# **APPENDIX 3A**

**Engagement Tables** 

Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
4-Apr-19	Letter - Outgoing	Introduction of Project and offer meet
2-May-19	Meeting - in Person	Meeting with Chief and others to present Project overview
13-Sep-19	Letter - Outgoing	Project/corporate update and information re: Project schedule and commitment to engagement
21-Oct-19	Email - Outgoing	Project update and notice of Grand Falls-Windsor supplier session
22-Oct-19	Email - Outgoing	Follow up letter to Chief introducing Manager of Stakeholder Relations and proposing a meeting with Qalipu in late October
23-Oct-19	Email - Incoming	Email from Qalipu Development Corporation (QDC) indicating interest in Supplier session and in meeting with Marathon representatives
22-Oct-19	Phone Call - Outgoing	Phone call to Chief to discuss potential meeting, no answer, left message
22-Oct-19	Email - Outgoing	Follow up email to Chief committing to engagement and Marathon interest in meeting with Chief and Qalipu representatives in late October
24-Oct-19	Phone Call - Outgoing	Phone call with Chief to discuss possibility of meeting in Corner Brook on either October 28th or 29th
25-Oct-19	Email - Outgoing	QDC - Follow up to email of October 23 and proposing a meeting on October 30 in Grand Falls-Windsor
25-Oct-19	Email - Outgoing	Email to Chief confirming meeting with Marathon on October 29. Purpose of meeting to provide Project update, discuss engagement
25-Oct-19	Email - Incoming	Email from QDC agreeing to meet with Marathon
25-Oct-19	Email – Outgoing/Incoming	E-mail chain re: details of meeting with QDC
29-Oct-19	Meeting - in Person	Meeting between Marathon and Chief and other representatives of Qalipu to provide Corporate/Project update
30-Oct-19	Email - Outgoing	E-mail to QDC with time and place of meeting
30-Oct-19	Meeting - in Person	Meeting with Marathon, Ausenco and QDC to provide Project overview, discuss mandate of QDC and identify potential opportunities for future work
30-Oct-19	Email - Incoming	QDC Follow up to meeting – confirming interest in ongoing cooperation
30-Oct-19	Email - Outgoing	Marathon follow up to meeting and response to QDC
11-Nov-19	Email - Outgoing	Marathon note to Chief Mitchell re next steps in engagement
18-Nov-19	Email - Outgoing	Marathon invitation to Chief and Qalipu representatives to attend Project Review Workshop on December 5
20-Nov-19	Phone Call - Outgoing	Phone call to Chief and response e-mail
	Email – Incoming/Outgoing	advising that Chief not able to attend December 5 Project review meeting. Recommendation that invitation be extended to Qalipu councillors and staff if Chief is agreeable
25-Nov-19	Email - Outgoing	Email to Qalipu Director of Natural Resources re participation in Project Review Workshop
25-Nov-19	Email - Incoming	Qalipu response confirming participation in Workshop



Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
25-Nov-19	Email - Incoming	Email confirming participation of Qalipu councillors
26-Nov-19	Email - Incoming	Email indicating interest on part of additional Qalipu participants
26-Nov-19	Email - Outgoing	Transmittal of Project Review Workshop materials to confirmed participants
28-Nov-19	Conference Call	Call with participants to discuss arrangements for upcoming Workshop Grand Falls-Windsor
5-Dec-19	Workshop	Project Review Workshop in Grand Falls-Windsor with representatives of Miawpukek and Qalipu to review and discuss Project layout and design, and issues and concerns.
5-Dec-19	Email - Incoming	Qalipu participant - thank you e-mail
6-Dec-19	Email - Outgoing	Marathon follow up to Workshop thank you email
7-Dec-19	Email - Incoming	Qalipu participant - thank you email
9-Dec-19	Email - Incoming	Qalipu participant - thank you email
10-Dec-19	Email - Outgoing	Email chain re conference call to discuss engagement process
11-Dec-19	Email – Outgoing/Incoming	Email chain confirming call on December 12
12-Dec-19	Phone Call - Outgoing	Call with Qalipu to discuss Traditional Knowledge (TK) Study and engagement process
17-Dec-19	Email - Outgoing	Marathon request for call with Chief to discuss TK Study and related matters
17-Dec-19	Email - Incoming	Response from Qalipu - Chief out of office but might be available on December 20
20-Dec-19	Phone Call - Outgoing	Call to Chief - Chief not available
6-Jan-20	Email – Outgoing/Incoming	Email chain re Marathon request to present to Qalipu Chief and Council
7-Jan-20	Email - Outgoing	Note to Chief re Marathon request to make presentation to Chief and council
10-Jan-20	Email - Incoming	Email confirming Marathon attendance at meeting of Chief and Council on January 25 2020
17-Jan-20	Email - Incoming	Call between CEO and Chief to discuss TK Study and next steps in engagement
24-Jan-20	Email - Outgoing	Correspondence to Chief:     Summary of Workshop proceedings (Workshop Report)     Description of changes to Project layout taking into account Workshop participant comments
24-Jan-20	Email - Outgoing	Marathon follow up to Project Review Workshop – circulation of Workshop Report to participants
25-Jan-20	Meeting - in Person	Presentation to Qalipu Chief and Council:
		<ul><li>Corporate/Project update</li><li>Q &amp; A by Councilors and participants</li></ul>
27-Jan-20	Email - Outgoing	Email requesting arrangements for call with Qalipu to discuss TK Study and other matters



Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
28-Jan-20	Email - Outgoing	Email invitation to Chief Mitchell re: public information sessions and confirmation that will continue to engage with Qalipu membership
30-Jan-20	Phone Call - Outgoing	Conference call with Qalipu representatives to discuss TK study and future engagement activities
10-Feb-20	Letter - Outgoing	Correspondence with Chief proposing negotiation of socio-economic agreement (SEA) and TK Study
18-Feb-20	Phone Call - Incoming	Call with Band Manager confirming receipt of letter re SEA and undertaking to follow up with Chief
19-Feb-20	Email – Outgoing/Incoming	Email chain follow up to call re TK and SEA and undertaking to present matter electronically to council
25-Feb-20	Email - Outgoing	Email inquiry re status of Marathon SEA/TK proposal
2-Mar-20	Phone Call - Outgoing	Phone call to Band Manager re Status of Marathon SEA/TK proposal - no answer, left message
4-Mar-20	Phone Call - Outgoing	Phone call with Band Manager re status of SEA/TK proposal. Matter to be discussed by Executive Committee and undertaking to provide response by March 10, 2020
10-Mar-20	Email - Outgoing	Email follow up to phone call re status of TK/SEA
13-Mar-20	Phone Call - Outgoing	Phone call to Band Manager re status of TK/SEA proposal. No answer left message
16-Mar-20	Phone Call - Outgoing	Phone Call to Band Manager. Marathon advised that matter had been discussed and would be referred to Council meeting on March 21
23-Mar-20	Email - Incoming	Notice that Qalipu offices closed due to COVID-19
23-Mar-20	Phone Call - Outgoing	Phone call to Band Manager re outcome of Council meeting. No answer, left message
23-Mar-20	Email - Incoming	Email confirming Council approval for TK study and SEA negotiations
23-Mar-20	Email - Outgoing	Marathon response requesting call to discuss negotiation process
26-Mar-20	Email – Outgoing/Incoming	Email chain re proposed call
26-Mar-20	Email - Outgoing	Invitation to call
30-Mar-20	Conference Call	Call to discuss SEA - timelines, negotiation process, role of engagement subcommittee, representatives, approval process, items for negotiation
30-Mar-20	Email - Outgoing	Marathon follow up to call setting out understanding of process and next steps
30-Mar-20	Email - Outgoing	Requesting call to discuss TK study
31-Mar-20	Email - Outgoing	Invitation to Call to discuss TK study
31-Mar-20	Conference Call	Proposed Conference Call - did not take place as Qalipu representative not available
31-Mar-20	Email - Outgoing	Email chain re rescheduling of call
1-Apr-20	Phone Call - Outgoing	Phone call re availability for call. No answer, left message



Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
1-Apr-20	Email - Outgoing	Email re availability for call
2-Apr-20	Email - Outgoing	Invitation to Call April 2
2-Apr-20	Conference Call	Conference call to discuss TK study including timelines, process, participants.
2-Apr-20	Email - Outgoing	Invitation first SEA Call
7-Apr-20	Email – Outgoing/Incoming	Email chain re call participants
7-Apr-20	Phone Call - Outgoing	Call to Qalipu to clarify negotiating roles
8-Apr-20	Conference Call	First SEA negotiation session
13-Apr-20	Email - Outgoing	Email to Qalipu re information request re Indigenous land and resource use for inclusion in EIS
14-Apr-20	Conference Call	Second SEA negotiation session
15-Apr-20	Email - Outgoing	Marathon email providing draft workscope and map for proposed TK study
17-Apr-20	Conference Call	Conference call with Qalipu representatives re joint communication strategy and information sharing
17-Apr-20	Email - Outgoing	Transmittal of spring quarterly newsletter to Qalipu communication officer
22-Apr-20	Conference Call	Third SEA negotiation session
24-Apr-20	Conference Call	Conference call land and resource use information request and expansion of TK workscope
26-Apr-20	Email - Outgoing	Marathon email follow up to phone call confirming interest in conference call on TK workscope
29-Apr-20	Email – Incoming	Email chain re rescheduling of SEA negotiating session
1-May-20	Conference Call	Fourth SEA negotiating session
4-May-20	Conference Call	Conference call to discuss scope of proposed TK. Qalipu to provide template agreement and draft questionnaire
8-May-20	Email - Outgoing	Transmittal of revised TK workscope to adapt to COVID-19 restrictions
8-May-20	Email - Incoming	Qalipu email re TK study software
8-May-20	Email - Incoming	Qalipu response to land and resource use questionnaire
12-May-20	Email – Incoming/Outgoing	Re rescheduling of negotiating session
15-May-20	Email - Incoming	Transmittal of draft press release re SEA negotiations for review and comment by Marathon
15-May-20	Email – Outgoing/Incoming	Email chain requesting call to discuss TK study
15-May-20	Conference Call	Fifth SEA negotiation session
20-May-20	Email - Outgoing	Email request for call to discuss TK study
21-May-20	Phone Call - Outgoing	Phone call to discuss status of land use study. Questionnaire completed, workscope under review. Questionnaire and draft template agreement to be sent to Marathon by end of week.



Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
21-May-20	Email - Outgoing	Invitation to Qalipu to attend virtual public meetings with poster attached
22-May-20	Email - Incoming	Qalipu transmission of link to draft questionnaire for review by Marathon
22-May-20	Phone Call - Outgoing	Phone call to discuss TK questionnaire
22-May-20	Meeting - in Person	SEA negotiation session
25-May-20	Email - Outgoing	Invitation to Qalipu members to attend virtual public meetings with poster attached
25-May-20	Email - Outgoing	Re TK questionnaire
26-May-20	Email - Outgoing	Notice of possible reopening of exploration camp
26-May-20	Email - Incoming	Re land use TK questionnaire
26-May-20	Email - Outgoing	Marathon request for call to discuss questionnaire
27-May-20	Phone Call - Outgoing	Phone Call with Qalipu representative to review questionnaire with proposed revisions
27-May-20	Email - Outgoing	Marathon follow up to phone call summarizing proposed revisions
28-May-20	Email - Incoming	Transmission of revised questionnaire questions
31-May-20	Email - Outgoing	Marathon - additional comments on questionnaire
2-Jun-20	Email - Incoming	Qalipu response agreeing to consider Marathon proposed revisions
2-Jun-20	Phone Call - Outgoing	Phone call to discuss final revisions to questionnaire, draft agreement and schedule for completion of TK Study
2-Jun-20	Email - Outgoing	Follow up to phone call summarizing next steps
3-Jun-20	Meeting - in Person	Sixth SEA negotiation session
3-Jun-20	Email - Outgoing	Notice of reopening of Exploration Camp and OVID-19safety measures
3-Jun-20	Email - Outgoing	Notice to Qalipu – employment opportunity - labourer and geologist positions
3-Jun-20	Email - Incoming	Qalipu confirmation that employment opportunities posted on website
9-Jun-20	Email - Outgoing	Marathon query re: status of land and resource use questionnaire
9-Jun-20	Email - Incoming	Qalipu response and question re schedule for completion of TK Study
9-Jun-20	Email - Outgoing	Transmission of press release re camp reopening
10-Jun-20	Email - Incoming	Transmission of draft TK study template agreement
10-Jun-20	Conference Call	Seventh SEA negotiation session; discussion of proposal to hold virtual meeting directed at Qalipu membership
11-Jun-20	Email - Outgoing	Marathon – proposed timelines for TK study
11-Jun-20	Email - Outgoing	Transmission of draft TK Study contract for Qalipu review and comment
15-Jun-20	Email - Outgoing	Inquiry re status of TK Study questionnaire
15-Jun-20	Email - Incoming	Response that questionnaire to be posted online soon



Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
17-Jun-20	Conference Call	Eighth SEA negotiating session; discussion of proposed virtual meeting with Qalipu membership and promotion of participation
18-Jun-20	Email - Outgoing	Inquiry re status of TK Study questionnaire
19-Jun-20	Email - Outgoing	Transmission of baseline conditions chapter for review and comment by Qalipu
19-Jun-20	Phone Call - Outgoing	Call to discuss status of LRU study and schedule
19-Jun-20	Email - Outgoing	Follow up to call, laying out schedule and concerns
23-Jun-20	Email - Incoming	Advising that questionnaire and TK Study on schedule
23-Jun-20	Webinair	Virtual information session with Qalipu membership:  Corporate/Project update Environmental Assessment process
24-Jun-20	Email – Outgoing/Incoming	Email chain re posting of TK questionnaire
25-Jun-20	Email - Outgoing	Notice to Qalipu – federal Participant Funding Program
25-Jun-20	Email - Outgoing	Email chain acknowledging posting of TK Study questionnaire
26-Jun-20	Email - Incoming	Email advising of limited number of participants in TK Study and requesting advice
29-Jun-20	Email - Outgoing	Transmission of summer Quarterly newsletter
29-Jun-20	Email - Outgoing	Notice to Qalipu - Update on federal Participant Funding Program
29-Jun-20	Email - Outgoing	Marathon agreement to consider extension of time for completion of TK study
30-Jun-20	Conference Call	Regular SEA negotiating session
30-Jun-20	Email - Outgoing	Marathon agreement to extend time frame for TK Study to July 10 with report due July 15
30-Jun-20	Email - Outgoing	Phone call to discuss means of promoting participation in questionnaire
30-Jun-20	Email - Outgoing	Query re status of existing conditions (EIS) review
1-Jul-20	Email - Outgoing	Notice of Project procurement database
2-Jul-20	Email - Outgoing	Notice to Qalipu – employment opportunity – Health and Safety Coordinator position
2-Jul-20	Email - Outgoing	Notice to Qalipu – employment opportunity – Geotech position
2-Jul-20	Email - Incoming	Qalipu update on TK Study participation rate
2-Jul-20	Email - Incoming	Qalipu confirmation of accuracy of information in existing conditions IG chapter
6-Jul-20	Email - Outgoing	Marathon request for daily update on progress of completion of TK study
6-Jul-20	Email – Outgoing/Incoming	Email chain re steps taken by Qalipu to promote survey participation
6-Jul-20	Email - Incoming	Re issues associated with TK Study conclusions if survey participation limited
7-Jul-20	Email - Incoming	Daily survey participation report



Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
9-Jul-20	Email - Incoming	Daily survey participation report
10-Jul-20	Email - Incoming	Daily survey participation report
14-Jul-20	Email - Outgoing	Marathon circulation of draft SEA for Qalipu review and comment
15-Jul-20	Email - Incoming	Status of survey report
15-Jul-20	Email - Incoming	Status of survey report update
15-Jul-20	Email - Incoming	Transmission of Draft TK Study Report
20-Jul-20	Email - Outgoing	Offer to share baseline studies with Qalipu subject to execution of NDA
20-Jul-20	Email - Outgoing	Marathon request for call to discuss draft TK Study Report
21-Jul-20	Phone Call - Outgoing	Phone call to discuss mapping refinements and finalization of draft TK Study Report
21-Jul-20	Email - Outgoing	Follow up to phone call with details of proposed refinements to draft TK Study Report
22-Jul-20	Email - Outgoing	Notice to Qalipu - Update on federal Participant Funding Program
24-Jul-20	Email - Incoming	Qalipu response re submission date of final TK Study report July 30, 2020
28-Jul-20	Email - Outgoing	Marathon request for call to discuss EIS distribution
28-Jul-20	Email - Incoming	Qalipu transmission of signed NDA
28-Jul-20	Phone Call - Outgoing	Call with Qalipu to discuss EIS distribution. Qalipu agreement to hard copy of PLS and EIS (minus appendices) and USB key with full EIS and PLS. To be delivered to Chief in Corner Brook
30-Jul-20	Email - Incoming	Transmission of final TK Study
2-Aug-20	Email - Outgoing	Transmittal of Virtual Meeting Summary Report to Chief
4-Aug-20	Email - Outgoing	Request for call with Band Manager to discuss SEA
4-Aug-20	Email - Outgoing	Transmission of executed NDA
5-Aug-20	Conference Call	Phone call to discuss next steps SEA negotiations, views of Council and community consultation on SEA
6-Aug-20	Email - Incoming	Email transmitting Qalipu's redrafted SEA
10-Aug-20	Conference Call	Review of Qalipu revisions to SEA, discussion of community consultation process
10-Aug-20	Email - Outgoing	Notice of proposed country food survey and request for Qalipu participation
10-Aug-20	Email - Outgoing	Request for call to discuss Qalipu redraft SEA
11-Aug-20	Phone Call - Outgoing	Phoned to request call, no answer, left message
13-Aug-20	Conference Call	Conference call to discuss scope of Country Food Survey and proposed Qalipu participation
15-Aug-20	Email - Incoming	Email advising that Qalipu unable to participate in CFS
15-Aug-20	Email - Outgoing	Marathon offer to adjust dates of Country Food Survey to facilitate Qalipu participation



