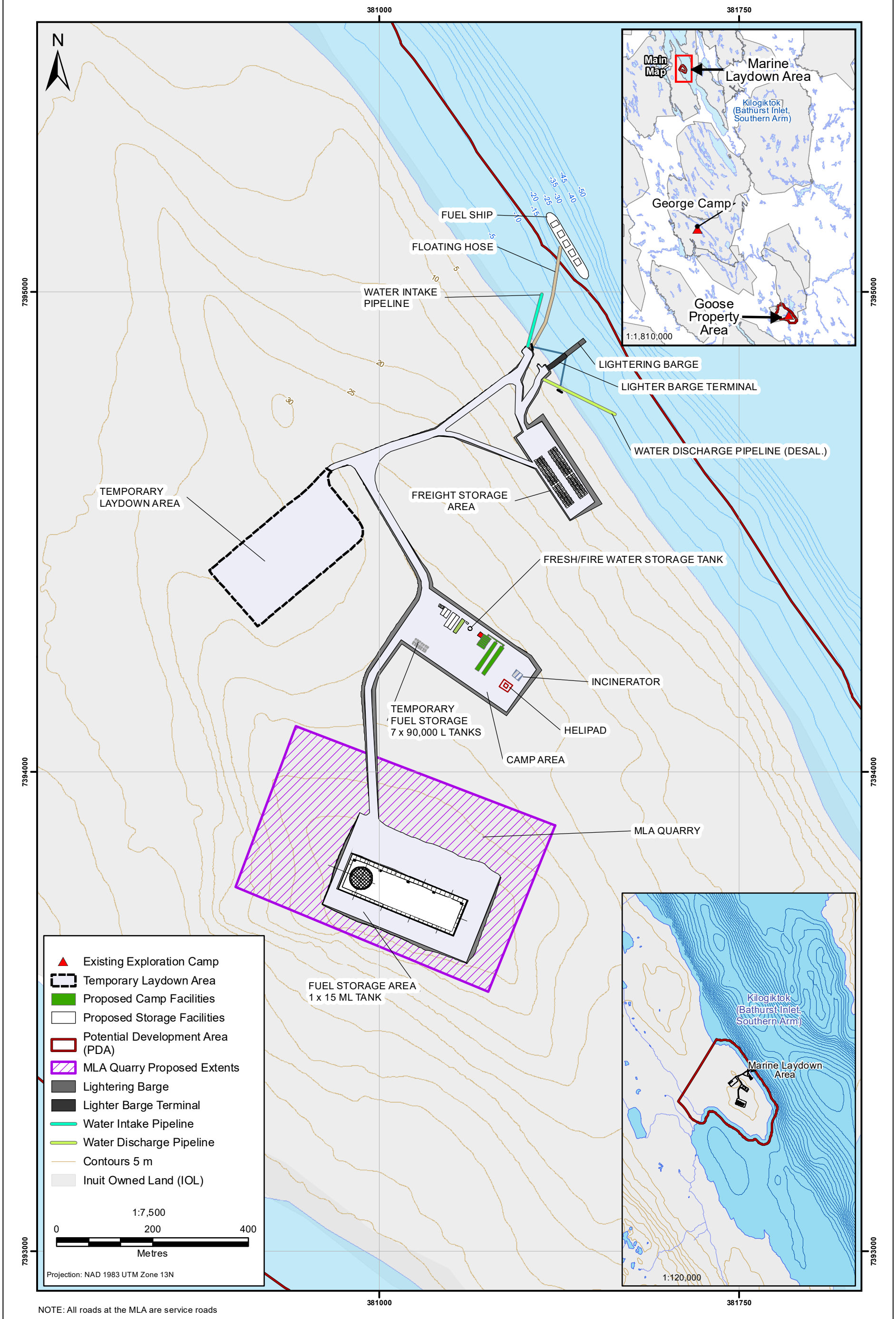

NOTE: All roads at the MLA are service roads

Sabina GOLD & SILVER CORP.

Marine Laydown Area
Potential Development Area and Layout
Type B Water Licence

base Figure 3

Appendix B: Concordance

Appendix B: CONCORDANCE

CONCORDANCE ASSESSMENT

Nunavut Water Board Mining and Milling Supplemental Information Guideline (SIG) for Mineral Exploration / Remote Camp (MM1)

Modified for Development Works

BACK RIVER PROJECT

September 2017

Note: This completed supplemental information guideline (SIG) for a Mineral Exploration Remote Camp (MM1) and NIRB Guide 9 were used to assess the development application and modified to include monitoring as required for general water works.

2.0 Minimum Application Requirements (Application Checklist)

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment
Minimum Application Requirements	**1**	General Water Licence Application Form (see the NWB's *Guide 4: Completing and Submitting a Water Licence Application for a New Licence*) or Application for Water Licence Amendment Form, if appropriate (see NWB's *Guide 7: Licensee Requirements Following the Issuance of a Water Licence*).	Y	n/a	General Water Licence Application Form from Sabina Gold & Silver Corp. to NWB for submission of the Application (Cover Letter) September 2017 **(Note: All reports authored by Sabina Gold & Silver Corp. unless otherwise stated)**	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Full Document	
	2	Information required to satisfy the requirements of the SIG including plans, reports and designs.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Full Document	
					NTS Map Sheets, September 2017	170913 8BC-BRP---- Attachment B_NTS Sheet	Attachment B - Full Document - NTS Sheets	
					Main Application Supporting Document (MASD); September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Full Document	
					MASD; September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Appendix B - Full Document - Concordance Assessment	
	3	Executive summary of Application in English.	Y	n/a	MASD; September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Executive Summary Section	
	4	Translated executive summary of Application in appropriate language and dialect.	Y		MASD; September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Executive Summary Section	
	5	Application fee.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 27	
					MASD; September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 2.0, Table 2.1	
	6	Water use fee.	n/a	Water use fee paid to Regional Inuit Association (RIA)	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 27	
				Water use fee paid to Regional Inuit Association (RIA)	MASD; September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 2.0, Table 2.1	

2.0 Minimum Application Requirements (Application Checklist)

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment
	7	A table indicating concordance of the application and supporting documents to the Guidelines. These generic Guidelines are provided in excel as a tool for applicants to provide the necessary concordance table.	Y	n/a	MASD; September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Appendix B - Full Document - Concordance Assessment	

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Applicant	**1**	Provide the full name of the applicant and contact person including contact information (position, phone number, address, fax number and email address).	Y	n/a	General Water Licence Application, September 2017 **(Note: All reports authored by Sabina Gold & Silver Corp. unless otherwise stated)**	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 1	**n/a**	
Applicant Representative	**2**	Provide the name and contact information of any party submitting the application on behalf of the applicant (including position, phone number, address, fax number and email address).	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 1	n/a	
					Type B Application Cover Letter, September 2017	170913 8BC-BRP---- Application Cover Ltr	Full Document	n/a	
					Main Application Supporting Document PD (MASD), September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Section 1.1	n/a	
	3	Provide a signed letter authorizing a party to be the applicant's representative in the licensing process.	Y	n/a	Type B Application Cover Letter, September 2017	170913 8BC-BRP---- Application Cover Ltr	Full Document	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 2		
Name of Project	**4**	Provide the name of the project.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 3	n/a	
Location of Undertaking	**5**	Provide coordinates of the project extents	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 4	n/a	
	a	Provide location by Latitude and Longitude (degrees, minutes and seconds).	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 4	n/a	
	b	Provide location by UTM coordinates, if available.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Appendix A-Base Figure	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 4	n/a	
	c	Provide the distances to the nearest communities.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Executive Summary, Section 1.0, 1.2	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 9		
	6	Indicate whether the drainage basin, in which the project is located, is shared with any other jurisdiction. If applicable, indicate which jurisdiction.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Executive Summary, Section 1.0, 1.2, Appendix A-Base Figure 1	n/a	

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Map	**7**	Provide a map at a 1:50,000 scale based on the National Topographic Series indicating the location of the undertaking, watercourses and the location of waste deposits. Additional maps at various scales may be provided if those maps will provide additional information or clarification. All additional maps must indicate the scale, map sheet number, and location of north.			General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 9		
			Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Appendix A-Base Figures	n/a	
					NTS Map Sheets, September 2017	170913 8BC-BRP---- Attachment B_NTS Sheet	Attachment B		
Nature of Interest in the Land	**8**	Provide the nature of the interest in the land associated with the proposed undertaking, including:	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 6	n/a	
	a	Sub-surface leases from Nunavut Tunngavik Incorporated (NTI) and/or Indian and Northern Affairs Canada (INAC) as well as surface authorizations from INAC for crown land use, a Designated Inuit Organization (DIO) for Inuit Owned Land (IOL) use, or the Government of Nunavut for Commissioner's land use. Provide the permit or licence numbers.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Section 2.4, Table 2.4-1, Figure 2.4-1	n/a	
	b	The date or expected date of issuance of any authorization and the date of expiry.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Section 2.4, Table 2.4-1	n/a	
	9	Indicate whether the applicant is the name of the entity holding the authorization for the interest in the land and if not, provide the name of the entity holding the authorization.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 6	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Section 1.1, Section 2.4	n/a	
NPC Determination	**10**	Provide written confirmation from the NPC confirming that NPC's requirements under the NLCA regarding land use plan conformity (Article 11 of the NLCA) have been addressed.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 7	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Section 2.1	n/a	
NIRB Determination	**11**	Provide written confirmation from the NIRB confirming that NIRB's requirements under the NLCA regarding development impact assessment (Article 12 of the NLCA) have been or are in the process of being addressed. Documentation may include:	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 8 and Block 9	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Section 2.2	n/a	
	a	Written confirmation from NIRB that the project proposal does not require screening;	Y	n/a	See item 11 above	See item 11 above	See item 11 above	n/a	
	b	NIRB's screening determination;	Y	n/a	See item 11 above	See item 11 above	See item 11 above	n/a	
	c	If a review is required, NIRB's recommendation to the Minister regarding the type of review;	Y	n/a	See item 11 above	See item 11 above	See item 11 above	n/a	
	d	If a review is required, the Minister's written decision regarding the review of the development proposal;	Y	n/a	See item 11 above	See item 11 above	See item 11 above	n/a	

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	e	If a review is required, NIRB's project certificate;	Y	n/a	See item 11 above	See item 11 above	See item 11 above	n/a	
	12	List of activities requested for exception in accordance with NLCA s. 12.10.2;	n/a	activities fall within scope of the Amendment Applications	n/a	n/a	n/a	n/a	
	13	Indicate whether any Type B water licence application is for an activity to be considered for interim, short term approval in accordance with NLCA s. 13.5.5.	Y	n/a	Type B Application Cover Letter, September 2017	170913 8BC-BRP---- Application Cover Ltr	Full Document	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 9	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Section 1.0	n/a	
Description of Undertaking	**14**	See section 4 of this SIG for specific requirements.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 9	n/a	
			Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Executive Summary, Section 1.5, Section 3.0 (and subsections)	n/a	
Other Applicable Supplemental Information Guidelines	**15**	Indicate whether any other Supplemental Information Guidelines apply to the undertaking including the following:	**Note: no SIG established for pre-development works and site preparation. SIGs are a tool to support an application; therefore, Sabina has used the mineral exploration/remote camp SIG to support this Type B application as it is consistent for scale of proposed pre-development works in advance of mine development.**						
	a	Hydrostatic testing	n/a	Not a project consideration	n/a	n/a	n/a	n/a	
	b	Tannery	n/a	Not a project consideration	n/a	n/a	n/a	n/a	
	c	Tourist / remote camp	n/a	Not a project consideration	n/a	n/a	n/a	n/a	
	d	Landfarm and on-site storage of hydrocarbon contaminated soil	n/a	If contaminated soils found within the claim they are treated and/or disposed of in accordance with 2BE-GOO1520 and 2BE-GE01520. Mitigation outlined in Attachment C - Appendix D.2 and D.4	n/a	n/a	n/a	n/a	
	e	Onshore oil and gas exploration drilling	n/a	Not a project consideration	n/a	n/a	n/a	c	
	f	Mineral exploration/ remote camp	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 11	n/a	
			Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Attachment C - Appendix B Concordance	n/a	

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	g	Advanced exploration	n/a	Ongoing advanced exploration to continue under water licence 2BE-GOO1520 and 2BE-GE01520	n/a	n/a	n/a	n/a	
	h	Mine development	n/a	Not a project consideration	n/a	n/a	n/a	n/a	
	i	Municipal	n/a	Not a project consideration	n/a	n/a	n/a	n/a	
	j	General Water Works	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment A - Block 11	n/a	
			Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Attachment C - Appendix B Concordance	n/a	
	l	Power	n/a	Not a project consideration	n/a	n/a	n/a	n/a	
Options (Alternatives)	**16**	Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment A - Block 10	n/a	
			Y	n/a	MASD, September 2017	170913 8BC-BRP----Main Application Document	Section 4.0		
Water Use	**17**	See section 6 of this SIG for specific requirements	Y	See Tab 6.0 Water Use	See Tab 6.0 Water Use	See Tab 6.0 Water Use	See Tab 6.0 Water Use	See Tab 6.0 Water Use	
Water Use: Quality and Quantity	**18**	See section 6 of this SIG for specific requirements	Y	See Tab 6.0 Water Use	See Tab 6.0 Water Use	See Tab 6.0 Water Use	See Tab 6.0 Water Use	See Tab 6.0 Water Use	
Waste Disposal	**19**	See section 7 of this SIG for specific requirements	Y	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	
Waste Disposal: Quality and Quantity	**20**	See section 7 of this SIG for specific requirements	Y	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	See Tab 7.0 Waste Disposal	
Other Authorizations	**21**	Provide a list of any authorizations required in relation to the project in addition to the water licence. For each additional authorization required for the project, provide the name of the authorization, the administering agency, the project activity requiring the authorization, the date or expected date of issuance and the date of expiry. Provide a description of how	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 2.1 to 2.5, Table 2.3-1, Table 2.4-1, Appendix F	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment A - Block 16	n/a	
	22	Provide formal applications to the Navigable Waters Protection Program (NWPP) for any works if applicable.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 2.5.4	n/a	
	23	Provide a timetable for filing the appropriate plans and procedures required by government parties.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 2.1 to 2.5, Table 6.1	n/a	
	24	Indicate whether the applicant/ licensee holds any existing water licences. If applicable, provide the licence number and expiry date of any existing water licences.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 2.3, Table 2.3-1	n/a	
Predicted Environmental Effect and Proposed	**25**	Identify the potential effect of water use and waste disposal on the following components:	**Section summarized in the context of the overall Back River Project. For additional information refer to the FEIS and FEIS Addendum submitted to NIRB where environmental effects and mitigation measures are evaluated in detail. Reference provided relevant to the scale and scope of the undertaking.**						

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
mitigation measures			Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP----General Water Licence Application	Attachment A - Block 17	n/a	
	a	Groundwater and Surface Water including: changes in flow (including seasonal rate of flow) quantity quality	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 5.1.4, Section 5.1.5, Section 5.1.6	n/a	
	b	Land including: geologic structure change soil contamination compaction, settling and erosion alteration of the permafrost regime riparian zone loss	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 5.1.1	n/a	
	c	Vegetation including: species composition and abundance non-native species introduction accumulation of toxins and heavy metals (in relation to remediation objectives for closure)	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 5.2.1	n/a	
	d	Aquatic Ecosystems including: fish benthic invertebrates plankton	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 5.2.3	n/a	
	26	See sections 5, 6 and 7 of this SIG for additional information requirements	Y	defer as identified	defer as identified	defer as identified	defer as identified	defer as identified	
Existing and Other User Water Rights	**27**	Provide the names, addresses, and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 2.4.3	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment A - Block 18	n/a	
	28	Provide a description of any potential effects of the project on the persons or properties identified in item 27 of this section.	n/a	None Identified	n/a	n/a	n/a	n/a	
	29	Provide a description of the measures incorporated into the project design to mitigate effects of the project on the persons or properties identified in item 27 of this section.	n/a	None Identified	n/a	n/a	n/a	n/a	
	30	Indicate whether compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.	n/a	To be resolved prior to the issuance of Type A Water Licence	n/a	n/a	n/a	To be resolved prior to the issuance of Type A Water Licence	
Inuit Water Rights	**31**	Provide a description of any potential effects of the project on the quality, quantity, or flow of waters flowing through Inuit Owned Land (IOL).	**Section summarized in the context of the overall Back River Project. For additional information refer to the FEIS and FEIS Addendum submitted to NIRB.**						
			Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 5.0, Section 5.1.6, Section 5.2.4, Section 5.3.4	n/a	

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 19	n/a	
	32	Provide a description of the measures incorporated into the project design to mitigate effects of the project on the quality, quantity, or flow of waters flowing through IOL.	**Section summarized in the context of the overall Back River Project. For additional information refer to the FEIS and FEIS Addendum submitted to NIRB.**						
			Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 6.0 (All)	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	All Supplemental Documents (SD) D.1 to D.7 (inclusive)	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 23 (list of plans)	n/a	
	33	Indicate whether an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO); or if the parties have been unable to reach an agreement on compensation	**Section summarized in the context of the overall Back River Project. For additional information refer to the FEIS and FEIS Addendum submitted to NIRB.**						
			n/a	To be resolved prior to the issuance of Type A Water Licence	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 2.4.1	To be resolved prior to the issuance of Type A Water Licence	
Consultation	**34**	Provide a summary of any consultation meetings including when the meetings were held, where and with whom.	**Section summarized in the context of the overall Back River Project. For additional information refer to the FEIS and FEIS Addendum submitted to NIRB.**						
			Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Block 20	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 2.6, Table 2.6-1	n/a	
	35	Provide a summary of the results of consultation meetings including a list of concerns expressed and measures proposed to address concerns.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 2.6	n/a	
Security	**36**	Provide a financial security assessment that is prepared in a manner consistent with principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut* , Indian and Northern Affairs Canada, 2002. The financial security assessment must include:	**Section summarized in the context of the overall Back River Project. For additional information refer to the FEIS and FEIS Addendum submitted to NIRB.**						
			Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Block 21	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 6.5, Section 7.3, Appendix D.5	n/a	
	a	An estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking;	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	SD D.5	n/a	
	b	The cost of having the necessary reclamation work done by a third-party contractor if the operator defaults;	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	SD D.5	n/a	
	c	Contingency factors appropriate to the particular work to be undertaken.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	SD D.5	n/a	
Abandonment and Restoration	**37**	Provide plans for the abandonment and restoration of facilities.	**Section summarized in the context of the overall Back River Project. For additional information refer to the FEIS and FEIS Addendum submitted to NIRB.**						
			Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 6.5, Section 7.3, SD D.5	n/a	

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	38	Provide a list and description of any existing abandoned or restored site facilities.	n/a	Not a project consideration	n/a	n/a	n/a	n/a	
Financial Information	**39**	Provide a statement of financial responsibility.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 1.1, Section 7.2	n/a	
	40	If the applicant is an entity for which audited financial statements are issued, a copy of the most recent audited financial statements must be attached to the statement of financial responsibility.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Appendix E	n/a	
	41	Provide the name of the corporation, limited company or other business entity, with a list of the officers of the company and a copy of the Certificate of Incorporation or evidence of registration of the company name.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 1.1, Appendix C, Appendix D	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 22	n/a	
Studies and Designs	**42**	Provide a list of studies, reports and plans relevant to the application that have been undertaken to date.	Y	n/a	Type B Application Cover Letter, September 2017	170913 8BC-BRP---- Application Cover Ltr	Full Document	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 23	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 6.0 (All), Table 6.1	n/a	
Proposed Time Schedule	**43**	Provide the proposed start and completion dates for each phase of development (construction, operation, closure) and any anticipated periods of seasonal shut down.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 24	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 1.3, Section 1.6, Table 1.6-1	n/a	
Proposed Term of Licence	**44**	Provide a proposed term of licence including the expected date of licence issuance and the expected date of licence expiry.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP----General Water Licence Application	Attachment A - Block 25	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 7.1	n/a	
Annual Reporting	**45**	Provide detailed information regarding the content of annual reports and a proposed outline or template of the annual report. The annual report should include the following:	**Sabina is committed to compliance with terms and conditions of the water licence which is expected to define Annual Reporting requirements.**						
			Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 26	n/a	
	a	Water related monitoring results;	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 7.4	n/a	

3.0 General Water Licence Application

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	b	A description of how the conditions in any NIRB screening decision related to the NWB mandate have been implemented;	n/a	Screening decision requirements will be imposed where applicable within a licence upon issuance by the NWB.	n/a	n/a	n/a	n/a	
	c	Any actions taken in response to direction provided by the Inspector.	n/a	not applicable at this time; new water licence application	n/a	n/a	n/a	n/a	
Renewals and Amendments	**46**	If the application is for a renewal or amendment of an existing licence provide the water licence number and the date of water licence expiry.	n/a	New water licence application	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 7.4	n/a	
	47	If the application is for a renewal or amendment of an existing licence, provide a compliance assessment/status report. This report must document the status of compliance for each condition of the existing water licence taking into consideration inspector dialogues and inspector directions, responses to inspector dialogues and inspector directions, spills that may have occurred, and any reporting requirements. The report must indicate when facilities were inspected by regulatory agencies and list any spills that may have occurred including a description, location shown on a map, and the action taken to address the affected area.	n/a	New water licence application	n/a	n/a	n/a	n/a	

4.0 Project Description

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Description of Undertaking	**1**	Provide a complete description of the undertaking with detailed site plan(s) of all infrastructure. Include maps and/or aerial photos with scales that allow the determination of distances between the objects depicted. Differentiate any temporary components from permanent components. Consider the following in providing the description:	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.0 and all subsections, Appendix A	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment A - Block 9	n/a	
	a	Camp site;	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	b	Raw water intake;	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
			Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.1.2.9, Section 3.2.2.6	n/a	
	c	Water storage and treatment facilities;	n/a	not a project component	n/a	n/a	n/a	n/a	
	d	Existing water bodies/courses and any changes to these water bodies/courses that may have or may occur as a result of water use or waste disposal facilities.	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
			Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment A - Block 12		
			Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.1.2.6, Section 3.1.2.7	n/a	
	e	Sewage disposal / treatment facilities;	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	f	Greywater disposal / treatment facilities;	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	g	Solid waste disposal facilities (ie. incinerators);	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n	
			Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment A -Block 15		

4.0 Project Description

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	h	Hazardous waste disposal facilities (including waste oil);	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	

4.0 Project Description

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	i	Fuel and chemical storage facilities (including empty barrels);	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA); updated plan provided	Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP----D4ComprehensiveSpillContingencyPlan-IMLE	Section 1.6, Section 2.0		
			Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.1.1.3 Section 3.1.2.4 Section 3.2.2.2 Section 3.2.2.5		
	j	Traditional water use and land use areas that may be impacted by the project;	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 5.1.5, Section 5.3.2	n/a	
	k	Transportation access routes and details of water course crossings (see the NWB's SIG for General Water Works (M1));	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.1, Section 3.1.1.4, Section 3.1.2.6, Section 3.2, Section 3.2.2.4, Section 3.1.2.6, Section 3.1.2.7		
			Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	Supplemental Document (SD) D.1 to the MASD	n/a	
	l	Locations of environmental monitoring sites;	Y	n/a	Environmental Management and Protection Plan, August 2017	170913 8BC-BRP----D6EMPP-IMLE	SD D.6 to the MASD: Table 3.3-1, Figures 3.3-1 and 3.3-2	n/a	
	m	Abandoned and/or restored facilities;	Y	n/a	Interim Closure and Reclamation Plan, August 2017	170913 8BC-BRP----D5InterimCRP-IMLE	SD D.5 to the MASD	n/a	
	n	Existing on site infrastructure;	Y	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 1.4	n/a	
	o	Others: (describe)	n/a	not requested under this application	n/a	n/a	n/a	n/a	
Camp	**2**	Classify the camp as one of following:						n/a	
	a	Mobile (self propelled)	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO	n/a	n/a	n/a	n/a	
	b	Temporary							
	c	Seasonally occupied (provide months occupied)							
	d	Permanent	Y	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	e	Other: (describe)	n/a	not requested under this application	n/a	n/a	n/a	n/a	
	3	Provide the design, maximum and average populations of the camp	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 1.4, Section 3.1.1.1, Section 3.2.1.1	n/a	

4.0 Project Description

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	4	Provide a description of how the location of the camp was selected. Indicate whether assistance from the Regional Inuit Association Land Manager was obtained in selecting the site.	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	5	Indicate whether the camp will support exploration projects other than the exploration project proposed in this water licence application. If applicable, provide a list of the other projects that the camp might support.	n/a	not requested under this application	n/a	n/a	n/a	n/a	

4.0 Project Description

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Exploration	**6**	Indicate whether any of the following activities are proposed:							
	a	Preliminary site visit	n/a	Not requested under this application	n/a	n/a	n/a	n/a	
	b	Prospecting							
	c	Geological mapping							
	d	Geophysical surveying							
	e	Diamond drilling							
	f	Reverse circulation drilling							
	g	Evaluation drilling / bulk sampling (see SIG MM2)							
	h	Other: (describe)	Y					n/a	
	7	Indicate whether drilling activities are:	n/a		n/a	n/a	n/a	n/a	
	a	Land based							
	b	Drilling on ice							
	8	Indicate the type of deposit as one of the following:							
	a	Diamond	n/a		n/a	n/a	n/a	n/a	
	b	Gold	n/a		n/a	n/a	n/a	n/a	
	c	Uranium	n/a		n/a	n/a	n/a	n/a	
	d	Lead/Zinc							
	e	Other: (describe)							
	9	Provide a description of any core testing activities done on site.	n/a		n/a	n/a	n/a	n/a	

5.0 Baseline Information

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
			Section summarized in the context of the Back River Project. For additional information refer to the FEIS and FEIS Addendum reviewed by NIRB where environmental baseline provided in detail. Reference relevant to the scale and scope of the undertaking.						
Environmental Setting	**1**	Provide a description of the site using maps and/or aerial photos with scales that allow the determination of distances between the objects depicted.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Appendix A - Figures	n/a	
	2	Provide a description of the site history if it has been used in the past.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 1.4	n/a	
	3	Indicate whether any baseline information has or will be collected as part of this project.	**Section summarized in the context of the Back River Project. For additional information refer to the FEIS and FEIS Addendum reviewed by NIRB.**						
	a	Physical environment	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 5.1 and subsections	n/a	
	b	Biological environment	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 5.2 and subsections	n/a	
	c	Socio-economic environment	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 5.3 and subsections	n/a	
	d	Other:	n/a	not requested under this application	n/a	n/a	n/a	n/a	
	4	Provide a description of the results of any consultation with Elders regarding the collection of baseline data.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 2.6, Section 5.3.2	n/a	
	5	Provide a description of the historical uses of the waters affected by the project.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 5.3.2	n/a	
	6	Provide a description of any traditional uses of water in the project area.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 5.3.2	n/a	
Fisheries	**7**	If applicable, provide baseline data and an evaluation of baseline data describing fish and fish habitat in the project area. The applicant is advised to consult with DFO regarding fish and fish habitat related issues and to visit DFO's website at http://www.dfo-mpo.gc.ca/habitat/habitat-eng.htm. Indicate whether the applicant has consulted with DFO and provide the results of any consultation.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 2.5.1, Section 5.2.3	n/a	

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Water Use	**1**	Provide a detailed description of all types of water uses including: (See the NWB definition of "use" in the NWB Guide 2: Terminology and Definitions). Categorize water consumption use(s) as either industrial use and/or domestic use.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.3.1, Section 3.3.2	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment - Block 12	n/a	
	a	Obtain water for domestic purposes	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	b	Obtain water for industrial purposes	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	c	To cross a water course	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.3, Section 3.1.2.3	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment - Block 12	n/a	
			Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.6, Section 3.1.2.7	n/a	
			Y		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	Supplemental Document (SD) D.1 to the MASD - Section 4.1.3		
	d	To alter the flow of water, or store water	n/a	not a project component	n/a	n/a	n/a	n/a	
	e	Flood control	n/a	not a project component	n/a	n/a	n/a	n/a	
	f	To divert a watercourse	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.6, Section 3.1.2.7	n/a	
	g	To modify the bed or bank of a watercourse	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.3	n/a	
					General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment - Block 12	n/a	
	h	Others: dust suppression if needed	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.3.2 SD D.1	n/a	
					Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - Section 6.1.1		
	2	If any of the sub categories c through g of item 1 of this section apply to the project, please refer to the NWB's SIG for General Water Works (M1)	(see Item 15-38 below)					n/a	
Water Use: Quality and Quantity	**3**	Provide the name of the primary water source as well as the name of any alternative water source(s).	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.3.1	n/a	

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Water Intake **Identify uses as either domestic or industrial**				n/a	General Water Licence Application, September 2017	170913 8BC-BRP----Attachment A_Application Form	Attachment - Block 13	n/a	
	4	Provide a description of the source of water and the location of the water source as shown on a map.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.3.1, Section 3.1.2.9, Section 3.2.2.6 Appendix A- Base Figures	n/a	
	5	Indicate the type of water source(s) as lake, river, well, or other type.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.3.1	n/a	
	7	Provide the capacity of the water source.	n/a	minor use	n/a	n/a	n/a	n/a	
	8	Provide the acquisition rate in cubic metres per day and cubic metres per year.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.3.1	n/a	
	9	Provide a description of the water intake method including the intake facility, the operating capacity of the pump used, the details of any screening to exclude fish, and the distance the pump will be placed from the ordinary high water mark of the watercourse.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.3.1	n/a	
	10	Provide a description of the general condition of any existing water intake facility. Rate the condition of the facility as satisfactory or unsatisfactory and explain the rating.	n/a	not a project component	n/a	n/a	n/a	n/a	
	11	Indicate whether water is drawn from the source intermittently or continuously and if intermittently indicate during what months it is drawn and for what period it is drawn (days/weeks/months).	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.3.1	n/a	
	12	Indicate the amount of water to be returned to the source.	n/a	not a project component	n/a	n/a	n/a	n/a	
	13	Provide a description of the methods to ensure water returned to source is of an acceptable quality.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 3.3.3, Section 3.3.4, Section 3.2.2.6	n/a	
			Y	n/a	Environmental Management and Protection Plan, August 2017	170913 8BC-BRP----D6EMPP-IMLE	SD D.6 to the MASD, Section 3.3-1		
	14	Provide a description of any measures to reduce water consumption.	n/a	not a project component	n/a	n/a	n/a	n/a	
Water Storage	**15**	Provide a description of any water storage facilities including the type (reservoir/pond, storage tank), location, design, and the water storage volume in cubic meters.	n/a	not a project component	n/a	n/a	n/a	n/a	
	16	If the water storage facility is a reservoir, indicate whether the reservoir is lined, the type of liner and when it was or will be installed.	n/a	not a project component	n/a	n/a	n/a	n/a	
	17	Indicate whether a storage reservoir is created in a natural channel. If applicable, provide plan and profile drawings of the reservoir including the size of the drainage basin upstream of the reservoir, topographical plan showing the drainage area boundary, number of hectares flooded, surface area of the reservoir at full capacity, storage capacity, and details of shoreline protection.	n/a	not a project component	n/a	n/a	n/a	n/a	

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
	18	Provide a plan showing representative cross sections of the reservoir.	n/a	not a project component	n/a	n/a	n/a	n/a	
	19	Provide a description of the general condition of any existing water storage facility and provide an explanation if it is unsatisfactory.	n/a	not a project component	n/a	n/a	n/a	n/a	
Water Distribution	**20**	Provide a description of water distribution systems (ie. piped water, trucked) including the number of people on each system.	n/a	not a project component	n/a	n/a	n/a	n/a	
	21	For each phase of development, calculate the total water consumed per day (L/day) by multiplying the estimated number of persons on the system by the estimated average water consumption (Litres/ capita/day). Calculate the total water consumed for each individual distribution system if more than one is used (ie. piped water, trucked water).	n/a	not a project component	n/a	n/a	n/a	n/a	
	22	Provide a description of the general condition of any existing water distribution system and provide an explanation if it is unsatisfactory.	n/a	not a project component	n/a	n/a	n/a	n/a	
Watercourse Crossings	**23**	Provide a description of any watercourse crossings including pipelines, bridges, culverts or roads and its purpose.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.3, Section 3.1.2.6, Section 3.1.2.7	n/a	
			Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - Section 4.1.3		
	24	Indicate whether a temporary detour road is required to construct the watercourse crossing. If applicable, provide a schematic drawing that shows the location of the proposed detour road, any watercourse crossings to be constructed to facilitate the detour road, and the type of crossing.	n/a	not a project component	n/a	n/a	n/a	n/a	
	25	Provide a plan of any watercourse crossing showing cross section and elevations	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - Figure 4.1-1	n/a	
Watercourse Trainings	**26**	Provide a description of any watercourse trainings including channel and bank alterations, culverts, spurs, erosion control, and artificial accretion, and its purpose.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
Flood Control	**27**	Provide a description of any flood control structures and its purpose.	n/a	not a project component	n/a	n/a	n/a	n/a	
Diversions	**28**	Provide a description of any diversions including ditches and dikes, and its purpose.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.6, Section 3.1.2.7	n/a	
Alterations in flow	**29**	Provide a description of any activities or structures that could alter the flow of a watercourse including dams, spillways, berms, cofferdams, and dikes, and its purpose.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.6, Section 3.1.2.7	n/a	
	30	Indicate whether the natural storage capacity or water level of any lake or pond will be altered.	n/a	not a project component	n/a	n/a	n/a	n/a	
	31	If the alteration involves a dam, provide a plan showing the length, height, cross section and elevations of the dam and the location and preliminary designs of spillways, canals, sluice pipes, and any other outlet work.	n/a	not a project component	n/a	n/a	n/a	n/a	

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Dewatering	**32**	Provide a description of dewatering programs, if planned, including estimated quantities, qualities, dewatering flow rates, methods and schedule of withdrawal, end use or discharge location.	n/a	not a project component	n/a	n/a	n/a	n/a	
Identification	**33**	Indicate whether there are any signs identifying past or present water intake, storage, distribution systems and/or waterwork structures presently in the project area.	n/a	not a project component	n/a	n/a	n/a	n/a	
Modifications	**34**	Indicate whether any changes are planned for the water intake, storage, distribution systems and/or waterwork structures. If applicable, see item 35 of this section.	n/a	not a project component	n/a	n/a	n/a	n/a	
Proposed Water works	**35**	For each proposed water work component provide design plans. Design plans shall consider the following: **Culvert**							
	a	Name of the water body(s) affected.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.3.1, Section 3.1.2.6, Section 3.1.2.7	n/a	
	b	Site photos, site map, or air photos of the location.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Appendix A	n/a	
	c	Description of the existing condition of the site (see section 4)	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.3	n/a	
	d	Indicate whether any structures will be placed in water on a temporary, seasonal or permanent basis and provide a description of when and how the structure will be removed.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.3.1, Section 3.1.2.6, Section 3.1.2.7	n/a	
	e	The design flood flow in cubic metres per second and its return period for the type of structure proposed.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.3	n/a	
	f	An explanation of the rationale for the selected design flow flood and its return period.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.3	n/a	
	g	Design drawings in plan and profile, drawn to scale, including all relevant dimensions.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - Figure 4.1-1	n/a	
	h	Details of design parameters including seismic design criteria if applicable.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.2.3, Section 3.1.2.6, Section 3.1.2.7	Sabina confirms they will submit to the NWB for review 30 days prior to construction, construction drawings stamped by an Engineer for any engineered facilities proposed for development works	
	i	In water work timing restriction for fisheries.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	j	Start and completion dates for construction.	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment - Block 24	n/a	
	k	Construction schedule and sequence taking into account any timing restrictions.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	l	Construction methods.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

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	m	Equipment to be used.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	n	A description of the source, type, and composition of material used in construction.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	o	The quantity of material to be either placed into or removed from the watercourse.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	p	Sedimentation and erosion control measures.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	q	Construction monitoring plans.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	r	Construction quality assurance and quality control measures.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	s	Assessment of impacts to fish and fish habitat (see item 46 of this Section).	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	t	Bank stabilization measures (including the size range of material if applicable).	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	u	Operation and maintenance plans including instrumentation, monitoring and inspection requirements	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	v	Contingency plans	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	w	Re-vegetation plans	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
	x	Proposed post construction monitoring (photos taken of the site before construction, during construction, and after construction; photos should be taken from the same reference point for easy comparison)	Y	n/a	n/a	n/a	n/a	To be provided in Construction Summary Report required by a water licence	
	y	Abandonment and restoration plans (see items 46 and 47 of Section 3).	Y	n/a	Interim Closure and Reclamation Plan, August 2017	170913 8BC-BRP----D5InterimCRP-IMLE	SD D.5 to the MASD	n/a	
	36	Final plans and drawings for construction must be stamped by a Professional Engineer licensed to practice in Nunavut. (See Section 7 of the NWB's Guide 4: Completing and Submitting a Water Licence Application for more information regarding design drawings).	Y	Final Design details to be provided 60 days prior to construction	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document		
	37	If geotextile is used or a similar material to prevent the transport of sediment into a watercourse, provide the technical specifications for the proposed material as well as the location, extent and placement method for the material.	n/a	not a project component	n/a	n/a	n/a	n/a	
	38	If rip rap is used or a similar material for erosion protection, provide information regarding the minimum and maximum sizes of the material and the gradation between those limits. Indicate the quantity to be used and its source.	Y	n/a	Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD - full document	n/a	
Predicted Environmental Effects and Proposed mitigation measures	**39**	Provide a description of the effects of water usage on the source from which water will be drawn, including the potential for drawdown.	n/a	not a project component	n/a	n/a	n/a	n/a	

6.0 Water Use: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

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Fisheries5073:80	**40**	If applicable, provide a description of any potential impacts to fish and/or fish habitat. (Indirect effects may include project effects, water quality, or aquatic organisms. Direct effects may include degradation or alteration of fish habitat). The applicant is advised to consult with DFO regarding fish and fish habitat related issues and to visit DFO's website at http://www.dfo-mpo.gc.ca/habitat/habitat-eng.htm.	Y	n/a	MASD, September 2017	170913 8BC-BRP----Attachment C_Main Application Document	Section 5.1.5, Section 5.1.6, Section 5.2.3, Section 5.2.4	n/a	

7.0 Waste Disposal: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Waste Disposal	**1**	Provide a detailed description of all types of waste and all forms of waste disposal including: (see the NWB definition of Waste in the NWB *Guide 2: Terminology and Definitions*)	Y	n/a	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 14	n/a	
	a	Sewage	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	b	Grey water	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	c	Solid waste	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	d	Bulky items/ scap metal	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	e	Hazardous waste including waste oil	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP---- D4ComprehensiveSpillContingencyPlan-IMLE	Supplemental Document (SD) D.4 to the MASD - Section 2.0	n/a	
	f	Empty barrels of fuel	Y	n/a	Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP---- D4ComprehensiveSpillContingencyPlan-IMLE	Section 1.6, Section 2.0	n/a	
					MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.1.3, Section 3.1.2.4, Section 3.1.2.5, Section 3.2.2.4 Section 3.2.2.5		
	g	Drill cuttings	n/a	not a project component	n/a	n/a	n/a	n/a	
	h	Other: Desalination Discharge	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.2.2.6	n/a	
Waste Disposal: Quality and Quantity	**2**	For each type of waste, provide the composition and quantity generated. Also provide the location, rate, timing, frequency and duration of the deposit.	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 15	n/a	
	3	For each type of waste, provide the proposed methods and processes for collecting, storing, treating and discharging the waste. Indicate the capacity of these facilities.	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	General Water Licence Application, September 2017	170913 8BC-BRP---- Attachment A_Application Form	Attachment A - Block 15	n/a	
	4	If an incineration system is proposed, provide a description of the system and the types of wastes that will be incinerated.	Y	Authorized by: 2BE-GEO 1520 (MLA)	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Incinerator referenced in Section 3.2.1.1	n/a	
	5	Provide a description of how non-combustible wastes will be disposed. If disposal at a municipality in Nunavut is proposed, indicate whether authorization has been granted.	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.1.1.1, Section 3.2.1.1	n/a	
	6	If sumps are proposed, provide a description of their location relative to water bodies and camp facilities, dimensions, volume, and freeboard.	n/a	not a project component	n/a	n/a	n/a	n/a	
	7	Provide a description of any measures to minimize the production of wastes.	Y	n/a	MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.2.1.1	n/a	