Table 3A.1 Engagement Activities – Marathon Gold and Qalipu Mi'kmaq First Nation (Qalipu)

Date	Activity	Purpose and Focus
18-Aug-20	Email - Outgoing	Email proposing later dates for commencement of Country Food Survey
20-Aug-20	Email - Outgoing	Request for call to discuss Marathon's proposed revisions to Qalipu redraft of SEA and community consultation
20-Aug-20	Phone Call - Outgoing	Phone call to request call to discuss Marathon redraft, no answer, left message
20-Aug-20	Email - Outgoing	Follow up query re possible participation by Qalipu in Country Food Survey
20-Aug-20	Email - Outgoing	Email transmitting Marathon SEA redraft with request for call to discuss revisions
25-Aug-20	Email - Incoming	Qalipu query as to whether later start date for Country Food survey is still possible
25-Aug-20	Email - Outgoing	Marathon response confirming new commencement date for survey
26-Aug-20	Email – Outgoing/Incoming	Qalipu confirmation of participation in Country Food Survey and Marathon acknowledgement
31-Aug-20	Email - Incoming	Email chain logistics of Qalipu participation in Country Food Survey
31-Aug-20	Email - Outgoing	Email chain requesting call to discuss Marathon SEA redraft
2-Sep-20	Phone Call – Outgoing/Email – Outgoing	Phone call requesting discussion of Marathon redraft and other matters. No answer, left message. Follow up email requesting call

Table 3A.2 Engagement Activities - Marathon Gold and Miawpukek First Nation (Miawpukek)

Date	Activity	Purpose and Focus
4-Apr-19	Letter - Outgoing	Introduction to Valentine Gold Project
28-Jun-19	Letter - Incoming	Letter outlining Miawpukek's concerns re Project
30-July-19	Meeting - in Person	Project overview presentation and discussion
13-Sep-19	Letter - Outgoing	Project description update and commitment to engagement
21-Oct-19	Email - Outgoing	E-mail containing Project update letter and invitation to attend meeting in Grand Falls to discuss procurement
22-Oct-19	Email - Outgoing	E-mail re Marathon's approach to engagement and request call to discuss next steps
22-Oct-19	Phone Call - Outgoing	Phone Call to Chief re: engagement; no answer, left message
8-Nov-19	Email - Outgoing	Request for contact information for Miawpukek engagement designate
12-Nov-19	Email - Incoming	Miawpukek response indicating Chief to be primary contact for time being
13-Nov-19	Email - Outgoing	Acknowledgement of Miawpukek email
17-Nov-19	Email – Outgoing/Incoming	E-mail chain re: engagement process



Table 3A.2 Engagement Activities - Marathon Gold and Miawpukek First Nation (Miawpukek)