7.0 Waste Disposal: Quality, Quantity, Predicted Environmental Impact and Proposed Mitigation Measures

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Predicted Environmental Effects and Proposed mitigation measures *Operations and Maintenance*	**8**	Indicate whether the water supply and waste treatment and disposal methods have been used and proven in cold climates.	n/a	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	n/a	n/a	n/a	n/a	
	9	Provide a description of any potential operational and maintenance problems that may occur.	n/a	not a project component	n/a	n/a	n/a	n/a	
Hazardous Materials	**10**	Provide a description of the type and quantities of drilling additives, petroleum products, chemicals and/or hazardous materials on site (MSDS sheets are **not** required to be submitted as part of the water licence application).	Y	n/a	Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP----D4ComprehensiveSpillContingencyPlan-IMLE	SD D.4 Full Document	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	
	11	Provide details regarding the handling and storage of hazardous or potentially hazardous materials.	Y	n/a	Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP----D4ComprehensiveSpillContingencyPlan-IMLE	SD D.4 Full Document	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	
Emergency Response and Spill Contingency	**12**	Provide an Emergency Response and Spill Contingency Plan (ERSCP) that includes mechanisms and processes for addressing potential or actual failure of structures, response equipment and material storage, and programs for providing appropriate training to workers. The plan shall address all	Y	n/a	Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP----D4ComprehensiveSpillContingencyPlan-IMLE	SD D.4 Full Document	Authorized by: 2BE-GOO1520 (Goose) and/or 2BE-GEO 1520 (MLA)	

8.0 Monitoring

Section Title	Section No.	Information Requirement	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	If information is not available at the time of application, indicate when the information will be made available	NWB Concordance Assessment
Monitoring	**1**	Provide a Monitoring Plan including a description of the methods, procedures, standards, and schedules proposed. Monitoring may be required for water use, effluent, surface and/or groundwater water quality, quantity, or flow; ground temperature; ground settlement; etc.	**Section summarized in the context of the Back River Project. For additional information refer to the FEIS and FEIS Addendum reviewed by NIRB.**						
			Y	n/a	Environmental Management and Protection Plan, August	170913 8BC-BRP----D6EMPP-IMLE	Supplemental Document (SD) D.6 to the MASD,	n/a	
	2	Indicate who is responsible for sampling including that person's position, contact information and level of training.	Y	n/a	Environmental Management and Protection Plan, August 2017	170913 8BC-BRP----D6EMPP-IMLE	SD D.6 to the MASD, Section 3.5	n/a	
	3	Indicate the name and contact information of the certified laboratory performing the analysis of samples.	n/a	Licence requirement if so established by the NWB	n/a	n/a	n/a	To be provide on issuance of licence (if required)	
	4	Provide an Inspection Plan including a description of the methods, procedures, standards, and schedules proposed. Inspections may be required for engineered facilities related to the management of water and waste as well as spills.	Y	n/a	Environmental Management and Protection Plan, August 2017	170913 8BC-BRP----D6EMPP-IMLE	SD D.6 to the MASD - Section 3.6 and subsections	n/a	
					Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP----D4ComprehensiveSpillContingencyPlan-IMLE	Appendix D-4 Full Document	n/a	
	5	Provide a Quality Assurance/ Quality Control (QA/QC) Plan that addresses both field sampling and laboratory analyses.	n/a	Licence requirement if so established by the NWB	n/a	n/a	n/a	To be provide on issuance of licence (if required)	
	6	Provide a summary table that details the monitoring plan. The table should include stations numbers, location, parameter(s) and frequency. Provide a map detailing the location of monitoring sites.	Y	n/a	Environmental Management and Protection Plan, August 2017	170913 8BC-BRP----D6EMPP-IMLE	SD D.6 to the MASD - Table 3.3-1 Table 3.3-2	n/a	

9.0 Project Specific Information Requirements (PSIR)

As determined based on the NIRB decision for those terms and conditions related to the document under review
PSIR's will only be issued following a positive Environment Assessment Review determination by NIRB

NIRB Condition	Responsible Parties	Category	Project Phase	Objective	Term or Condition	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	If information is not available at the time of application, indicate when the information	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment
1.	Sabina	Air Quality Monitoring and Management Plan	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To provide parties with updated information on air quality baseline information and monitoring conducted on-site.	The Proponent shall have in place an Air Quality Monitoring and Management Plan, which shall include the following: a. Description of air monitoring stations including proposed timing of installation, location, and any factors considered with regards to planning for the installation; b. Plans for the collection of total suspended dust samples year round, including sampling for metals content relevant to the Project; c. Description of dustfall collectors; d. Description of lichen surveys; e. Identification of near field, far field and reference sites locations with demonstrated consideration for ambient wind conditions; f. Baseline data collected prior to significant construction activity; and g. A description of the proposed annual reporting mechanism and response framework.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	Supplemental Document (SD) SD D.1 to the MASD	
2.	Sabina	Air Quality Mitigation and Adaptive Management	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that mitigation and adaptive management measures effectively mitigate impacts on-site.	The Proponent shall demonstrate through monitoring of air quality that all emissions remain within predicted levels and, where applicable, within limits established by all applicable guidelines and regulations. In cases where exceedances occur, the Proponent shall provide an explanation for the exceedance, a description of planned mitigation, and shall conduct additional monitoring to evaluate the effectiveness of mitigative measures.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
3.	Sabina	Air Quality Monitoring and Management Plan	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that mitigation and adaptive management measures effectively mitigate dust impacts on-site.	The Proponent shall have in place dust management and monitoring plans which address the following items: a. Reflect commitments made in the Final Environmental Impact Statement, the Final Environmental Impact Statement Addendum, and through the Nunavut Impact Review Board's impact assessment process; b. Verify commitments to use dust suppressants on-site, including a description of the type of suppressant to be used, as well as the frequency and timing of applications to be made throughout the periods of applicable use; c. Specify commitments to the use of appropriate dust suppression measures when conducting activities in the landfill such as topping or capping; d. Outline the specific adaptive management measures to be considered should monitoring indicate that dust deposition is higher than predicted, specifically where project-related traffic is greater than initially expected or where meteorological events have instigated additional deposition; and e. Demonstrate consideration for the implementation of alternative methods (e.g., windscreens) to limit the deposition of dust generated from the Project.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
4.	Sabina	Incineration Management Plan	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that waste management operations are conducted in line with regulatory guidelines.	The Proponent shall develop and implement an Incineration Management Plan that demonstrates consideration for the recommendations provided in Environment and Climate Change Canada's Technical Document for Batch Waste Incineration (2010).	N	not a project component for development works					
5.	Sabina	Stack Monitoring	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To monitor waste management operations.	The Proponent shall provide the results of all stack testing conducted on temporary or permanent incinerators operated for the Project for the year in which testing was conducted.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
6.	Sabina	Greenhouse Gas Reduction Plan	Construction, Operations, Temporary Closure/Care and Maintenance, and Closure	To monitor and reduce greenhouse gas emissions produced by the Project.	The Proponent shall maintain a Greenhouse Gas Emissions (GHG) Reduction Plan which includes: a. An estimate of the Project's GHG baseline emissions; b. A description of monitoring measures to be undertaken, including the methods, frequency, parameters, and a description of data analysis; and c. A description of mitigative and adaptive strategies planned, and taken, toward reducing the project-related emission of greenhouse gases over the Project's life.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
7.	Sabina	Mine Closure and Reclamation Plan	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure mitigation, monitoring, and adaptive management measures are in place for the long-term stability, containment, and integrity of project components and the protection of environmental features.	The Proponent shall maintain a Mine Closure and Reclamation Plan designed to: identify the processes that may act upon the mine components after closure and reclamation so that they can be factored within the design and operation of the mine; ensure physical and chemical stability of mine components that remain after closure; ensure mine components that remain after closure will not require long-term active care; and consider future use and aesthetics of the area with the surrounding lands. This plan should include: a. An adaptive management component that documents monitoring and mitigation measures to ensure long-term containment of the Tailings Storage Facility and Waste Rock Storage Areas; b. Details for monitoring the thermal condition and stability of storage facilities; c. Details on the triggers for implementing alternative mitigation options; d. Details pertaining to ongoing monitoring and research being conducted to supplement the adaptive management protocols; e. Details on the plans to maintain the integrity of the groundwater quality within and adjacent to the Project; and f. Details on how the Proponent will carry out continued analyses over time to confirm or update the approximate fill time for the mine pits.	Y	Only as it relates to scope and scale of development work activities		Interim Closure and Reclamation Plan, August 2017	170913 8BC-BRP----D5InterimCRP-IMLE	SD D.5 to the MASD	
8.	Sabina	Weather Monitoring and Adaptive Management	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To monitor local weather and adaptively manage potential impacts from extreme or abnormal weather conditions.	The Proponent shall provide a summary report of meteorological conditions experienced within the project area including details related to temperature, wind velocities and patterns, precipitation, as well the onset of seasonal freeze and thaw cycles, and highlight extreme or outlying weather events.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
9.	Sabina	Noise Reduction	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, and Final Closure	To ensure worker health and safety.	The Proponent shall demonstrate consideration for noise reduction measures when siting and constructing both the Goose Property and Marine Laydown Area camps. Further, the Proponent shall demonstrate that noise levels will remain within reasonable limits and no further mitigation (e.g. additional sound proofing) is required.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
10.	Sabina	Noise Reduction	Construction and Operation	To ensure worker health and safety.	The Proponent shall demonstrate its consideration of options to further mitigate noise generated from project activities, equipment, and components during normal operations as well as from project activities, equipment, and components that would remain operational during staged reduction events (e.g., noise barriers, acoustic insulation, exhaust silencers).	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
11.	Sabina	Permafrost Mapping and Monitoring	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To monitor and plan for changing permafrost conditions.	The Proponent shall conduct further permafrost mapping to document permafrost temperature, thickness of seasonal thaw and amount of ground ice in the project development area. This information will be made available to inform the detailed design of project infrastructure.	NA	not a project component for development works	To be implemented in accordance with Project Certificate				
12.	Sabina	Permafrost Monitoring	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To monitor and mitigate impacts from the Project on permafrost.	The Proponent shall monitor the effects of the Project on permafrost conditions relative to project infrastructure, including associated roads, waste rock stockpiles, trails, and quarries. Should permafrost degradation be observed, the Proponent shall report on measures implemented to restore and promote permafrost integrity.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
13.	Sabina	Sensitive Landform Mitigation and Monitoring	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate project impacts on sensitive landforms.	The Proponent shall undertake additional geotechnical investigations as required to identify sensitive landforms, modify engineering design for project infrastructure (e.g., tailings storage facilities, waste rock piles, and landfill), and develop and implement mitigation and monitoring measures to prevent or minimize the impacts of the Project's activities and infrastructure on sensitive landforms. Plans for the investigations, mitigation, and monitoring measures are to be included within appropriate management plans.	NA	not a project component for development works	To be implemented in accordance with Project Certificate				
14.	Sabina	Waste Management Plan	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure waste management is protective of the surrounding environment.	The Proponent shall provide a Waste Management Plan that describes how the local environment, including permafrost integrity and water quality, will not be harmed by wastes at project landfills. The Proponent shall demonstrate that the use of liners at waste management facilities has been considered and adopted, wherever feasible.	NA	not a project component for development works	To be implemented in accordance with Project Certificate				
15.	Sabina	Progressive Reclamation Plan	Pre-construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that project components, areas, and infrastructure are progressively reclaimed throughout the life of the Project.	The Proponent shall have in place a plan for the progressive reclamation of project components, areas, and infrastructure throughout the life of the Project. The plan shall detail: a. projected timelines for the reclamation of project features, methodologies for undertaking such activities, and monitoring measures to ensure the effectiveness of reclamation methods employed; b. specific measures for adaptive management and triggers for their application, should monitoring results reveal trends that could affect the reclamation and closure objectives.; and, c. how Inuit Qaujimajatuqangit and Traditional Knowledge was collected, and used to inform closure plans and the design of project components.	Y	Only as it relates to scope and scale of development work activities		Interim Closure and Reclamation Plan, August 2017	170913 8BC-BRP----D5InterimCRP-IMLE	SD D.5 to the MASD	
16.	Sabina	Aggregate Sources	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, and Closure	To inform parties on the quarry or borrow materials required for the development of project infrastructure.	The Proponent shall develop site-specific quarry operation and management plans in advance of the development of any potential quarry site or borrow pit.	Y	Only as it relates to scope and scale of development work activities		Quarry Management Plan, August 2017	170913 8BC-BRP----D3QuarryMgmtPlan-IMLE	SD D.3 to the MASD	
17.	Sabina	Monitoring of Tailings and Treatment Sludges	Operations, Temporary Closure/Care and Maintenance	To mitigate potential impacts to the receiving environment caused by remobilization of arsenic.	The Proponent shall conduct tests of the tailings and treatment sludges as they are produced to evaluate the potential for remobilization of arsenic from these materials.	NA	not a project component for development works	To be implemented in accordance with Project Certificate				

NIRB Condition	Responsible Parties	Category	Project Phase	Objective	Term or Condition	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	If information is not available at the time of application, indicate when the information	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment
18.	Sabina	Geotechnical Characterization Program	Pre-Construction, Construction, Operations	To minimize the impacts of contaminated water to the groundwater and receiving environment.	The Proponent shall undertake an infill geotechnical characterization program to determine the extent of the fractured bedrock contact zone and apply proposed mitigation measures as necessary. The program should include permeability testing, seepage analysis and planning for thermal monitoring of the western ridge, where appropriate.	NA	not a project component for development works	To be implemented in accordance with Project Certificate				
19.	Sabina	Saline Water	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To manage saline groundwater and minimize the impacts to permafrost, soil, surface water, vegetation and wildlife.	The Proponent shall, reflecting any direction from the Nunavut Water Board, maintain a saline water management plan which includes monitoring of thermal conditions, monitoring of saline water at the Goose site, and mitigation measures designed to address the potential for higher-than- predicted volumes of saline water inflows into the open pits and the underground mine, treatment and disposal methods. The plan should include accurate characterization of saline water inflows into the underground mine workings.	NA	not a project component for development works	To be implemented in accordance with Project Certificate				
20.	Sabina	Thermal Monitoring	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To minimize the impacts of contaminated water to the groundwater and receiving environment.	The Proponent shall develop a thermal monitoring plan to address the potential changes in permafrost/talik distribution, flow distribution and flow paths that may be directly or indirectly affected by the Project facilities and activities. Thermal monitoring should be considered at a minimum for the critical cross sections of the Main Dam, Llama Pit, and Umwelt Pit.	NA	not a project component for development works	To be implemented in accordance with Project Certificate				
21.	Sabina	Aquatic Effects Monitoring Plan	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To mitigate potential impacts to groundwater and surface waters.	The Proponent shall, reflecting any direction from the Nunavut Water Board, maintain an Aquatic Effects Monitoring Plan (AEMP) designed to: - determine the short and long-term effects in the aquatic environment resulting from the Project; - evaluate the accuracy of Project effect predictions; - assess the effectiveness of mitigation and management measures on Project effects; - identify additional mitigation measures to avert or reduce environmental effects due to Project activities; and - comply with Metal Mining Effluent Regulations requirements, should an Environmental Effects Monitoring program be triggered. The AEMP should include sufficient sampling and monitoring programs to appropriately characterize the receiving environment to ensure that adequate data is available to assess impact predictions made within the Final Environmental Impact Statement.	Y	Only as it relates to scope and scale of development work activities		Environmental Management and Protection Plan, August 2017	170913 8BC-BRP---- D6EMPP-IMLE	SD D.6 to the MASD	
22.	Sabina	Site Water Monitoring and Management Pan	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance and Closure and Post-Closure Monitoring	To minimize the use of natural waters as practicable and limit potential impacts to the receiving environment from contact (site) water.	The Proponent shall, reflecting any direction from the Nunavut Water Board, maintain a Site Water Monitoring and Management Plan designed to: minimize the amount of water that contacts mine ore and wastes; appropriately manage all contact water and discharges to protect local aquatic resources; and, implement water conservation and recycling to maximize water reuse and minimize the use of natural waters. The plan should include monitoring that demonstrates contact water (runoff and shallow groundwater) from the ore storage and waste rock storage areas is adequately captured and managed, as per the Mine Waste Rock Management Plan.	Y	Only as it relates to scope and scale of development work activities		MASD, September 2017	170913 8BC-BRP---- Attachment C_Main Application Document	Section 3.3	
23.	Sabina	Setbacks	Construction, Operations, Temporary Closure/Care and Maintenance and Closure	To mitigate impacts of runoff/sedimentation into freshwater aquatic habitat.	The Proponent shall maintain an appropriate setback distance between project quarries and fish-bearing or permanent waterbodies, or implement appropriate mitigation measures, as required to prevent acid rock drainage or metal leaching into such waterbodies.	Y	Only as it relates to scope and scale of development work activities		Quarry Management Plan, August 2017	170913 8BC-BRP---- D3QuarryMgmtPlan-IMLE	SD D.3 to the MASD	
24.	Sabina	Watercourses	Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To prevent blockages or restrictions to fish passages.	The Proponent shall ensure that all project infrastructure in watercourses are designed and constructed in such a manner that they do not unduly prevent and limit the movement of water in fish bearing streams and rivers, unless otherwise authorized by Fisheries and Oceans Canada.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
25.	Sabina, Fisheries and Oceans Canada	Blasting	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance and Closure.	To mitigate impacts of explosives use on fish and fish habitat.	The Proponent shall engage with Fisheries and Oceans Canada in exploring possible project specific thresholds, mitigation and monitoring for blasting that would exceed the requirements of Fisheries and Oceans Canada's *Guidelines for the Use of Explosives In or Near Canadian Fisheries Waters* (D.G. Wright and G.E. Hopky, 1998).	Y	Only as it relates to scope and scale of development work activities		Quarry Management Plan, August 2017	170913 8BC-BRP---- D3QuarryMgmtPlan-IMLE	SD D.3 to the MASD	
26.	Sabina, the Kitikmeot Inuit Association, Fisheries and Oceans Canada	Fish Passage	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To minimize potential impacts to the migration of Arctic Grayling.	The Proponent shall engage Fisheries and Oceans Canada, the Kitikmeot Inuit Association, and other interested parties during the regulatory phase on the design, construction, and operation of adequate fish passage to permit migration of Arctic Grayling from Goose Lake to natural spawning and rearing habitat located in upper Rascal Stream East, south of the planned airstrip. Any additional information required to ensure the design of the fish passage will be completed prior to significant construction activities at the Goose Property.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
27.	Sabina, Nunavut Water Board, Fisheries and Oceans Canada	Water Withdrawal Sites	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To minimize impacts to freshwater fish habitat that may be used for water withdrawal.	The Proponent shall provide bathymetry, depth, and location of proposed water withdrawal sites, volumes to be extracted, anticipated water level decreases, and fish habitat features within each waterbody proposed to be used for winter water withdrawal in support of the annual construction of the winter ice roads. If additional waterbodies are required the Proponent shall provide all required information on the additional proposed lakes prior to the use of the waterbodies.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
28.	Sabina	Winter Ice Road	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To mitigate impacts to fish and fish habitat.	The Proponent shall implement all applicable Fisheries and Oceans Canada best management practices to avoid and mitigate serious harm to fish as a result of the construction, operation, and decommissioning of winter ice roads, and from under ice water withdrawals. This includes adequately screening the water intakes pipes to prevent impingement and entrainment of fish.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
29.	Sabina	Water Crossings	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To mitigate impacts to fish and fish habitat.	The Proponent shall implement all applicable Fisheries and Oceans Canada best management practices to avoid and mitigate serious harm to fish as a result of water crossing construction, operation, and decommissioning for all fish-bearing water crossings. These measures should include, but are not limited to, appropriate design of water crossings to facilitate fish passage at both high and low flows, timing windows that incorporate spawning, incubation and hatch times for all species using watercourses, sediment and erosion control, protection of riparian vegetation, and other forms of bank stabilization.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
30.	Sabina	Monitoring Program for Culverts	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To minimize the impacts to fish bearing watercourses.	Unless otherwise directed by Fisheries and Oceans Canada, the Proponent's monitoring program for culverts on fish bearing watercourses during the operations and closure phases shall include measures to ensure that barriers to fish passage do not form over time as a result of crossing damage due to ice blockage, flooding, or movement of debris; all of which may occur at freshet. Detailed design drawings and an updated monitoring program shall be produced prior to construction.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
31.	Sabina	Monitoring Program for Culverts	Operations, Temporary Closure/Care and Maintenance, Closure and Post- Closure Monitoring	To minimize the impacts to fish and fish habitat.	The Proponent should provide annual monitoring updates regarding the Rascal Stream Fish Passage that enables parties to determine its effectiveness.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP---- D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
32.	Sabina	Site Footprint	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To minimize the impacts of the Project on vegetation.	The Proponent shall ensure that Project activities are planned and conducted in such a way as to minimize the Project footprint.	Y	Only as it relates to scope and scale of development work activities					
33.	Sabina	Invasive Species	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To prevent the introduction of invasive species.	The Proponent shall ensure that equipment and supplies brought to the project sites are clean and free of soils that could contain plant seeds not naturally occurring in the area. Vehicle tires and treads in particular must be inspected prior to initial use in project areas. The Proponent shall also incorporate protocols for monitoring for the potential introduction of invasive vegetation species (e.g. surveys of plant populations in previously disturbed areas) into relevant monitoring and management plans for the terrestrial environment. Any introductions of non-indigenous plant species must be promptly reported to the Government of Nunavut Department of Environment.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
34.	Sabina, the Kitikmeot Inuit Association, the Government of Nunavut	Vegetation Monitoring Plan	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To minimize potential impacts to vegetation along the winter road/trail routings and around project sites.	The Proponent shall have in place a Vegetation Monitoring Plan that is designed to quantify the potential impacts on vegetation from the Project, including the annual construction/operation of the winter ice roads and trails. The plan should include all commitments discussed throughout the Review of the Project, including commitments to consult with the Kitikmeot Inuit Association, the Government of Nunavut, and other relevant parties, as well as: a. Establishment of pre-construction and post-operation vegetation conditions annually with supporting photographs to allow for long- term comparisons of vegetation conditions along winter ice road/trail routings and around project sites; b. Incorporation of measures to prevent or minimize potential destabilization and erosion along winter ice road/trail routings and around project sites; c. Details on the triggers for implementing adaptive management options if effects to vegetation are observed, including potential impacts from dust deposition; and, d. Discussion of how the findings from monitoring efforts would be used to inform reclamation planning.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
35.	Sabina	Revegetation and Reclamation	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To maximize revegetation in reclaimed areas.	The Proponent shall develop a progressive revegetation program for disturbed areas that are no longer required for operations, such as a program to incorporate measures for the use of test plots, reseeding, and replanting of native plants as necessary. It is further recommended that this program be directly associated with the management plans for erosion control established for the Project.	Y	Only as it relates to scope and scale of development work activities		Interim Closure and Reclamation Plan, August 2017	170913 8BC-BRP---- D5InterimCRP-IMLE	SD D.5 to the MASD	

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36.	Sabina	Mine Closure and Reclamation Plan	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To maintain an up to date revegetation plan for the Project.	The Proponent shall include revegetation strategies within its Mine Closure and Reclamation Plan that support progressive reclamation, and promote natural revegetation and recovery of disturbed areas compatible with the surrounding natural environment. These strategies should include exploration of the feasibility and practicality of topsoil/organic matter salvage through Project development. The Closure and Reclamation Plan should be updated on an on-going basis as more information becomes available from similar reclamation efforts at other northern projects, as applicable.	Y	Only as it relates to scope and scale of development work activities		Interim Closure and Reclamation Plan, August 2017	170913 8BC-BRP----DSInterimCRP-IMLE	SD D.5 to the MASD	
37.	Sabina	Wildlife Mitigation and Monitoring Plan	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate, monitor, and adaptively manage potential impacts to wildlife.	The Proponent shall have in place a Wildlife Mitigation and Monitoring Program Plan (WMMPP) throughout all phases of the Project. The plan shall include detailed monitoring, mitigation, and adaptive management measures for wildlife, and shall detail considerations for: species-specific sensitive wildlife periods and areas; activities known to affect wildlife; specific triggers for mitigation and adaptive management intervention; and implementation of all commitments made throughout the Nunavut Impact Review Board's (NIRB) assessment of the Project. The Proponent shall demonstrate appropriate refinements to the WMMPP's design throughout the life of the Project, as necessary to allow for the identification of long- term trends and cumulative effects where project interactions with wildlife are identified. Updates to the WMMPP may be triggered by significant changes in project development plans, monitoring results indicating biologically-meaningful changes, significant updates to the scientific understanding of management methods relevant to wildlife at the project site, Inuit Qaujimajatuqangit, Traditional Knowledge, changes in climatic conditions that might subject wildlife to unexpected impacts, or as otherwise necessary. Comments: Measures included in the WMMPP shall be inclusive of all commitments made by the Proponent throughout the Review of the Project. Further, the Proponent shall, throughout the duration of the Project, collaborate with the Kitikmeot Inuit Association, the Government of Nunavut, and other relevant parties to develop updated mitigation, monitoring, and adaptive management measures within the Wildlife Mitigation and Monitoring Program Plan.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
38.	Sabina, the Kitikmeot Inuit Association, the Government of Nunavut	Wildlife Monitoring	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To monitor wildlife in collaboration with other monitoring bodies.	In consultation with the Government of Nunavut, the Kitikmeot Inuit Association, and other relevant parties, the Proponent shall make efforts to contribute to existing and planned cumulative effects and regional monitoring programs for caribou, grizzly bear, wolverine and muskox, as appropriate. Relevant details of coordination through data sharing arrangements or agreements should be highlighted.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
39.	Sabina	Caribou Mitigation and Adaptive Management Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to caribou throughout the life of the Project.	The Proponent shall provide, within its Wildlife Mitigation and Monitoring Program Plan (WMMPP), measures for the staged reduction of project activities should caribou occur in proximity to the project site. The WMMPP will include a detailed description of all project activities, equipment, and components that would be managed during different phases of staged reduction mitigation events, including rapid and planned operational shutdowns should caribou calving or post-calving ranges overlap with the Project. Any planned activity restrictions/cessations should be of sufficient duration to take into account annual variation in the timing and distribution of calving and post-calving caribou interactions with the Project. Comments: Additional details to be contained within the WMMPP shall include a quantitative description of the noise produced by all activities, equipment, and components that would be managed during the staged reduction events, in addition to an analysis of the zones over which continuous and instantaneous noise thresholds for caribou would be exceeded within the project area. The Proponent shall provide updated details throughout the life of the Project should activities, equipment, or components alter the zones of influence as originally assessed.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
40.	Sabina, the Kitikmeot Inuit Association, the Government of Nunavut	Caribou Monitoring	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that implementation of adaptive management is not unduly delayed by potential lag times associated with delayed access to collar data.	In consultation with the Kitikmeot Inuit Association, the Government of Nunavut, and relevant parties, the Proponent shall ensure that the utilization of satellite collar data as an early detection method for caribou takes into consideration an agreed-upon biological buffer, as well as potential lag times associated with delayed access to collar data, for the development of thresholds for monitoring and adaptive management triggers.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
41.	Sabina	Caribou Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to caribou during periods of heightened sensitivity.	The Proponent shall demonstrate consideration for the increased potential of caribou presence in the area when planning outdoor construction activities (including site clearing, blasting, and operation of heavy equipment) during the July 26 to August 31 period.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
42.	Sabina	Caribou Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that mitigation measures apply for all caribou.	The Proponent shall ensure that all caribou mitigation and monitoring measures (including mitigation for shifts in calving and post-calving ranges) included within the Wildlife Mitigation Monitoring Program Plan apply to all caribou, regardless of the herd.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
43.	Sabina, the Government of Nunavut	Wildlife Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that specific criteria and procedures are developed should wildlife be deemed project-tolerant.	In consultation with the Government of Nunavut (GN) and other relevant authorities, the Proponent shall include criteria and procedures within its Wildlife Mitigation and Monitoring Program Plan governing the deterring of wildlife from blast zones and the relaxation of mitigation measures for animals deemed project-tolerant. Caribou shall be deterred using only agreed-upon deterrence measures established in consultation with the GN and only if their safety is deemed at risk.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
44.	Sabina, the Government of Nunavut	Muskox Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to muskox from project activities.	In collaboration with the Government of Nunavut, the Proponent shall specify within its Wildlife Mitigation and Monitoring Plan specific mitigation measures, trigger distances, and group size thresholds for the protection of muskox in proximity to project activities (e.g., blasting, heavy truck traffic, and aircraft).	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
45.	Sabina	Wildlife Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential disturbances to wildlife migration and movement from project infrastructure.	The Proponent shall ensure that safety barriers, berms, and designed crossings associated with project infrastructure, including site roads and the winter ice road, are constructed as necessary to allow for the safe passage of caribou and other terrestrial wildlife and do not interfere with wildlife denning sites.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
46.	Sabina	Wildlife Monitoring and Adaptive Management Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that all direct mortalities are reported and considered in the development of adaptive management protocols.	The Proponent shall file an incident report to the local wildlife conservation office for any and all direct wildlife mortalities that occur in association with the Project. All incident reports should include sufficient detail to demonstrate how monitoring and mitigation measures failed to prevent the mortality, as well as information pertaining to what measures would be put in place to prevent the incident from reoccurring. The Proponent shall reach an agreement with the appropriate Designated Inuit Organization regarding compensation for any direct mortality of wildlife resulting from the Project.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
47.	Sabina, the Kitikmeot Inuit Association	Wildlife Monitoring and Adaptive Management Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to wildlife through interaction with water attenuation ponds and/or tailings storage areas.	The Proponent shall, in consultation with the Kitikmeot Inuit Association, develop and implement measures to prevent the use of water attenuation ponds and tailings storage areas by wildlife, including waterfowl, other migratory birds, and caribou, with sufficient monitoring to assess whether these measures are effective or whether further deterrents may be required.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
48.	Sabina	Wildlife Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to wildlife from attraction to project infrastructure.	The Proponent shall develop and implement mitigation measures and monitoring programs to limit the attraction of predators and scavengers to Project facilities, and to limit impacts from specific project activities.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
49.	Sabina	Annual Reporting to the Nunavut Impact Review Board	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To provide annual updates to the Nunavut Impact Review Board and relevant parties for ongoing monitoring and collaboration purposes.	The Proponent shall report to the Nunavut Impact Review Board (NIRB) regarding its terrestrial wildlife monitoring efforts, with inclusion of the following information: a. Description of all updates to terrestrial wildlife baseline data; b. A description of the involvement of local communities in its monitoring programs; c. A detailed presentation and analysis of the distribution relative to Project infrastructure and activities for caribou and other terrestrial mammals observed during surveys and incidental sightings; and d. Results of the annual monitoring programs, including methodologies and statistical approaches used to support conclusions drawn.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
50.	Sabina	Annual Reporting to the Nunavut Impact Review Board	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To provide annual updates to the Nunavut Impact Review Board and relevant parties to verify the effectiveness of ongoing monitoring and mitigation efforts.	Within its annual report to the NIRB, the Proponent shall incorporate a review section which includes: a. An examination for trends in the measured natural variability of Valued Ecosystem Components in the region relative to the baseline reporting; b. A detailed analysis of wildlife responses to operations with emphasis on wildlife behaviour, mortalities, and displacements (if any), and responses to project operations; c. A detailed description of staged reduction mitigation events, including operational shutdowns, undertaken throughout the year in response to wildlife in proximity to the Project. Details shall include, but are not limited to: i. A description of the aggregation and species of wildlife encountered; ii. Environmental conditions; iii. A description of the sequence of activities ceased as well as the duration of cessation; and iv. The effectiveness of the applied mitigation measures and potential amendments that may be required. d. A demonstration and description of how the monitoring results contribute to cumulative effects monitoring associated with the Project; and e. Any proposed changes to the monitoring survey methodologies, statistical approaches, or proposed adaptive management stemming from the results of the monitoring program.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				

NIRB Condition	Responsible Parties	Category	Project Phase	Objective	Term or Condition	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	If information is not available at the time of application, indicate when the information	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment
51.	Sabina	Caribou Technical Advisory Group	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To establish an advisory group to provide technical oversight on the Project's mitigation, monitoring, and adaptive management measures related to caribou.	In collaboration with the Kitikmeot Inuit Association, the Government of Nunavut, and other relevant parties, the Proponent shall develop and participate in a Caribou Technical Advisory Group. As part of its function, the group shall seek to: - Provide independent advice on study design(s) and analyses for the testing and evaluation of the Project's adaptive management measures for reducing disturbance to caribou: - Undertake appropriate testing of the caribou detection methods, group size thresholds, and distance thresholds employed as recommended by the advisory group; - On the basis of these tests, and any other available evidence, provide analyses and a written evaluation of the caribou protection measures and where appropriate make necessary adjustments to those measures; and - Submit reports to the Nunavut Impact Review Board (NIRB), and other relevant parties, for review. Comments: Where possible the Proponent shall include relevant hunters and trappers associations and/or knowledgeable land users in the membership of the group and shall demonstrate its consideration for community input and Inuit Qaujimajatuqangit as part of the group's function.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
52.	The Proponent, the Kitikmeot Inuit Association, the Government of Nunavut, the Government of the Northwest Territories	Caribou Mitigation	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure caribou protection in the context of additional exploration	The Proponent shall, in collaboration with the Government of Nunavut, the Government of the Northwest Territories, the Kitikmeot Inuit Association and other relevant parties, thoroughly evaluate the potential impacts to caribou from planned mineral exploration within its mineral tenures and outside the approved project development area. The Proponent must demonstrate that the potential for adverse effects to caribou populations can be prevented prior to exploration occurring.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
53.	Sabina	Mitigation, Monitoring, and Adaptive Management for Birds and Bird Habitat	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To develop and implement appropriate mitigation and monitoring measures for birds and bird habitat.	The Proponent shall have in place specific measures for the protection and monitoring of birds and bird habitat within its Wildlife Mitigation and Monitoring Program Plan (WMMPP). Protection measures shall include, but are not limited to: - Mitigation and monitoring measures applied at all times throughout project operations to limit impacts to birds and bird habitat from specific project activities and infrastructure; - Mitigation and monitoring measures applied during periods of heightened sensitivity or alternative circumstances; - Adaptive management measures with specific triggers for intervention; and - Protocols for collaboration with relevant parties, and the Project's advisory groups, throughout the Project, including on-going consideration and incorporation of Inuit Qaujimaningit, to ensure the effective delivery of the WMMPP as related to bird and bird habitat protection.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
54.	Sabina	Mitigation Measures for Birds and Species at Risk	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to Species at Risk.	If Species at Risk or their nests and eggs are encountered during project activities or monitoring programs, the primary mitigation measure must be avoidance. The Proponent shall establish clear zones of avoidance for nest of birds, particularly for Species At Risk, based on species-specific nest setback distances outlined in the Wildlife Mitigation and Monitoring Program Plan.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
55.	Sabina	Mitigation and Monitoring Measures for Species at Risk	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate and monitor potential impacts to Species at Risk.	The Proponent shall ensure that the mitigation and monitoring strategies developed for Species at Risk are updated as necessary to maintain consistency with any applicable status reports, recovery strategies, action plans, and management plans that may become available through the duration of the Project.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
56.	Sabina	Bird Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to birds from construction and clearing activities.	The Proponent shall, to the extent possible, schedule required ground- disturbance activities (e.g. clearing) to occur prior to the seasonal return of migratory birds to the project area and shall install nesting deterrents (e.g. flagging) to discourage birds from nesting in areas likely to be disturbed by construction/clearing activities. If clearing is to occur during the nesting season, a nest survey should take place to identify nests and establish appropriate setbacks to ensure nests remain undisturbed until the young have fledged or left the nest. Pre-clearing nest surveys should be conducted less than 14 days prior to land clearing activities as a consideration for the short nesting cycles of some arctic-nesting birds.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
57.	Sabina, the Government of Nunavut – Department of Environment	Raptor Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to raptors from project operations.	Prior to removal or deterrence of raptors, the Proponent will contact the Government of Nunavut – Department of Environment to discuss proposed mitigation options and, if required, will obtain the required permits prior to undertaking any activity that can lead to the destruction of raptor nests or the deterring of raptors from nesting sites.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
58.	Sabina	Seaducks and Waterfowl Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to seaducks and waterfowl from shipping activities.	The Proponent shall include measures within the Wildlife Mitigation and Monitoring Program Plan to ensure that, subject only to vessel safety requirements, a setback distance of at least 500 metres is maintained from colonies and moulting aggregations of seaducks and waterfowl during Project shipping transiting through Bathurst/Elu Inlet, Lambert Channel, and Eastern Lancaster Sound.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
59.	Sabina, Environment and Climate Change Canada	Bird Mortality Reporting	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To report bird mortalities to appropriate parties.	Any incidents of bird mortalities associated with project activities are to be recorded and reported to Environment and Climate Change Canada (Canadian Wildlife Service). The Proponent shall work with the Canadian Wildlife Service to determine appropriate recording and reporting format and timing.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
60.	Sabina	Wildlife Mitigation Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To mitigate potential impacts to wildlife from aircraft operations.	Subject to safety requirements, the Proponent shall ensure that project aircraft maintain sufficient cruising altitudes to avoid disturbance to migratory birds. In particular, the Proponent shall maintain appropriate altitudes in proximity to observed concentrations of migratory birds, caribou and muskoxen that may be encountered during aircraft flights to the George property and other exploration areas, as well as during the transfer of employees between project facilities.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
61.	Sabina	Aircraft Monitoring Measures	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure	To ensure that project aircraft are in compliance with operational procedures, commitments, and regulatory requirements.	The Proponent shall ensure that pilots are informed of minimum cruising altitude guidelines and that a daily log or record of flight paths and cruising altitudes for project aircraft is maintained to monitor adherence and to follow up on complaints.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
62.	Sabina	General	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure potential impacts to the marine environment are identified and appropriately mitigated.	The Proponent shall maintain a marine monitoring program at the Marine Laydown Area to enable identification of potential impacts of the Project on the marine environment and to inform adaptive management actions. The monitoring program shall be in line with the proposed monitoring in the Aquatic Effects Monitoring Program, or as required by applicable regulatory authorities. At a minimum, water sampling should include end of pipe and control area samples, collected on a regular basis to confirm salinity levels of the discharge and the receiving environment.	Y	Only as it relates to scope and scale of development work activities		Environmental Management and Protection Plan, August 2017	170913 8BC-BRP----D6EMPP-IMLE	SD D.6 to the MASD	
63.	Sabina	Monitoring	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure protection of seals and seal lairs.	The Proponent shall undertake a survey for seals and seal lairs annually prior to construction of the winter airstrip and ice road on Bathurst Inlet, and shall take every precaution to align these components to ensure that seal dens/lairs are not impacted by Project infrastructure or activities.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
64.	Sabina, Fisheries and Oceans Canada, and other interested parties	Monitoring	Prior to Project-Shipping	To ensure protection of marine mammals during Project shipping.	The Proponent shall ensure that shipping companies contracted for the Project have in place appropriate ship-based marine mammal monitoring programs and protocols developed through consultation with Fisheries and Oceans Canada, communities, and other interested parties. Consideration should be provided for utilizing, trained observers for full-time marine wildlife monitoring with established data collection and recording protocols.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
65.	Sabina	Marine Shipping	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure community safety and protection of marine/wildlife habitat.	The Proponent shall ensure contracted shipping companies are made aware of and required to avoid sensitive wildlife habitat and species along the shipping route and use appropriate protocols and equipment to reduce the potential for an accidental release of fuel or other deleterious substances into the marine environment. These protocols should also be communicated to local communities.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
66.	Sabina and Kitikmeot Socio-Economic Monitoring Committee	Socio-Economic Monitoring and Kitikmeot Socio-Economic Monitoring Committee	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Description of the general monitoring framework to be developed in consultation with the Kitikmeot Socio-Economic Monitoring Committee.	The Proponent is strongly encouraged to participate in the work of the Kitikmeot Socio-Economic Monitoring Committee along with other agencies and the communities of the Kitikmeot region, and to identify areas of mutual interest and priority for inclusion into a collaborative monitoring framework that includes socio-economic priorities related to the Project, communities, and the Kitikmeot region as a whole.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
67.	The Proponent, Kitikmeot Inuit Association, Government of Nunavut, Indigenous and Northern Affairs Canada, and Kitikmeot communities	Socio-Economic Monitoring	Pre-Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Development and establishment of a project specific a Back River Socio-Economic Monitoring Committee to oversee the project-specific monitoring program.	The Proponent should work with other socio-economic stakeholders including the Kitikmeot Inuit Association, the Government of Nunavut, Indigenous and Northern Affairs Canada, and communities of the Kitikmeot region, to establish a Back River Socio-Economic Monitoring Committee for the Project to develop and oversee the Back River Socio-Economic Monitoring Program. The Back River Socio-Economic Monitoring Committee should develop Terms of Reference outlining each member's roles and responsibilities for project-specific socio-economic monitoring throughout the life of the Project.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				

NIRB Condition	Responsible Parties	Category	Project Phase	Objective	Term or Condition	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	If information is not available at the time of application, indicate when the information	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment
68.	Sabina, Kitikmeot Socio-Economic Monitoring Committee, Kitikmeot Inuit Association, Government of Nunavut, Indigenous and Northern Affairs Canada, and Kitikmeot communities	Socio-Economic Monitoring	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Development of the project-specific socio-economic monitoring program and on-going monitoring of project-related socio-economic effects.	The Proponent should develop a Project-specific Back River Socio-Economic Monitoring Program designed to: ▪ Monitor for project-induced effects, including the impacts predicted in the Final Environmental Impact Statement through indicators presented in the Back River Socio-Economic Monitoring Plan; ▪ reflect regional socio-economic concerns identified by the Kitikmeot Socio-Economic Monitoring Committee (K-SEMC); ▪ work in collaboration with all other socio-economic stakeholders such as the Kitikmeot Inuit Association, the Government of Nunavut, and Indigenous and Northern Affairs Canada, and the communities of the Kitikmeot region to develop the program; and ▪ include a process for adaptive management and mitigation to respond if unanticipated impacts are identified.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
69.	Sabina	Socio-Economic Monitoring and Kitikmeot Socio-Economic Monitoring Committee	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Identify risks and potential effects of temporary mine closures on the Kitikmeot Region.	The Proponent should undertake an analysis of the risk of temporary mine closure, giving particular consideration to how communities in the Kitikmeot region may be affected by temporary closure of the mine, including economic, social, and cultural effects. This analysis is required to be updated as necessary to reflect significant changes to the Project or the socio-economic conditions in the region that may increase the risks and potential effects of temporary mine closures.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
70.	Sabina	Socio-Economic Monitoring and Kitikmeot Socio-Economic Monitoring Committee (K-SEMC)	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Ensuring that the Proponent's Socio-Economic Management Plan addresses the risks and potential effects of temporary mine closures on the Kitikmeot Region.	The Proponent is required to update its Socio-Economic Management Plan to include defined measures to address the risks and mitigate the potential effects of temporary closure.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
71.	Sabina	Staff Schedule	Construction, Operations, Temporary Closure/Care and Maintenance, and Closure	To produce accurate labour market information regarding available Project employment and skill requirements for the Project to support economic and employment forecasting.	To the extent the sharing of such information is consistent with and not limited by any Inuit Impact Benefit Agreement with the Kitikmeot Inuit Association, and in consultation with the Government of Nunavut during preparation, the Proponent should submit detailed staff schedule information, consisting of at least the following items: a. Title of positions required by department and division; b. Quantity of positions available by project phase and year; c. Transferable skills, both certified and uncertified which may be required for, or gained during, employment within each position; and d. The National Occupational Classification code for each individual position.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
72.	Sabina, Government of Nunavut	Registration of Trades Workers	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure that the Government of Nunavut has accurate information to assist in its role as overseer of the apprenticeship program in Nunavut and in providing access to training initiatives and programs.	The Proponent is encouraged to identify and register all trades occupations, journeypersons, and apprentices working with the Project, as well as to provide the Government of Nunavut with information regarding the number of registered apprentices and journeypersons from other jurisdictions employed at the Project.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
73.	Sabina, Government of Nunavut, Training Organizations	Training Opportunities	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Ensuring that the local, regional, and territorial training opportunities associated with the Project maximize opportunities for the regional workforce to obtain transferable skills and certifications.	The Proponent is encouraged to work with training organizations and/or government departments offering mine-related or other training to ensure that Project-specific training programs can yield additional opportunities for residents and employees to gain meaningful and transferable skills and certifications.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
74.	Sabina, Government of Nunavut, Training Organizations	Transferable Skills and Certifications	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Ensuring that the Project maximizes opportunities for the regional workforce to obtain transferable skills and certifications.	The Proponent shall develop and maintain an easily referenced listing of formal certificates and licences that may be acquired via on-site training or training during project employment. The listing shall indicate which of these certifications and licences would be transferable to a similar job site within Nunavut.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
75.	The Proponent, Government of Nunavut, Kitikmeot Socio-Economic Monitoring Committee	Educational Opportunities	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Ensuring that the local, regional and territorial educational opportunities maximize the opportunities for Project employment.	The Proponent is encouraged to work with the Back River Socio-Economic Monitoring Committee and with the Kitikmeot Socio-Economic Monitoring Committee (K-SEMC) to review and monitor education utilization rate trends for Project employees throughout the Project to identify whether or not the Project's employees are accessing educational opportunities available to them in the Kitikmeot region and/or any Northwest Territories communities.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
76.	Sabina	Inuktitut/Inuinnaqtun Training	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Monitoring training measures being taken to reduce language barriers to Inuit employment on-site.	The Proponent is encouraged to provide the following information regarding any second language courses offered on-site: a. Description of courses offered (to include general outline); b. Timing and frequency of courses offered; c. The number of individuals (and percentage of workforce), including Inuit and non-Inuit, taking part in each course, including completion rates; and d. Any noted outcomes or lessons learned from the courses offered.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
77.	Sabina and the Kitikmeot Socio-Economic Monitoring Committee	Monitoring Demographic Changes	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Monitoring demographic changes affecting the Kitikmeot communities and the territory as a whole is important to understand and evaluate the Proponent's predictions with regards to population demographics and whether any trends are identified which may be correlated with the Project.	Provided the collection and sharing of such information is consistent with and not limited by any Inuit Impact and Benefit Agreement with the Kitikmeot Inuit Association, the Proponent should provide project-specific data concerning employee community of residence and number of employees that relocated from the year prior (where available, to and from, for Cambridge Bay, Kugluktuk, Taloyoak, Gjoa Haven, and Kugaaruk). The details of this process will be captured in the terms of reference for the project specific Back River Socio-Economic Monitoring Committee.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
78.	The Proponent, the Kitikmeot Inuit Association, and Kitikmeot Socio-Economic Monitoring Committee	Incorporation of IQ and TK	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure monitoring efforts are informed by and reflect Inuit Qaujimaningit and local community knowledge.	The Proponent is strongly encouraged to ensure that the development of all project monitoring plans and associated reporting and updates are undertaken with active engagement of Kitikmeot communities, land users, and harvesters. The Proponent should work with the Kitikmeot Inuit Association and the Kitikmeot Socio-Economic Monitoring Committee to report on the collection and integration of Inuit Qaujimaningit and Traditional Knowledge through its monitoring programs for the Project.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
79.	Sabina and Kitikmeot Inuit Association	Inuit Environmental Advisory Committee	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	Establishing and reporting on the Inuit Environmental Advisory Committee as a mechanism to incorporate community input (including Inuit Qaujimaningit and Traditional Knowledge) into monitoring plans, programs, and mitigation measures.	The Proponent shall establish an Inuit Environmental Advisory Committee. To the extent the sharing of such information is consistent with and not limited by any Inuit Impact Benefit Agreement with the Kitikmeot Inuit Association, once established, the Proponent shall provide the Nunavut Impact Review Board with the following information about the Committee: a. Number of members and home communities; b. Selection process; c. Description of work to be undertaken; and d. Outcome of any work undertaken.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
80.	Sabina	Wildlife Harvesting	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To assess the potential impacts of winter ice road usage on caribou harvesting.	If the results from monitoring reveal extensive public use of the winter ice road, or a trend of increasing use of the winter ice road for harvesting, the Proponent shall conduct a harvest study in nearby communities of wildlife harvested from the areas surrounding the winter ice road.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
81.	Sabina	Non-Traditional Activity and Resource Use	Construction, Operations, and Post-Closure Monitoring	To assess and monitor potential project effects on non-traditional activity and knowledge.	The Proponent is encouraged to consult with outfitting and guiding businesses that operate in the regional study area regarding use of the land and marine areas in proximity to project infrastructure or activities and any noted project effects, particularly for effects in relation to the experience of the natural environment.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				

NIRB Condition	Responsible Parties	Category	Project Phase	Objective	Term or Condition	Indicate whether Information Requirement is applicable by inserting ' Y ' or ' NA '	If 'NA' provide justification	If information is not available at the time of application, indicate when the information	Insert Title, Author and Date of Document where information is provided	Insert electronic file name of document where information is provided	Insert Section of document where information is provided	NWB Concordance Assessment
82.	The Proponent, Government of Nunavut – Department of Culture and Heritage	Assessment of Archaeological and Heritage Resources	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To assess and monitor potential project effects to archaeological and heritage resources.	In any year in which changes to the project footprint are expected to occur or an archaeological permit will be requested, the Proponent will provide the Government of Nunavut – Department of Culture and Heritage (GN-CH) with a series of maps and tables indicating the current status of all archaeological sites within the Project Development Area. Tables provided should include textual descriptions of map contents, and the Proponent shall consult with the GN-CH to establish the contents of the maps and tables to be submitted within its annual status reports.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
83.	Sabina, Government of Nunavut, Nunavut Housing Corporation	Employee Housing	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To assess and monitor the extent to which the Project enhances employee access to a range of housing options.	The Proponent is strongly encouraged to communicate and collaborate with the Government of Nunavut and the Nunavut Housing Corporation on potential housing initiatives with a view to enhancing employee access to a range of housing options, including homeownership. Initiatives may include, but are not limited to, the provision of financial literacy, financial planning, and personal budgeting training.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
84.	The Proponent, Government of Nunavut, Nunavut Housing Corporation, Kitikmeot Socio-Economic Monitoring Committee	Employee Housing	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To assess and monitor the potential for project-induced effects on regional access to housing.	The Proponent is strongly encouraged to work with the Kitikmeot Socio- Economic Monitoring Committee (K-SEMC), the Nunavut Housing Corporation, and the GN to design and implement a voluntary housing survey to be offered to its Nunavummiut employees.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
85.	Sabina, Kitikmeot Inuit Association	Cross-cultural Awareness	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To support the elimination of cultural barriers and promote recognition for Inuit Qaujimajatuqangit to establish a healthy workplace for all Project employees.	The Proponent is encouraged to work with the Kitikmeot Inuit Association to establish cross-cultural training initiatives which promote respect and consideration for the importance of Inuit Qaujimajatuqangit to the Inuit identity and to make this training available to Project employees and on-site sub-contractors. The Proponent should actively monitor the implementation of these initiatives, including the following items: a. Descriptions of the goals of each program offered; b. Language of instruction; c. Schedules and location(s) of when each program was offered; d. Uptake by employees and/or family members where relevant, noting Inuit and non-Inuit participation rates; and e. Completion rates for enrolled participants, noting Inuit and non- Inuit participation rates.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
86.	Sabina	Airborne Actinolite Fibres	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure worker health and safety.	If potential health risks due to airborne actinolite fibres are identified, the Proponent shall enact measures to mitigate human exposure, notify the Territorial occupational health authority, and update relevant management plans.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
87.	Sabina	Site Orientation	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure worker health and safety.	The Proponent shall have in place a comprehensive site orientation plan for all employees. Further, the Proponent shall ensure all worker site- orientation, training presentations, and materials are updated regularly and reflect any amendments to management plans.	NA	outside jurisdiction of NWB	To be implemented in accordance with Project Certificate				
88.	Sabina	Winter Ice Road Operations	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure worker health and safety.	The Proponent shall include, within its relevant management plans, consideration for worker safety during winter ice road operations, particularly during periods of adverse weather conditions. The Proponent shall ensure that updates are made to its safety procedures throughout the life of the Project consistent with best management practices for similar ice road projects.	Y	Only as it relates to scope and scale of development work activities		Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	SD D.1 to the MASD	
89.	Sabina	Spills	Pre-shipping, Construction, Operations, Temporary Closure/Care and Maintenance	To protect marine wildlife, migratory birds, and the marine environment.	The Proponent shall include within its Wildlife Mitigation and Monitoring Program Plan measures for preventing fuel spills into the marine environment and mitigating potential effects of an accidental spill on polar bears, seals, other marine wildlife, and migratory birds. Measures should include: a. Placement of spill prevention and response equipment as necessary to initiate wildlife protection measures along shipping routes and on-site; b. Ensuring spill response contacts for Sabina and government agencies are current; c. Providing a list of community organizations that would be contacted to inform traditional land users of shipping activity in the area, any spills and actions to ensure public safety and plans for clean-up.	Y	Only as it relates to scope and scale of development work activities		Oil Pollution Emergency	170913 8BC-BRP----D7OPEP-IMLE	SD D.7 to the MASD	
						Y	Only as it relates to scope and scale of development work activities		Comprehensive Spill Co	170913 8BC-BRP----D4ComprehensiveSpillContingencyPlan-IMLE	Appendix D-4 to the MASD	
90.	Sabina, Transport Canada	Spills	Pre-Construction, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure accurate and adequate spill response and emergency preparedness.	The Proponent shall maintain an Oil Pollution Emergency Plan (OPEP) with a list of authorised personnel, staff training, and the required Northwest Territories-Nunavut spill report document.	Y	Only as it relates to scope and scale of development work activities		Oil Pollution Emergency	170913 8BC-BRP----D7OPEP-IMLE	SD D.7 to the MASD	
91.	Sabina, Transport Canada	Marine Shipping	Prior to Project-shipping, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure protection of the marine environment.	The Proponent shall contract only Transport Canada certified shippers to carry cargo for the Project, and will ensure shippers are aware of the requirements of the Shipping Management Plan, the Risk Management and Emergency Response Plan, and the Oil Pollution Emergency Plan.	Y	Only as it relates to scope and scale of development work activities		Oil Pollution Emergency	170913 8BC-BRP----D7OPEP-IMLE	SD D.7 to the MASD	
92.	Sabina	Marine Shipping	Prior to Project-shipping, Construction, Operations, Temporary Closure/Care and Maintenance, Closure and Post-Closure Monitoring	To ensure protection of the Marine Environment.	The Proponent shall ensure that the necessary spill response equipment and training to employees, contractors, and local community members is available prior to commencing Project shipping.	Y	Only as it relates to scope and scale of development work activities		Oil Pollution Emergency	170913 8BC-BRP----D7OPEP-IMLE	SD D.7 to the MASD	
93.	The Proponent, Fisheries and Oceans Canada – Canadian Hydrographic Services	Navigation Charts	Post-Construction	To mitigate potential ship groundings.	The Proponent shall submit a post-construction depiction of the Marine Laydown Area and surrounding shoreline, including any new bathymetry aspects.	Y	Only as it relates to scope and scale of development work activities		Oil Pollution Emergency	170913 8BC-BRP----D7OPEP-IMLE	SD D.7 to the MASD	
94.	Sabina	Fuel Transportation	Pre-shipping, Construction, Operations, Temporary Closure/Care and Maintenance	To ensure protection of the environment.	The Proponent shall ensure fuel trucks meet industry design standards and receive regularly scheduled maintenance of fuel lines, nozzles and dust caps.	Y	Only as it relates to scope and scale of development work activities		Oil Pollution Emergency	170913 8BC-BRP----D7OPEP-IMLE	SD D.7 to the MASD	

Appendix A - List of Plans

For the purpose of this Type B Application the following plans/supplemental documents have been submitted:

Road Management Plan, August 2017	170913 8BC-BRP----D1RoadMgmtPlan-IMLE	Supplemental Document D.1 to the MASD
Fuel Management Plan, August 2017	170913 8BC-BRP----D2FuelMgmtPlan-IMLE	Supplemental Document D.2 to the MASD
Quarry Management Plan, August 2017	170913 8BC-BRP----D3QuarryMgmtPlan-IMLE	Supplemental Document D.3 to the MASD
Comprehensive Spill Contingency Plan, August 2017	170913 8BC-BRP----D4ComprehensiveSpillContingencyPlan-IMLE	Supplemental Document D.4 to the MASD
Interim Closure and Reclamation Plan, August 2017	170913 8BC-BRP----D5InterimCRP-IMLE	Supplemental Document D.5 to the MASD
Environmental Management and Protection Plan, August 2017	170913 8BC-BRP----D6EMPP-IMLE	Supplemental Document D.6 to the MASD
Oil Pollution Emergency Plan, August 2017	170913 8BC-BRP----D7OPEP-IMLE	Supplemental Document D.7 to the MASD

Appendix C: Certificate of Incorporation

03.05.002

BRITISH COLUMBIA
The Best Place on Earth

Number: **BC0069881**

CERTIFICATE
OF
GOOD STANDING

BUSINESS CORPORATIONS ACT

I Hereby Certify *that,* according to the corporate register maintained by me, **SABINA GOLD & SILVER CORP.** was incorporated as a company under the laws of the Province of British Columbia, is a valid and existing company and is, with respect to the filing of annual reports, in good standing.

Issued under my hand at Victoria, British Columbia
On January 6, 2011

RON TOWNSHEND
Registrar of Companies
Province of British Columbia
Canada

BRITISH COLUMBIA
The Best Place on Earth

BC Registry Services

Mailing Address:
PO BOX 9431 Stn Prov Govt.
Victoria BC V8W 9V3
www.corporateonline.gov.bc.ca

Location:
2nd Floor - 940 Blanshard St.
Victoria BC
250 356-8626

Cover Sheet

SABINA GOLD & SILVER CORP.

Confirmation of Service

Request Type:	Certificate of Good Standing
Date and Time of Request:	January 6, 2011 09:53 AM Pacific Time
Name of Company:	SABINA GOLD & SILVER CORP.
Incorporation Number:	**BC0069881**

This package contains:

- Certificate of Good Standing

Check your documents carefully to ensure there are no errors or omissions. If errors or omissions are discovered, please contact the Corporate Registry for instructions on how to correct the errors or omissions.

Appendix D: List of Officers of the Company, Consultants, and Experts

Table D-1. List of Officers, Sabina Gold & Silver Corp.

Bruce McLeod, Director, President and Chief Executive Officer 1800-555 Burrard Street Vancouver, BC V7X 1M9 Ph: (604) 998-4175 Direct: (604) 998-4176 Email: bmcleod@sabinagoldsilver.com
Matthew Pickard, Vice-President, Environment &Sustainability 1800-555 Burrard Street Vancouver, BC V7X 1M9 Ph: (604) 998-4175 Direct: (604) 484-8967 Email: mpickard@sabinagoldsilver.com
Elaine Bennet, Chief Financial Officer and Vice-President, Finance 1800-555 Burrard Street Vancouver, BC V7X 1M9 Ph: (604) 998-4175 Direct: (604) 998-4178 Email: ebennett@sabinagoldsilver.com
Angus Campbell, Vice-President, Exploration 1800-555 Burrard Street Vancouver, BC V7X 1M9 Ph: (604) 998-4175 Direct: (604) 998-4183 Email: acampbell@sabinagoldsilver.com
Nicole Hoeller, Vice-President, Communications 1800-555 Burrard Street Vancouver, BC V7X 1M9 Ph: (604) 998-4175 Direct: (604) 998-4179 Email: nhoeller@sabinagoldsilver.com

Table D-2. List of Consultants

Golder Associates Ltd. 16820 107 Avenue, Edmonton, AB, Canada, T5P 4C3
SRK Consulting Oceanic Plaza, 22nd Floor, 1066 West Hastings Street, Vancouver, BC, V6E 3X2
Navenco Marine Inc. 350 boul. Ford, Suite 130, Chateauguay, Quebec, J6J 4Z2

Appendix E: Financial Statement

Consolidated Financial Statements

Years ended December 31, 2016 and 2015

KPMG LLP
Chartered Professional Accountants
PO Box 10426 777 Dunsmuir Street
Vancouver BC V7Y 1K3
Canada

Telephone (604) 691-3000
Fax (604) 691-3031
Internet www.kpmg.ca

INDEPENDENT AUDITORS' REPORT

To the Shareholders of Sabina Gold & Silver Corp.

We have audited the accompanying consolidated financial statements of Sabina Gold & Silver Corp., which comprise the consolidated statements of financial position as at December 31, 2016 and December 31, 2015, the consolidated statements of comprehensive loss, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained in our audits is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Sabina Gold & Silver Corp. as at December 31, 2016 and December 31, 2015, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards**.**

KPMG LLP (Signed)

Chartered Professional Accountants

March 17, 2017
Vancouver, Canada

SABINA GOLD & SILVER CORP.

Consolidated Statements of Financial Position

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 8,161	$ 4,564
Short-term investments	31,700	13,814
Accounts receivable (note 5)	351	261
Inventory	1,397	1,170
Prepaid expenses	69	131
Total current assets	41,678	19,940
Non-current assets:		
Investments (note 6)	1,690	748
Property and equipment (note 7)	7,163	9,957
Mineral properties (note 8)	287,293	283,394
Hackett silver royalty (note 9)	34,754	34,754
Reclamation deposits	2,227	2,229
Total non-current assets	333,127	331,082
Total assets	$ 374,805	$ 351,022
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 1,134	$ 641
Flow-through share premium liability (note 13)	-	577
Current portion of capital lease obligation (note 15)	56	110
Total current liabilities	1,190	1,328
Non-current liabilities:		
Capital lease obligation (note 15)	174	218
Provision for site reclamation (note 10)	2,174	2,067
Deferred income tax liability (note 18)	32,881	35,390
Total non-current liabilities	35,229	37,675
Total liabilities	36,419	39,003
Equity:		
Share capital (note 11)	386,613	355,355
Contributed surplus	23,961	24,043
Accumulated other comprehensive income	1,289	33
Deficit	(73,477)	(67,412)
Total equity	338,386	312,019
Total liabilities and equity	$ 374,805	$ 351,022

Nature of operations (note 1)
Commitments (note 15)
Subsequent event (note 19)

The accompanying notes are an integral part of these consolidated financial statements.

Approved on behalf of the Board:

"Bruce McLeod" Director

"Tony Walsh" Director

SABINA GOLD & SILVER CORP.

Consolidated Statements of Comprehensive Loss
(Expressed in thousands of Canadian dollars, except per share amounts)

For the years ended December 31, 2016 and 2015

		2016		2015
Expenses:				
Administration and general	$	429	$	429
Depreciation and accretion		55		76
Insurance		102		134
Listing, transfer and shareholder		391		536
Part XII.6 tax		4		-
Professional services		334		409
Salaries and severance		1,804		2,048
Share-based payments (note 12(a))		143		1,578
Travel		152		200
Write-down of mineral properties (note 8(a))		7,099		4,227
Loss on disposition of property and equipment		-		66
		10,513		9,703
Loss from operating activities		(10,513)		(9,703)
Net finance income:				
Interest income		497		396
Amortization of flow-through premium (note 13)		577		114
		1,074		510
Loss before impairment and disposition of investments		(9,439)		(9,193)
Disposition of investments (note 6)		1,343		(9)
Impairment of investments (note 6)		-		(2,015)
Loss before income taxes		(8,096)		(11,217)
Deferred income tax recovery (note 18)		2,031		1,700
Loss for the period		(6,065)		(9,517)
Other comprehensive income (loss):				
Available-for-sale investments, change in fair value, net of tax		2,599		(1,184)
Available-for-sale investments, disposal transferred to profit and loss		(1,343)		1,807
Unrealized gain on available-for-sale investments		1,256		623
Comprehensive loss	$	(4,809)	$	(8,894)
Basic and diluted loss per share	$	(0.03)	$	(0.05)
Weighted average number of common shares outstanding		212,271,954		195,649,954

The accompanying notes are an integral part of these consolidated financial statements.

SABINA GOLD & SILVER CORP.

Consolidated Statements of Changes in Equity
(Expressed in thousands of Canadian dollars)

For the years ended December 31, 2016 and 2015

	2016	2015
Share capital:		
Balance, beginning of period	$ 355,355	$ 352,435
Shares issued, net of share issue costs	30,458	3,568
Fair value of options transferred to share capital	260	36
Flow-through premium transferred to deferred liability (note 13)	-	(691)
Deferred income tax effect of flow through shares and issuance costs	540	7
Balance, end of period	386,613	355,355
Contributed surplus:		
Balance, beginning of period	24,043	21,682
Fair value of share-based payments included in operating expenses	143	1,578
Fair value of share-based payments capitalized to mineral properties	35	819
Fair value of options transferred to share capital	(260)	(36)
Balance, end of period	23,961	24,043
Accumulated other comprehensive income (loss):		
Balance, beginning of period	33	(590)
Other comprehensive income	1,256	623
Balance, end of period	1,289	33
Deficit:		
Balance, beginning of period	(67,412)	(57,895)
Loss for the period	(6,065)	(9,517)
Deficit, end of period	(73,477)	(67,412)
Total shareholders' equity	$ 338,386	$ 312,019

The accompanying notes are an integral part of these consolidated financial statements.

SABINA GOLD & SILVER CORP.

Consolidated Statements of Cash Flows
(Expressed in thousands of Canadian dollars)

For the years ended December 31, 2016 and 2015

	2016	2015
Cash provided by (used in) operating activities:		
Loss for the period	$ (6,065)	$ (9,517)
Adjustments for:		
Depreciation and accretion	55	76
Deferred income tax recovery	(2,031)	(1,700)
Part XII.6 tax	4	-
Interest income	(497)	(396)
Impairment of investment	-	2,015
Write-down of mineral properties	7,099	4,227
Loss (gain) on disposition of investment	(1,343)	9
Loss on disposition of assets	-	66
Amortization of flow-through premium liability	(577)	(114)
Share-based payments	143	1,578
	(3,212)	(3,756)
Accounts receivable	38	121
Inventories	(227)	224
Prepaid expenses	62	14
Accounts payable and accrued liabilities	(161)	57
	(3,500)	(3,340)
Interest received	369	405
Net cash used in operating activities	(3,131)	(2,935)
Cash flows provided by (used in) investing activities:		
Expenditures on deferred exploration*	(6,894)	(14,652)
Expenditures on property and equipment	(572)	(83)
Decrease in reclamation deposits	2	-
Net proceeds(purchases) of short-term investments	(17,886)	14,686
Proceeds on disposition of investment	1,718	33
Proceeds on disposition of assets	-	14
Net cash used in investing activities	(23,632)	(2)
Cash flows provided by (used in) financing activities:		
Issue of common shares for cash, net of share issue costs	30,458	3,568
Capital leases	(98)	(102)
Net cash provided by financing activities	30,360	3,466
Net increase in cash and cash equivalents	3,597	529
Cash and cash equivalents, beginning of period	4,564	4,035
Cash and cash equivalents, end of period	$ 8,161	$ 4,564

The accompanying notes are an integral part of these consolidated financial statements.

*Changes in accounts payable and accrued liabilities of $646 thousand (2015 - $1.6 million) related to deferred exploration costs are included in investing activities for the year ended December 31, 2016.

1. Nature of operations:

Sabina Gold & Silver Corp. (the "Company" or "Sabina") was incorporated in June 1966 under the laws of the Province of British Columbia. On October 28, 2009 the Company changed its name from Sabina Silver Corporation to Sabina Gold & Silver Corp. The Company's principal business activity is the exploration and development of mineral property interests. The Company's principal assets are the Back River Gold Project and its silver royalty on the Hackett River project, both of which are located in Nunavut, Canada. The Company also has exploration properties in Nunavut and in the vicinity of the Red Lake gold camp in Ontario.

The financial statements have been prepared with the assumption that the Company will be able to realize its assets and discharge its liabilities in the normal course of business.

The Company is in the process of exploring and evaluating its mineral property interests and has not yet determined whether its mineral properties, other than the Back River property, are economically viable. The Company has completed a feasibility study for the Back River project which demonstrates positive economics and has advanced the environmental assessment on project. The Company has not yet determined if necessary financing for the construction of the Back River project can be obtained on satisfactory terms. The underlying value and the recoverability of the amounts recorded as mineral properties and silver royalty are entirely dependent upon the existence of economically recoverable mineral reserves, the ability of the Company to obtain the necessary financing to complete the exploration and development of the mineral properties, and future profitable production or proceeds from the disposition of the mineral property interest. Management has forecast its cash requirements for the next year and believes that the Company has sufficient funds to continue operations for at least the next twelve months. This assessment is based on the Company's budget, its available cash and short-term investments and that certain of the Company's expenditures are discretionary in nature, and which can be deferred as required without significant impact on the Company or its mineral properties.

2. Basis of preparation:

(a) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements were authorized for issue by the Board of Directors on March 17, 2017.

The accounting policies set out in note 3 have been applied consistently to all years presented in these consolidated financial statements.

(b) Basis of measurement and consolidation

These consolidated financial statements include the financial statements of Sabina and its wholly owned subsidiary, Sabina Back River Ltd. All significant intercompany balances and transactions are eliminated on consolidation.

The consolidated financial statements have been prepared on the historical cost basis except for financial instruments classified as available-for-sale financial assets and share based compensation, which are measured at fair value, and provision for site reclamation, which is recorded at management's best estimate of the present value of costs to be incurred in the future. In addition these consolidated financial statements have been prepared using the accrual basis of accounting, except for cash flow information.

(c) Functional and presentation currency

These consolidated financial statements are presented in Canadian dollars, which is the Company's functional currency. All tabular financial information presented in Canadian dollars has been rounded to the nearest thousand.

2. Basis of preparation, continued:

(d) Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Significant judgement is applied in the determination of the Company's ability to continue as a going concern. Significant areas requiring the use of management estimates relate to the assessment of impairment of its mineral properties and the Hackett silver royalty (note 3(f)(ii)), the provision for site reclamation (notes 3(g) and 10), share-based payments (notes 3(i) and 12(a)), and deferred income tax assets (notes 3(k) and 18). Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to estimates are recognized in the period in which the estimates are revised and in any future periods affected.

3. Significant accounting policies:

(a) Financial instruments

(i) Non-derivative financial assets

The Company initially recognizes loans and receivables and deposits on the date that they originated. All other financial assets (including assets designated at fair value through profit or loss) are recognized on the trade date at which the Company becomes a party to the contractual provisions of the instrument.

The Company derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Company has a legal right to offset the amounts and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Company has the following non-derivative financial assets: cash and cash equivalents, short-term investments, accounts receivables, reclamation deposits and available-for-sale financial assets.

Financial assets at fair value through profit or loss

A financial asset is classified at fair value through profit or loss if it is classified as held for trading or is designated as such upon initial recognition. Financial assets are designated at fair value through profit or loss if the Company manages such investments and makes purchase and sale decisions based on their fair value in accordance with the Company's documented risk management or investment strategy. Upon initial recognition attributable transaction costs are recognized in profit or loss as incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. The Company does not have any financial assets measured at fair value through profit or loss.

3. Significant accounting policies, continued:

(a) Financial instruments, continued

(i) Non-derivative financial assets, continued

Held-to-maturity financial assets

If the Company has the positive intent and ability to hold debt securities to maturity, then such financial assets are classified as held-to-maturity. Held-to-maturity financial assets are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition held-to-maturity financial assets are measured at amortized costs using the effective interest rate method, less any impairment losses. Any sale or reclassification of a more than insignificant amount of held-to-maturity investments not close to their maturity would result in the reclassification of all held-to-maturity investments as available-for-sale, and prevent the Company from classifying investment securities as held-to-maturity for the current and the following two financial years. The Company does not have any held-to-maturity financial assets.

Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest rate method, less any impairment losses.

Loans and receivables comprise cash and cash equivalents, short-term investments, accounts receivable, and reclamation deposits.

Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale and that are not classified in any of the previous categories. The Company's investments in equity securities are classified as available-for-sale financial assets. Subsequent to initial recognition, they are measured at fair value and changes therein, other than impairment losses, are recognized in other comprehensive income and presented within equity in the fair value reserve. Impairment losses are recognised if there is objective evidence of impairment that occurred after the initial recognition of the asset. Objective evidence would be if there has been a significant or prolonged decline in the fair value of the equity securities below its cost. The significance of the decline in fair value is assessed using both quantitative and qualitative factors. Volatility of the fair value may be considered in determining whether the decline is significant. Prolonged is measured against the period of time that the fair value has been below cost. When an investment is sold or no longer classified as available-for-sale, the cumulative gain or loss in other comprehensive income is transferred to profit or loss.

(ii) Non-derivative financial liabilities

All financial liabilities (including liabilities designated at fair value through profit or loss) are recognized initially on the trade date at which the Company becomes a party to the contractual provisions of the instrument. The Company derecognizes a financial liability when its contractual obligations are discharged or cancelled, or they expire.

The Company has the following non-derivative financial liabilities: accounts payable and accrued liabilities.

Such financial liabilities are initially recognized at fair value plus any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortized cost using the effective interest method.

3. Significant accounting policies, continued:

(a) Financial instruments, continued

(iii) Share capital

Common Shares

Common shares are classified as equity. Incremental costs directly attributable to the issue of common shares and share options are recognized as a deduction from equity, net of any tax effects.

Flow-through common shares

Canadian tax legislation permits a company to issue flow-through shares whereby the deduction for tax purposes relating to qualified resource expenditures is claimed by the investors rather than the Company. Recording these expenditures for accounting purposes gives rise to taxable temporary differences.

Upon issuance of flow-through shares, the quoted value or the non-flow-through share price, as appropriate, is used to record the increase to share capital. The difference between the amounts recognized in common shares and the amount paid by the investor is recognized as a flow-through share premium liability which is amortized into earnings when eligible expenditures are made extinguishing the obligation. A deferred tax liability and the associated income tax expense are recorded when eligible expenditures are made.

(b) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less and guaranteed investment certificates with no penalty for early redemption.

(c) Short-term investments

Short-term investments consist of investments with terms to maturity at acquisition of greater than 90 days but not more than one year and are designated as loans and receivables.

(d) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on a weighted average cost formula, and includes expenditures incurred in acquiring the inventories and other costs incurred in bringing them to their existing location and condition.

(e) Property, plant and equipment

(i) Recognition and measurement

Items of property, plant and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Cost includes expenditures that are directly attributable to the acquisition of the asset. The cost of self-constructed assets includes the cost of materials and direct labour, any other costs directly attributable to bringing the assets to a working condition for their intended use, the costs of dismantling and removing the items and restoring the site on which they are located. When parts of an item of property, plant and equipment have different useful lives, they are accounted for as separate items (major components) of property, plant and equipment.

Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of the property, plant and equipment, and are recognized net within the statement of comprehensive loss.

3. Significant accounting policies, continued:

(e) Property, plant and equipment, continued

(ii) Depreciation

Depreciation is calculated on the depreciable amount, which is the cost of an asset, less its residual value.

Depreciation on corporate assets is recognized in the statement of comprehensive loss on a declining balance basis or on a straight-line basis over the estimated useful lives of each part of an item of property, plant and equipment, based on how this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. Depreciation for exploration assets is capitalized to mineral properties in the statement of financial position.

The depreciation rates used are as follows:

Office furniture	20% declining balance
Computer and other equipment	30% declining balance
Leasehold improvements	Straight-line over life of lease
Exploration camp and equipment	Straight-line over estimated useful life, ranging from 2 to 16 years

Depreciation methods, useful lives and residual values are reviewed at each financial year end and adjusted if appropriate.

(f) Mineral properties

The cost of acquiring mineral properties and related exploration and evaluation costs are deferred on an individual area of interest basis until the properties are placed into production, sold or abandoned. Once a license to explore an area has been secured, directly attributable expenditures on exploration and evaluation activities are capitalized to mineral properties. Costs incurred to acquire an interest in a mineral property are capitalized as a mineral property acquisition cost. Costs incurred prior to obtaining the right to explore are expensed as incurred.

Management reviews the carrying value of capitalized exploration costs at least annually and when facts and circumstances suggest that the carrying amount may exceed its recoverable amount, considers if any evidence of impairment exists. In the case of undeveloped projects there may be no resources; or only inferred or indicated resources to form a basis for the impairment review. The impairment review is based on the exploration and evaluation results to-date and a status report regarding the Company's intentions for development of the mineral property.

Once an economically viable reserve has been determined for an area and the decision to proceed with development has been approved, exploration and evaluation assets attributable to that area are first tested for impairment and then reclassified to construction in progress within property, plant and equipment.

Subsequent recovery of the resulting carrying value depends on the successful development or sale of the undeveloped project. If a project does not prove viable, all unrecoverable costs associated with the project are written off.

(g) Impairment

(i) Financial assets (including receivables)

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

3. Significant accounting policies, continued:

(g) Impairment, continued

(i) Financial assets (including receivables), continued

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate.

Impairment losses on available-for-sale financial assets are recognized by transferring the cumulative loss that has been recognized in other comprehensive income, and presented in unrealized gains/losses on available-for-sale financial assets in equity, to profit or loss. The cumulative loss that is removed from other comprehensive income and recognized in profit or loss is the difference between the acquisition cost and the current fair value, less any impairment loss previously recognized in profit or loss. Any subsequent recovery in the fair value of an impaired available-for-sale equity security is recognized in other comprehensive income.

(ii) Non-financial assets

The carrying amounts of the Company's non-financial assets, other than inventories, primarily being its mineral properties, the Hackett silver royalty, and property and equipment, are reviewed each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. The recoverable amount of an asset is the greater of its value in use and its fair value less costs to sell. In calculating the recoverable amount the Company uses discounted cash flow techniques to determine fair value when it is not possible to determine fair value either by quotes from an active market or a binding sales agreement. Discounted cash flow techniques require management to make estimates and assumptions concerning future production revenues and expenses. The determination of discounted cash flows is dependent on a number of factors, including future metal prices, the amount of reserves, the cost of bringing the project into production, production schedules, production costs, sustaining capital expenditures and site reclamation costs. Additionally, these reviews take into account factors such as political, social, legal and environmental regulations. These factors may change due to changing economic conditions or the accuracy of certain assumptions, and hence affect the recoverable amount. The Company uses its best efforts to fully understand all of the aforementioned to make an informed decision based upon historical and current facts surrounding its mineral properties.

An impairment loss is recognized if the carrying amount of an asset exceeds its estimated recoverable amount. Impairment losses are recognized in profit or loss.

Impairment losses recognized in prior periods are assessed at each reporting date for any indications that the loss has decreased or no longer exists. An impairment loss is reversed if there had been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of amortization, if no impairment loss had been recognized.

(h) Provision for site reclamation

The Company recognizes management's best estimate of a future asset retirement obligation as a liability in the period in which it incurs a legal or constructive obligation associated with the acquisition, construction, development and/or normal use of its assets. The Company concurrently recognizes a corresponding increase in the carrying amount of the related long-lived asset which is amortized over the life of the asset.

3. Significant accounting policies, continued:

(i) Leases

(i) Determining whether an arrangement contains a lease

At inception of an arrangement, the Company determines whether the arrangement is or contains a lease.

At inception or on reassessment of an arrangement that contains a lease, the Company separates payments and other consideration required by the arrangement into those for the lease and those for other elements on the basis of their relative fair values. If the Company concludes for a finance lease that it is impracticable to separate the payments reliably, then an asset and a liability are recognized at an amount equal to the fair value of the underlying asset; subsequently, the liability is reduced as payments are made and an imputed finance cost on the liability is recognized using the Company's incremental borrowing rate.

(ii) Leased asset

Assets held by the Company under leases that transfer to the Company substantially all of the risks and rewards of ownership are classified as finance leases. The leased assets are measured initially at an amount equal to the lower of their fair value and the present value of the minimum lease payments. Subsequent to initial recognition, the assets are accounted for in accordance with the accounting policy applicable to that asset.

Assets held under other leases are classified as operating leases and are not recognized in the Company's statement of financial position.

(iii) Lease payments

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the term of the lease. Lease incentives received are recognized as an integral part of the total lease expense, over the term of the lease. Minimum lease payments made under finance leases are apportioned between the finance expense and the reduction of the outstanding liability. The finance expense is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability.

(j) Share-based payments

The Company has a share option plan which is described in note 12(a). Share-based payment arrangements in which the Company receives goods or services as consideration for its own equity instruments are accounted for as equity-settled share-based payment transactions. If the fair value of the goods or services received cannot be estimated reliably, the share-based payment transaction is measured at the fair value of the equity instruments granted at the date the Company receives the goods or the services. Share-based payments to employees and Directors are measured at the grant date fair value of the equity instruments issued and are amortized over their applicable vesting periods. The offset to the recorded cost is to contributed surplus. Consideration received on the exercise of stock options is recorded as share capital and the related contributed surplus is transferred to share capital.

(k) Finance income and finance costs

Finance income comprises interest income on funds invested, gains on the disposal of available-for-sale financial assets, increases in the fair value of financial assets, and increases in the fair value of financial assets at fair value through profit or loss. Interest income is recognized as it accrues, using the effective interest method.

Finance costs comprise interest expense, interest charges relating to flow through share issuances, declines in the fair value of financial assets at fair value through profit or loss, and impairment losses recognized on financial assets.

3. Significant accounting policies, continued:

(l) Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that the tax relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable income or loss for the year, using rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years.

A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Deferred tax is recognized in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Deferred tax is not recognized for the temporary differences arising from the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit nor loss. Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset the tax liabilities and assets, and they relate to income taxes levied by the same tax authority.

(m) Loss per share

The Company presents basic and diluted loss per share data for its common shares. Basic loss per share is calculated by dividing the loss attributable to common shareholders of the Company by the weighted average number of common shares outstanding during the period. Diluted loss per share is determined by adjusting the loss attributable to common shareholders and the weighted average number of common shares, which comprise share options granted to employees and share purchase warrants. For the year ended December 31, 2016, diluted loss per share is the same as basic loss per share as the affect of all outstanding options and warrants would be anti-dilutive.

(n) Changes in accounting policies - new and amended standards

There were a number of new standards and interpretations effective for January 1, 2016; however, none of these new standards had an impact on the Company's consolidated financial statements.

4. Future changes in accounting standards:

A number of new standards, and amendments to standards and interpretations, are not yet effective for the period ended December 31, 2016, and have not been applied in preparing these consolidated financial statements. The Company’s assessment of the impact of these new standards and amendments is detailed below.

IFRS 9, Financial Instruments

This standard replaces IAS 39, Financial Instruments: Recognition & Measurement. IFRS 9 details new requirements for classifying and measuring financial assets. The new standard introduces extensive changes to IAS 39's guidance on the classification and measurement of financial assets and introduces a new "expected credit loss model" for the impairment of financial assets. IFRS 9 also provides new guidance on the application of hedge accounting. The standard becomes effective for annual periods beginning on or after January 1, 2018 with early adoption allowed. The extent of the impact of adoption of IFRS 9 has not yet been determined.

4. Future changes in accounting standards, continued:

IFRS 16, Leases

In January 2016, the IASB published IFRS 16, Leases which will replace IAS 17, Leases. IFRS 16 eliminates the classification as an operating lease and requires lessees to recognize a right-of-use asset and a lease liability in the statement of financial position for all leases, with exemptions permitted for short-term leases and leases of low value assets. In addition, IFRS 16 changes the definition of a lease; sets requirements on how to account for the asset and liability, including complexities such as non-lease elements, variable lease payments and option periods; changes the accounting for sale and leaseback arrangements; and introduces new disclosure requirements. IFRS 16 is effective for annual reporting periods beginning on or after January 1, 2019 with early application permitted in certain circumstances. The Company's current office lease expires in October 2017 and is not expected to be extended to be effective on or after January 1, 2019. The Company will continue to assess the impact of this new standard for any new leases that are in place prior to January 1, 2019.

5. Accounts receivable:

		2016		2015
GST receivable	$	38	$	96
Interest receivable		285		157
Other trade receivables		28		8
	$	351	$	261

The Company's exposure to credit risk, and impairment losses related to its receivables is disclosed in note 16.

6. Available-for-sale investments:

At December 31, 2016 and December 31, 2015, the Company's available-for-sale investments were comprised of common shares of Pure Gold Mining Inc. ("Pure Gold") which were recorded in the consolidated statement of financial position at their fair value. The fair values of these investments have been determined by reference to their quoted closing bid price at the reporting date. At December 31, 2016 the Company had 3,250,000 common shares of Pure Gold with a fair value of $1.7 million. At December 31, 2015 the Company had 6,500,000 common shares of Pure Gold with a fair value of $0.7 million.

During the year ended December 31, 2016, the Company sold 3,250,000 common shares of Pure Gold for net proceeds of $1.7 million. On disposition of these common shares the Company recognized gains of $1.3 million and such amounts were transferred from accumulated other comprehensive income to profit and loss at the time of the disposition.

During year ended December 31, 2015, the Company recorded impairment losses of $2.0 million with respect to its investment in Pure Gold. During the year ended December 31, 2016 there were no impairment losses.

7. Property and equipment:

Cost	Exploration camp and equipment	Office and equipment	Total
Balance at January 1, 2015	$ 24,056	$ 583	$ 24,639
Additions	-	83	83
Dispositions	(24)	(505)	(529)
Balance at December 31, 2015	24,032	161	24,193
Additions	587	3	590
Dispositions	(17)	-	(17)
Balance at December 31, 2016	$ 24,602	164	$ 24,766
Accumulated depreciation			
Balance at January 1, 2015	$ (10,706)	$ (419)	$ (11,125)
Depreciation	(3,497)	(61)	(3,558)
Dispositions	20	427	447
Balance at December 31, 2015	(14,183)	(53)	(14,236)
Depreciation	(3,311)	(50)	(3,361)
Dispositions	(6)	-	(6)
Balance at December 31, 2016	$ (17,500)	$ (103)	$ (17,603)
Carrying value			
At December 31, 2015	$ 9,849	$ 108	$ 9,957
At December 31, 2016	$ 7,102	$ 61	$ 7,163

At December 31, 2016, the net book value of exploration camp and equipment assets held under capital lease arrangements was $202 thousand (December 31, 2015 - $288 thousand).

8. Mineral properties:

The following is a summary of cumulative exploration and evaluation costs incurred by property:

		2016		2015
Back River (Nunavut)	$	276,935	$	265,977
Wishbone (Nunavut)		4,632		11,731
Red Lake (Ontario)		5,726		5,686
	$	287,293	$	283,394

Summary - All Properties	2016	2015
Balance, beginning of period	283,394	270,214
Exploration and other expenditures	10,890	17,407
Provision for site reclamation	108	-
Write-down of mineral properties	(7,099)	(4,227)
Balance,end of period	287,293	283,394

		2016		2015
Back River (Nunavut)				
Balance, beginning of period	$	265,977	$	248,593
Additions:				
Drilling and camp support		1,501		237
Economic assessment		1,638		5,741
Environmental assessment		3,010		4,578
Geology & geophysics		822		1,357
Management & administration		397		997
Property maintenance		132		109
Support		-		49
Share-based payments		34		819
Provision for site reclamation		108		-
Depreciation		3,316		3,497
		10,958		17,384
Balance, end of period	$	276,935	$	265,977
Wishbone (Nunavut)				
Balance, beginning of period	$	11,731	$	15,957
Property maintenance		-		1
Write-down of mineral properties		(7,099)		(4,227)
Balance, end of period	$	4,632	$	11,731
Red Lake (Ontario)				
Balance, beginning of period	$	5,686	$	5,664
Additions:				
Geology & geophysics		37		15
Management & administration		-		5
Property maintenance		3		2
		40		22
Balance, end of period	$	5,726	$	5,686

8. Mineral properties, continued:

(a) Back River and Wishbone (Nunavut)

The Company owns 100% of the Back River project which is comprised of the George and Goose property areas. The Back River project has 43-101 compliant gold mineral reserves and resources in eight known deposits, namely Llama, Umwelt, Goose Main and Echo on the Goose property and Locale 1 & 2, LCP, GH and Slave on the George property. Certain additional share consideration remains payable to the previous owners should a positive production decision be reached for the Back River project (note 12(b)).

The Company owns 100% of certain mineral claims on the Wishbone Greenstone Belt which is adjacent to and surrounding the Hackett River Greenstone Belt and hosts the Hackett River silver-zinc project. The Wishbone property and the Back River project area total approximately 3,000 square km and cover a largely unexplored highly prospective greenstone belt.

On May 31, 2011, the Company completed the purchase of certain royalties on the Back River and Wishbone projects. The royalty required payment of 1.5% of the value of minerals mined until the royalty payments aggregated $5.0 million after which the royalty decreased to 0.75%. The buyback was completed through the purchase of all issued and outstanding shares of R.A. Olson Consulting Ltd. (Royalty 2, noted below) for $4.5 million in cash and the issue of 750,000 common shares of the Company. A value of $5.2 million was attributed to the shares based on their market value at the time of issue.

The Back River project is subject to net smelter return ("NSR") royalties payable to various parties. The following royalties apply to the George Lake property. Royalty 1 pays 0% on the first 800,000 ounces and pays 5% (gross before sub-royalty deductions) after the first 800,000 ounces of gold produced after deducting Royalties 2 and 3. Royalty 2 pays 1.5% and Royalty 3 pays 0.7% until a total of $5 million has been paid on each royalty; after $5 million each, Royalties 2 and 3 drop by 50%. Royalty 4 pays 0.45% until a total of $7.5 million has been paid after which this royalty also drops by 50%. Royalties payable, (excluding Royalty 2 which is owned by the Company) depending on gold price and gold production, could range from 0.35% to 0.7% on the first 800,000 ounces and 3.5% to 4.25% thereafter.

The Goose property is subject to the following royalties. Royalty 1 pays 0% on the first 400,000 ounces and pays 5% (gross before sub-royalty deductions) after the first 400,000 ounces of gold produced after deducting Royalty 2. Royalty 2 pays 1.5% and Royalty 3 pays 0.7% until a total of $5 million has been paid on each royalty; after $5 million Royalties 2 and 3 each drop by 50%. Royalties payable (excluding Royalty 2 which is owned by the Company), depending on gold price and gold production, could range from 0.35% to 0.7% on the first 400,000 ounces and 3.5% to 4.25% thereafter.

In 2016, the Company completed an assessment of long-term strategic exploration opportunities on its Wishbone property. As a result of this assessment, the Company recorded write-downs totalling $7.1 million on the Wishbone property for mineral claims that were relinquished during the year and certain non-core mineral claims which the Company determined had lower exploration potential. During 2015, the Company recorded write-downs totalling $4.2 million on the Wishbone property for mineral claims that were relinquished during the year and certain non-core mineral claims.

(b) Red Lake and Thunder Bay Properties (Ontario)

(i) Golden Sidewalk, Red Lake:

The Company owns 100% of its Golden Sidewalk property comprised of 600 hectares, 5 mineral claims and 12 mining leases. There are no royalties or carried interests attached to the property. The property is located in Skinner township, 67 km east-northeast of Red Lake.

8. Mineral properties, continued:

(b) Red Lake and Thunder Bay Properties (Ontario), continued:

(ii) Skinner, Red Lake:

Sabina owns a 100% of its Skinner property comprised of 2,610 hectares and 18 mineral claims. The property is in Skinner township, 69 km east-northeast of Red Lake and adjacent to and immediately south of Sabina's Golden Sidewalk property. Premier has a 7.5% net profit interest capped at $0.5 million. Franco-Nevada Corporation holds a 1% net smelter return royalty and a local prospector holds another 2% net smelter return interest which can be purchased by Sabina subject to certain conditions.

(iii) Redaurum, Red Lake:

Pursuant to an option agreement with Goldcorp Inc., the Company has a 20% interest carried to production on the 14 patent claims Redaurum property located at Red Lake.

9. Hackett silver royalty:

The Hackett River project consists of approximately 10,637 hectares and is located approximately 480 km northeast of Yellowknife and approximately 60 km from the Back River project.

On October 4, 2011, the Company completed the sale of the Hackett River property and certain claims on the Wishbone Greenstone Belt to Glencore plc ("Glencore", formerly Xstrata Zinc) for cash consideration of $50 million along with Sabina retaining a silver production royalty (the Hackett Silver Royalty") equal to 22.5% of the first 190 million ounces of payable silver from the then current resource at Hackett River and other properties (the "Properties") and 12.5% of all payable silver from the Properties thereafter at no future cost to Sabina. Additionally, Glencore had to incur not less than $80 million on exploration expenditures on the Properties over a seven year period with a view of completing a NI 43-101 compliant feasibility study. If at the seventh anniversary Glencore has not publicly announced a definitive decision to begin construction of a mine within a period of 12 months, Sabina may exercise a right to buy back the Properties for a cash purchase price equal to 100% of the expenditures incurred by Glencore. Glencore can pre-empt Sabina's buy back right by electing to pay an advance royalty of $75 million. As at December 31, 2016, Glencore had incurred sufficient exploration expenditures to satisfy its $80 million spending commitment.

Disposition price allocation		
Hackett River property	$	73,106
Wishbone property		6,586
Capital assets		997
Site reclamation provision		(377)
Net assets		80,312
Cash received, net of transaction costs		(45,558)
Balance allocated to Hackett Royalty	$	34,754

Due to the contingent nature of the Hackett Silver Royalty, the royalty interest is carried at carrying value of the assets remaining after deduction of the deposit proceeds, rather than fair value based on potential future cash flows.

10. Provision for site reclamation:

The Company has recorded a provision for the estimated cost of site reclamation relating to exploration activities at its Back River project.

The Company is unable to reliably estimate when the work will be performed and accordingly recognizes the full amount of the provision, as if the work were to be completed immediately, in the current period and does not discount and accrete the provision.

	2016	2015
Balance at January 1	$ 2,067	$ 2,067
Increase in estimate during the year	107	-
Balance at December 31	$ 2,174	$ 2,067

11. Share capital and other components of equity:

Authorized number of common shares

At December 31, 2016, the authorized share capital of the Company was comprised of an unlimited number of common shares without par value. The number of issued and outstanding common shares is as follows:

	2016		2015	
	# of shares	$	# of shares	$
Issued and outstanding as at January 1	199,688,668	355,355	194,019,926	352,435
Issued for cash, net of share issuance costs	19,790,750	30,252	5,518,742	3,503
Issued on exercise of stock options	581,484	206	150,000	65
Fair value of options exercised	-	260	-	36
Deferred income tax effect of share issue costs	-	540	-	7
Flow-through share premium liability (note 13)	-	-	-	(691)
Issued and outstanding at December 31	220,060,902	386,613	199,688,668	355,355

On May 20, 2016, the Company completed an equity financing of 19,790,750 common shares at $1.63 per share for gross proceeds of $32.3 million; costs associated with the financing totaled $2.0 million.

On July 14, 2015, the Company completed a non-brokered private placement of 2,661,600 flow-through common shares at a price of $0.50 per common share. This private placement was fully subscribed by directors and employees of the Company. On November 25, 2015, the Company completed a non-brokered private placement of 2,857,142 flow-through common shares at a price of $0.77 per common share.

The gross proceeds from the two 2015 private placements have been reduced by $691 thousand, being the flow-through premium liability (see Note 13) and $28 thousand in issue costs.

The gross proceeds of both of these flow-through financings must be used to incur Canadian exploration expenditures as defined by the Income Tax Act (Canada) by December 31, 2016. At December 31, 2016, the Company had incurred sufficient flow-through eligible expenditures to satisfy the requirements of these flow-through financings.

12. Share-based payments:

(a) Share purchase options

The Company has a share option plan that allows it to grant options to its employees, officers, directors and consultants. A rolling maximum of 10% of the common shares issued may be granted. The exercise price of each option shall not be less than the closing market prce for the common shares on the trading day prior to the date of the grant. Options may have a maximum term of ten years. Vesting conditions are at the discretion of the Board of Directors at the time the options are granted. The Plan also provides for a cashless exercise option provision which is, in substance, a stock appreciation right and for which the stock options can only be equity-settled. When the cashless option is exercised, the full amount of equity related to the options exercised is recorded in share capital.

The number and weighted average exercise prices of outstanding share options are as follows:

	2016		2015	
	Number of options	Average exercise price	Number of options	Average exercise price
Outstanding as at January 1	16,755,000	$ 1.92	12,002,410	$ 2.63
Exercised during the period	(581,484)	0.58	(150,000)	0.43
Forfeited or expired during the period	(2,391,516)	4.60	(2,910,410)	1.36
Granted during the period	190,000	0.91	7,813,000	0.59
Outstanding at December 31	13,972,000	1.49	16,755,000	1.92
Exercisable as at December 31	13,472,000	$ 1.53	15,955,000	$ 1.96

As permitted under the Company's Stock Option Plan, 485,000 options were exercised as stock appreciation rights during the twelve months ended December 31, 2016, resulting in the issuance of 250,484 common shares with no cash proceeds. The common shares issued represent the difference between the market price of the common shares at the date of issuance and the exercise price of the stock options exercised divided by the market price at the exercise date. The difference between the number of options exercised and the number of shares issued is included in forfeited or expired options in the table above. In addition, 331,000 options were exercised during the twelve months ended December 31, 2016 for cash proceeds of $206 thousand.

The following table summarizes the outstanding options as at December 31, 2016 by year of expiry. Of the outstanding options, 500,000 options were not fully vested at December 31, 2016.

Year	Number of options	Average exercise price
2017	2,115,000	3.78
2018	2,625,000	2.48
2019	2,370,000	0.94
2020	6,672,000	0.60
2021	190,000	0.91
	13,972,000	$ 1.49

12. Share-based payments, continued:

(a) Share purchase options, continued

Employee compensation cost

During the year ended December 31, 2016, the Company recorded $0.2 million (2015 - $2.4 million) in share-based payment costs, of which $143 thousand (2015 - $1.6 million) is presented as an operating expense in the consolidated statement of comprehensive loss and $34 thousand (2015 - $0.8 million) is capitalized to mineral property costs.

Inputs for measurement of grant date fair values

The grant date fair values of share options were measured based on the Black-Scholes option pricing model. The weighted average inputs used in the measurement of the fair values at grant date of the share-based payment plans are the following: a risk-free interest rate of 0.68% (2015 – 0.66%); a dividend yield of 0% (2015 – 0%); an expected volatility of 65.6% (2015 – 66.4%) and expected lives of stock options of 5.0 years (2015 – 5.0 years). The weighted average fair value of options granted in the period was $0.50 per share (2015 - $0.31). The expected volatility is estimated by considering historic average share price volatility.

(b) Back River share consideration

In connection with the original asset purchase dated June 9, 2009 to acquire the Back River assets from Dundee Precious Metals ("DPM"), the Company agreed to provide future equity consideration in the event certain milestones related to the project were met. At December 31, 2016, the remaining consideration consists of 5 million common shares of the Company, which would be issuable upon a positive production decision for the Back River project.

13. Flow-through share premium liability:

		2016		2015
January 1	$	577	$	-
Financing		-		691
Amortization		(577)		(114)
December 31	$	-	$	577

On July 14, 2015, the Company completed a non-brokered private placement of 2,661,600 flow-through shares at a price of $0.50 per common share. This price was at a premium of $0.045 to market price at the date of announcement for a total flow-through premium of $120 thousand. On November 25, 2015 the Company completed a non-brokered private placement of 2,857,142 flow-through shares at a price of $0.77 per common share. This price was at a premium of $0.20 to market price at the date of announcement for a total flow-through premium of $571 thousand. The flow-through premium liability is amortized over the period in which the funds are used. During the year ended December 31, 2016, the Company fully incurred the remaining required flow-through eligible expenditures associated with these financings.

14. Related parties:

Key management personnel, comprised of directors and officers, received compensation as follows:

		2016		2015
Salaries and benefits	$	2,017	$	1,854
Stock-based compensation, non-cash		134		1,796
	$	2,151	$	3,650

Upon resignation at the Company's request, certain executives are entitled to termination benefits up to 24 months' gross salary. For the President and Chief Executive Officer, in the first 12 months of employment, termination benefits are capped at 12 months, thereafter, one additional month for each completed year of service to a maximum of 34 months. In 2015, the Company recognized an expense of $473 thousand for termination benefits for a former executive, of which $421 thousand was paid in 2015 and the balance in 2016.

15. Capital and operating leases and commitments:

a) Obligation under capital leases

The Company has financed certain mobile equipment used at its Back River exploration camp by entering into capital leasing arrangements. Minimum lease payments as at December 31, 2016 are as follows:

2017	$	57
2018		52
2019		141
Total minimum lease payments		250
Less amount representing interest (at 5.7%)		(20)
Present value of net minimum capital payments		230
Current portion of obligation under capital leases		(56)
	$	174

b) Operating leases

In June, 2015, the Company completed a sublease agreement for its corporate head office in Vancouver, commencing December 1, 2015 and expiring October 30, 2017. Minimum rental payments for this lease total: 2017 $54 thousand.

c) Commitments:

On October 4, 2011, in recognition of Inuit rights under the Nunavut Land Claims Agreement, the Company signed a memorandum of understanding with the Kitikmeot Inuit Association (“KIA”) for the creation of a development trust (the “Trust”) whereby Sabina would establish and contribute to the trust from funds received on its silver royalty on the Hackett River project. The Trust would provide short and long term benefits to the Inuit of the Kitikmeot region, including training and education initiatives and infrastructure projects that would serve to support sustainable economic development in the region.

Under the terms of the agreement, the Trust would receive 3% of Sabina’s net proceeds from the silver royalty on the Hackett River and Wishbone properties sold to Glencore plc (formerly Xstrata Zinc). The Trust would be comprised of a maximum of six trustees of which a majority would be KIA appointees with at least one Sabina appointee. Funds contributed to the Trust would be allocated by the Trustees to initiatives that provide benefits to the Kitikmeot region. A portion of the Trust funds would be retained for allocation after mine or project closure. Payments may be made to the Trust in shares at Sabina’s election and subject to regulatory approval. To implement the initiative, prior to creation of the Trust in 2011, Sabina paid approximately $1.4 million to an existing KIA fund which provides for development and community initiatives in the region, which was capitalized to mineral properties.

16. Financial risk management:

Overview

The Company has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- market risk
- operational risk

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk, and the Company's management of capital. Further quantitative disclosures are included throughout these financial statements.

Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework.

The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities. The Company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Company's Audit Committee oversees how management monitors compliance with the Company's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Company.

Credit risk

Credit risk is the risk of an unexpected loss if a counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to the carrying value of its cash and cash equivalents, short-term investments, accounts receivable and reclamation deposits. The Company limits its exposure to credit risk by dealing with high credit quality counterparties.

The Company's cash and cash equivalents, short-term investments and reclamation deposits are primarily held through, or issued by, large credit worthy Canadian financial institutions. These investments mature at various dates over 2017. The Company's receivables consist primarily of sales taxes due from the Federal Government of Canada and interest from Canadian financial institutions. The Company has not experienced any bad debts on its receivables in 2016 or 2015 and has no allowance for doubtful accounts recorded at either of December 31, 2016 or 2015.

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation. Liquidity risk is managed through capital structure. The Company's cash and cash equivalents and short term investments are liquid and available to meet the Company's ongoing obligations.

16. Financial risk management, continued:

Market risk

Market risk is the risk that changes in market values, such as foreign exchange rates, interest rates and equity prices will affect the Company's income or the value of its financial instruments. Market risk management seeks to limit exposures to acceptable values, while optimizing return. The Company is exposed to interest rate and equity price risk. The Company has no material foreign exchange exposures.

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is exposed to interest rate risk with respect to interest earned on cash and cash equivalents including its guaranteed investment certificates and its short-term investments. The Company does not use derivative instruments to reduce its exposure to interest risk. Based on balances of these instruments at December 31, 2016, a plus or minus 1% change in interest rates would result in a change in net income of $0.3 million, assuming all other variables remain constant.

The Company is exposed to equity price risk as it holds marketable Canadian Securities as investments that are classified as available-for-sale.

Capital Management

The Company's objective when managing capital is to safeguard the Company's ability to continue as a going concern in order to pursue the development of its mineral properties and to maintain a flexible capital structure which optimizes the costs of capital at an acceptable risk. The Company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue new shares, share options or share purchase warrants.

The Company considers the components of shareholders' equity to be its capital. There were no changes in the Company's approach to capital management during the year. The Company is not subject to externally imposed capital requirements.

17. Fair value measurements:

The fair value of financial instruments that are measured subsequent to initial recognition at their fair value, is measured within a 'fair value hierarchy' which has the following levels:

(i) Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;
(ii) Level 2: valuation techniques using inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
(iii) Level 3: valuation techniques using inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The fair value of financial assets and financial liabilities at amortized cost is determined in accordance with generally accepted pricing models based on discounted cash flow analysis or using prices from observable current market transactions. The fair value of the Company's cash and cash equivalents, short-term investments, accounts receivables, and accounts payable and accrued liabilities approximate their carrying amounts due to the short-term maturities of these instruments.

The fair value of the Company's reclamation deposit is not expected to differ materially from its carrying value given the interest rate being received (level two of the fair value hierarchy) and the carrying value of its investments is based on the quoted market price of the related shares in publicly traded companies to which the investment relates (level one of the fair value hierarchy).

18. Income taxes:

The tax effects of temporary differences between amounts recorded in the Company's accounts and the corresponding amounts as computed for income tax purposes gives rise to deferred tax assets and liabilities are as follows:

	2016	2015
Tax loss carry forwards	$ 20,900	$ 18,934
Financing costs	441	114
Provision for closure and reclamation	587	558
Other	(15)	46
Flow-through share effect on mineral properties	(48,893)	(48,282)
Mineral properties	(9,670)	(9,647)
Property and equipment	3,769	2,887
Deferred tax liabilities	$ (32,881)	$ (35,390)

The Company has tax loss carry forwards at December 31, 2016 of $77.4 million that expire from 2031 to 2036 (2015 - $70.1 million).

At December 31, 2016 the Company has deductible temporary differences of nil (2015 - $2.2 million) related to capital losses and other associated deductions not recognized as it is not probable that future taxable capital gains will be available to utilize these deductions.

Movement in temporary differences during the year:

December 31, 2016	Opening Balance	Recognized in Income Tax Expense	Recognized in Other Comprehensive Income (loss)	Recognized in Shareholders' Equity	Closing Balance
Deferred tax assets:					
Tax loss carry forwards	$ 18,934	$ 1,966	$ -	$ -	$ 20,900
Financing costs	113	(212)	-	540	441
Provision for closure and reclamation	558	29	-	-	587
Property and equipment	2,887	882	-	-	3,769
Deferred tax liabilities:					
Mineral properties	(9,647)	(23)	-	-	(9,670)
Flow-through shares	(48,282)	(611)	-	-	(48,893)
Other	47	-	(62)	-	(15)
	$ (35,390)	$ 2,031	$ (62)	$ 540	$ (32,881)

18. Income taxes, continued:

Movement in temporary differences during the year:

December 31, 2015	Opening Balance	Recognized in Income Tax Expense	Recognized in Other Comprehensive Income (loss)	Recognized in Shareholders' Equity	Closing Balance
Deferred tax assets:					
Tax loss carry forwards	$ 15,466	$ 3,468	$ -	$ -	$ 18,934
Financing costs	484	(378)	-	7	113
Provision for closure and reclamation	558	-	-	-	558
Other	37	10	-	-	47
Deferred tax liabilities:					
Mineral properties	(7,638)	(2,009)	-	-	(9,647)
Flow-through shares	(47,940)	(342)	-	-	(48,282)
Property and equipment	1,936	951	-	-	2,887
	$ (37,097)	$ 1,700	$ -	$ 7	$ (35,390)

The provision for income taxes differs from the expected amount calculated using the Canadian federal and provincial statutory income tax rates of 27.0% as follows:

	For the year ended December 31, 2016	2015
Expected tax recovery	$ (2,186)	$ (3,028)
Share based compensation and other permanent differences	(300)	665
Flow-through renunciation	611	342
Other	(156)	321
Income tax recovery	$ (2,031)	$ (1,700)

19. Subsequent event:

Subsequent to the year, on February 28, 2017, the Company completed a bought deal private placement flow-through financing of 3,150,000 flow-through common shares at a price of $1.75 per share and an additional 320,000 flow-through common shares at the offering price for total gross proceeds of approximately $6.1 million. The total gross proceeds from the financing must be used to incur Canadian exploration expenditures as defined by the Income Tax Act (Canada) by December 31, 2018.

Appendix F: List of Regulatory Permits, Authorizations, and Leases

Table F-1: List of Permits, Licenses, and Authorizations Required for Project

Responsible Authority	Legislation	Authorization	Project Activity	Permitting Strategy/Timeline
Nunavut Impact Review Board	NLCA Article 12 Nunavut Planning and Project Assessment Act (S.C. 2013, c. 14, s. 2)	Project Certificate	Required to obtain requisite permits and approvals to proceed with Project	Sabina aims to obtain a Project Certificate from NIRB by Q2/Q3-2016
Kitikmeot Inuit Association	NLCA Article 26	Inuit Impact and Benefits Agreement	Required to proceed with Project	Sabina aims to conclude successful negotiation of an IIBA after receiving a Project Certificate. Compensation agreements may form part of the IIBA.
	NLCA Article 20	Inuit Water Rights Compensation Agreement	May be required	
	NLCA Article 6	Wildlife Compensation Agreement		
	NLCA	Inuit Owned Lands - Commercial Land Use Lease	Access surface IOL to develop mine	Sabina intends to submit its commercial land use and quarry concession permit applications to the KIA once NIRB has issued a positive final hearing report to the Minister. Submission timing: mid-2016
		Inuit Owned Lands - Quarry Concession Licenses	Extract aggregate on IOL	
Nunavut Water Board	NLCA Article 13 *Nunavut Waters and Nunavut Surface Rights Tribunal Act* Nunavut Waters Regulations	Type A and B Water Licences	Required for water use and waste disposal	Sabina intends to submit its Type A Water Licence in Q2/Q3 of 2016. Sabina plans to utilize its existing Type B Water Licences or new licenses with already screened activities for initial construction activities, if necessary.
Indigenous and Northern Affairs Canada	*Territorial Lands Act* Canadian Mining Regulations	Prospector Licence Mineral leases	To obtain and hold subsurface mineral rights	Sabina intends to submit its land use and quarry permit applications to INAC once NIRB has issued a positive final hearing report to the Minister. Sabina plans to utilize its existing land use permits and/or will apply for new interim land use permits to support initial construction, to address delays in receipt of leases, if necessary.
	Territorial Land Use Regulations	Crown Land - Class A and Class B Land Use Permits	Access surface Crown lands for initial Project development, prior to obtaining leases	
		Crown Land - Land lease and Waterlot lease	Access surface Crown lands for the Project life	
	Territorial Quarrying Regulations	Crown Land - Quarry Lease/Permit	Extract aggregate on Crown Land	

(continued)

Table F-1: List of Permits, Licenses, and Authorizations Required for Project (continued)

Responsible Authority	Legislation	Authorization	Project Activity	Permitting Strategy/Timeline
Transport Canada	*Navigation Protection Act*	Approval and/or Exemption	Construction of works in navigable water to protect navigation channels	Sabina will seek feedback from Transport Canada on potential impacts to navigation during review of the FEIS, and will submit formal applications under the *Navigation Protection Act* for relevant in-water works once detailed engineering has been completed. Submission timing: 2016
	Canada Shipping Act Response Organizations and Oil Handling Facilities Regulations		Approved Oil Pollution Emergency Plan (OPEP)	Conceptual OPEP included with this FEIS for Transport Canada comment. Formal submission of the OPEP to Transport Canada for approval will follow detailed engineering.
	Canada Shipping Act Response Organizations and Oil Handling Facilities Regulations		Approved Ship Oil Pollution Emergency Plan (SOPEP)	Formal submission of the SOPEP to Transport Canada for approval prior to shipping
Fisheries and Oceans Canada	*Fisheries Act* (Section 35(2))	Authorization under Paragraph 35(2)(b) of the *Fisheries Act*; required if serious harm to fish cannot be avoided. In instances in which serious harm to fish can be avoided, DFO may provide a letter of authorization in addition to compliance with Measures to Avoid Causing Harm to Fish and Fish Habitat.	Project activities directly removing or altering fish habitat: full lake dewatering, culvert installations, dam construction in watercourses, stream flow reductions and potential water and sediment quality changes.	Sabina's application for an Authorization under the *Fisheries Act* presented as Appendix V12-1D of the DEIS will be finalized after receiving a Project Certificate.
Environment Canada	*Fisheries Act (Section 36)* Metal Mining Effluent Regulations	Schedule 2 Amendment	Deposit of tailings in fish-bearing waters	Should Sabina require a Schedule 2 Amendment Sabina intends to submit its request in the first half of 2016.

(continued)

Table F-1: List of Permits, Licenses, and Authorizations Required for Project (continued)

Responsible Authority	Legislation	Authorization	Project Activity	Permitting Strategy/Timeline
Natural Resources Canada	*Explosives Act* and Regulations Blasting Permits Explosive Magazine Permits Radio Licensing	Licence for a Factory and Magazine	Required for construction of explosives factories and magazines and storage of explosives	Sabina's explosives contractor (once contracted) will obtain the requisite licence(s).
GN Culture and Heritage	Nunavut Archaeological and Palaeontological Sites Regulations (Nunavut) *Nunavut Historical Resources Act*	Archaeology Permit	Required to conduct archaeology surveys and to mitigate cultrual/heritage resources	Archaeological permit applications will be submitted to the GN-CH by March 31 by Sabina's consulting archaeologist for survey or mitigation field work planned for the upcoming summer.
Nunavut Research Institute	*Scientist Act* (Nunavut)	Scientific Licences: Land and Water Social and Traditional Knowledge	Undertake non-biological and non-cultural heritage baseline and monitoring studies	Sabina or its consultants will obtain the requisite scientific licences as required prior to and during the life of the Project.
GN Environment	*Environmental Protection Act* (Nunavut) Spill Contingency Planning and Reporting Regulations(Nunavut)	Approval of Spill Contingency Plan		Sabina will submit its Spill Contingency Plan for approval as part of the Type A Water Licence Application. Submission timing: mid-2016
	Environmental Protection Act (Nunavut)	Hazardous Waste Generator		Sabina is currently registered as a hazardous waste generator
	Wildlife Act (Nunavut)			Sabina or its consultants will obtain the requisite wildlife research permits as required prior to and during the life of the Project.
GN Health and Social Services	*Public Health Act* (Nunavut) Camp Sanitation Regulations (Nunavut)	Approval of camp facilities	Construction and operation of camp, medical facilities, buildings and propane storage	Prior to construction and occupancy
	Emergency Medical Aid Act (Nunavut)	Medical facilities approval		

(continued)

Table F-1: List of Permits, Licenses, and Authorizations Required for Project (completed)

Responsible Authority	Legislation	Authorization	Project Activity	Permitting Strategy/Timeline
GN Community and Government Services	Building Codes (Nunavut)	Building Permits	Construction and operation of camp, medical facilities, buildings and propane storage	Prior to construction and occupancy
	Fire Prevention Act (Nunavut) Fire Prevention Regulations (Nunavut) Propane Cylinder Storage Regulations	Approval of camp facilities and propane storage		
Worker's Safety and Compensation Commission of Nunavut - Mine Health and Safety	*Explosives Use Act* (Nunavut) Explosive Use Regulations (Nunavut)	Authorization to store and use explosives	Required to store detonators in a magazine	Sabina's explosives contractor (once contracted) will obtain the requisite authorization(s).
	Mine Health and Safety Act (Nunavut) Mine Health and Safety Regulations (Nunavut)	Authorization to store and use explosives	Required to store detonators in a magazine	
	Worker's Compensation Act (Nunavut) Workers Compensation Regulations (Nunavut)	Authorization for Activities	Required to proceed with Project activities	Sabina is currently authorized to conduct business in Nunavut. Confirmation will be sought from WSCC if changes to this authorization are required for mine development. Sabina's contractors will be required to seek approval to work in Nunavut.

Notes:
IOL = Inuit Owned Land; NLCA = Nunavut Land Claims Agreement

Appendix G: Regulatory History

Table G-1. NIRB Procedural History

Date	Action
2011	Sabina initiates Environmental Assessment process
14 June 2012	Sabina submits project proposal directly to the NIRB
1 August 2012	NIRB issues public notice of Screening
5 September 2012	NIRB receives comments on the project from interested parties
25 September 2012	NIRB issues screening decision report to the AANDC Minister
17 December 2012	Minister issues decision to NIRB regarding screening report
17 December 2012	NIRB provided notice and distributes Minister decision to interested parties
21 December 2012	NIRB provides initial direction, procedural clarification and request for comments on project scope to/from interested parties
2-13 February 2013	NIRB holds public scoping sessions in various communities
18 March 2013	NIRB issues final scope, revised Draft EIS Guidelines
5 April 2013	NIRB issues Public Scoping Meetings Summary Report
9 April 2013	NIRB confirms guideline development workshop unnecessary
30 April 2013	NIRB issues to Sabina Guidelines for the Preparation of the Environmental Impact Statement
20 January 2014	Sabina submits Draft Environmental Impact Statement (DEIS)
11 February 2014	NIRB accepts DEIS as complete and conforms to Guidelines and initiates technical review period for the DEIS
13 March 2014	Interested Parties submitted information requests (IR's)
7 April 2014	NIRB issues direction and IR's to Sabina for response
23 July 2014	Sabina response to IR's
31 July 2014	NIRB initiates 60 day technical review
29 September 2014	Interested parties provided Technical comments to NIRB
14 October 2014	NIRB provides Sabina with technical review comments from all federal and territorial interested parties
17 October 2014	Sabina provides overview response to technical comments submission deadlines
24 & 30 October 2014	Sabina provided response to technical comments
17-19 November 2014	NIRB holds Technical Meetings and Pre-hearing Conference (TM/PHC)
9 December 2014	NIRB issues TM/PHC Decision (includes Appendix 3: NWB Technical Review Submission regarding Sabina DEIS dated 18-December 2014)
18 December 2014	NWB issues Appendix 3 to the NIRB PHC Decision (see previous)
January 2015	Sabina initiated the development of the Final Environmental Impact Statement (FEIS)
3 July 2015	Sabina advised NIRB that project scope reduced to remove activities associated with development of George Property.
23 November 2015	Sabina submits final FEIS to the NIRB
23 November 2015	NIRB initiates compliance check the EIS guidelines and PHC Decision
8 December 2015	NIRB confirms FEIS submitted generally complies
23 December 2015	NIRB issues notice of public hearing
15 January 2016	Parties deadline for submission of Information Requests
25 January 2016	NIRB confirms suitability of IR's submitted
12 February 2016	Sabina provides initial response to IR's

Date	Action
29 February 2016	NIRB issues Draft Hearing Agenda
7 March 2016	NIRB's deadline for final technical comments
21 March 2016	NIRB issues Final Hearing Agenda
24 March 2016	NIRB deadline for submission of evidence (technical presentations) for use at the Hearing
8 April 2016	NIRB deadline for translated technical presentations
25 - 30 April 2016	NIRB Final Public hearing held in Cambridge Bay
15 June 2016	NIRB Final decision to the Minister
12 January 2017	Minister Decision issued to NIRB
15 February 2017	Sabina submits FEIS Addendum
24 May 2017	NIRB holds Technical Meeting (via Telecom)
31 May – 3 June, 2017	NIRB Final Public hearing held in Cambridge Bay
18 July 2017	NIRB Final decision to the Minister
Pending	Minister Decision issued to NIRB
Pending	NIRB hold Project Certificate development meeting
Pending	NIRB issues final Project Certificate to Sabina

Appendix H: Land Tenure

Table H-1. Land Tenure (as of August 10, 2017)

Project/ Prospects	Tenure Number	Hectares (ha)	Tenure Type	Registered Ownership as of August 10th, 2017	Expiry / Renewal Date
Goose	3694	417.60	Federal Mining Leases (9)	100% in good standing	16-Oct-2017
	3695	409.95			16-Oct-2017
	3696	1076.87			16-Oct-2017
	3697	1100.95			16-Oct-2017
	3698	1072.82			16-Oct-2017
	3699	1003.22			16-Oct-2017
	3700	1083.75			16-Oct-2017
	5750	922.00			19-May-2019
	5751	614.00			19-May-2019
	F94558	800.06	Federal Mineral Claims (2)	100% in good standing	09-Sep-2016*
	K19901	629.00			23-Sep-2017*
	K19902	87.68	Federal Mineral Claims (2)	Pending	27-Aug-2018
	K19903	112.18			27-Aug-2018
George	3562	69.48	Federal Mining Leases (20)	100% in good standing	9-Nov-2017
	3598	394.16			28-Dec-2017
	3599	821.11			28-Dec-2017
	3600	1008.88			28-Dec-2017
	3601	1097.91			28-Dec-2017
	3602	1027.90			28-Dec-2017
	3603	1078.08			28-Dec-2017
	3604	450.01			28-Dec-2017
	3605	1036.81			19-Dec-2017*
	3606	1074.04			19-Dec-2017*
	3607	1033.97			19-Dec-2017*
	3608	1057.61			19-Dec-2017*
	3649	1046.92			19-Dec-2017*
	3650	200.08			28-Dec-2017
	3651	1042.07			28-Dec-2017
	3653	1074.85			19-Dec-2017*
	3677	536.53			16-Oct-2017
	3729	111.01			16-Oct-2017
	3730	749.88			16-Oct-2017
	5707	1865.06			25-Nov-2017
Boot	3552	1,029.12	Federal Mining Leases (10)	100% in good standing	29-Dec-2017*
	3553	1,036.00			29-Dec-2017*
	3554	1,092.65			29-Dec-2017*
	3555	1,014.38			29-Dec-2017*
	3609	1,081.32			29-Dec-2017*
	3612	1,079.70			29-Dec-2017*
	3613	1,024.26			29-Dec-2017*

Project/ Prospects	Tenure Number	Hectares (ha)	Tenure Type	Registered Ownership as of August 10th, 2017	Expiry / Renewal Date
	3678	1,060.68			16-Oct-2017
	3679	1,001.60			16-Oct-2017
	3724	541.47			16-Oct-2017
Boulder	3466	300.28	Federal Mining Leases (8)	100% in good standing	18-Nov-2017
	3557	1,012.12			30-Dec-2017*
	3558	1,051.37			30-Dec-2017*
	3559	1,048.54			30-Dec-2017*
	3560	1,099.53			30-Dec-2017*
	3691	259.81			16-Oct-2017
	3692	456.49			16-Oct-2017
	3693	670.56			16-Oct-2017
	K12027	903.26	Federal Mineral Claims (6)	100% in good standing	4-Oct-2022
	K12028	1,008.07			4-Oct-2022
	K12029	948.99			4-Oct-2022
	K12030	938.06			4-Oct-2022
	K12033	290.56			4-Oct-2022
	K12034	733.70			4-Oct-2022
Bath	5152	982.37	Federal Mining Lease (1)	100% in good standing	10-Mar-2018
	F94554	649.93	Federal Mineral Claims (2)	100% in good standing	9-Sep-2016*
	F94555	549.97			9-Sep-2016*
Del	K10862	965.98	Federal Mineral Claims (6)	100% in good standing	12-Sep-2018
	K10863	965.98			12-Sep-2018
	K10866	965.98			12-Sep-2018
	K10867	965.98			12-Sep-2018
	K10869	964.77			12-Sep-2018
	K10870	975.70			12-Sep-2018

** Renewal in progress.*
Source: Sabina Gold & Silver Corp. 2017