Date	Activity	Purpose and Focus
18-Nov-19	Email - Outgoing	E-mail notice of and invitation to Miawpukek representatives to attend Project Review Workshop in Grand Falls-Windsor
20-Nov-19	Phone Call - Outgoing	Re Workshop: Miapukek advising that Chief unable to attend and recommending that invitation be forwarded to other representatives of Miawpukek
21-Nov-19	Email - Outgoing	E-mail to Chief's EA requesting contact information for additional Miawpukek representatives
22-Nov-19	Email - Outgoing	Forwarding Project Review Workshop invitation to identified representatives
25-Nov-19	Email - Incoming	Response to Workshop invitation with request for information on timing and logistics
25-Nov-19	Email - Outgoing	Response providing additional details on proposed Workshop
25-Nov-19	Phone Call - Incoming	General discussion with Chief re: engagement. Approval for Miawpukek representatives to attend Workshop. Marathon offer to meet with the Chief in St. John's during week of December 2.
26-Nov-19	Email - Outgoing	Transmittal of Project Review Workshop materials to confirmed participants
26-Nov-19	Email - Outgoing	Invitation to Conference Call on November 28 to prepare for Project Review Workshop; no response
26-Nov-19	Email - Outgoing	E-mail to Miawpukek representatives re meeting logistics
29-Nov-19	Email - Incoming	E-mail from Miawpukek representative indicating intent to withdraw from Workshop
29-Nov-19	Email - Outgoing	E-mail response encouraging participation in Workshop and requesting call to discuss
29-Nov-19	Email – Outgoing/Incoming	E-mail chain re: Miawpukek participation at Workshop; resolution and agreement by representative to attend
29-Nov-19	Email - Outgoing	E-mail to Chief re: possible meeting in St. John's during week of December 2
5-Dec-19	Workshop	Project Review Workshop in Grand Falls Windsor with representatives of Miawpukek and Qalipu to review and discuss Project layout and design, and issues and concerns
6-Dec-19	Email - Outgoing	Note of thanks to Workshop participants
9-Dec-19	Email - Incoming	Miawpukek acknowledgement
10-Dec-19	Email - Outgoing	Email to Miawpukek re: interest in undertaking Traditional Knowledge Study with Marathon support
12-Dec-19	Email - Incoming	Miawpukek follow up to Workshop and request to defer discussions of Traditional Knowledge (TK) Study until the new year.
9-Jan-20	Email – Outgoing/Incoming	E mail chain re follow up to Workshop and Marathon's expression of continuing interest in TK Study
24-Jan-20	Email - Outgoing	Correspondence to Chief:
		<ul> <li>Summary of Workshop proceedings (Workshop Report)</li> <li>Description of changes to Project layout taking into account Workshop participant comments</li> </ul>



Table 3A.2 Engagement Activities - Marathon Gold and Miawpukek First Nation (Miawpukek)

Date	Activity	Purpose and Focus
24-Jan-20	Email - Outgoing	Marathon follow up to Project Review Workshop – circulation of Workshop Report to participants
28-Jan-20	Email - Incoming	Email from Miawpukek indicating that Workshop report has been circulated internally.
28-Jan-20	Email - Outgoing	Email to Chief:
		<ul> <li>advising of upcoming community information sessions in Central Region</li> <li>inviting Miawpukek members to attend community information sessions</li> <li>expressing intention to meet in Conne River for Miawpukek membership information session</li> </ul>
29-Jan-20	Email – Outgoing/Incoming	Email chain with Chief's office re: attendance at community information sessions
3-Feb-20	Email - Incoming	Email chain indicating that Chief could not attend community information sessions but expressing interest in meeting in Conne River.
18-Feb-20	Phone Call - Outgoing	Phone call to Chief to discuss timing of community meeting in Conne River. Chief expressed support for meeting. Discussion of possible TK study
18-Feb-20	Email - Outgoing	Email to Miawpukek proposing meeting during week of March 30 and requesting call to discuss arrangements
18-Feb-20	Email - Incoming	Email confirming week of March 30 as acceptable for Chief
27-Feb-20	Phone Call - Outgoing	Phone call to discuss meeting arrangements. No answer, left message
27-Feb-20	Email – Outgoing/Incoming	E-mail follow up to missed phone call. Agreement to April 2 as date for community meeting and proposal to discuss arrangements by phone.
28-Feb-20	Phone Call - Outgoing	Phone call to discuss meeting arrangements. Meeting confirmed for April 2 and all arrangements made. Marathon to provide brief description for circulation to Chief and Council
3-Mar-20	Email – Outgoing/Incoming	Meeting notice for inclusion on Miawpukek website and Facebook page – confirmation by Miawpukek that note posted
11-Mar-20	Email – Outgoing/Incoming	Email chain re Miawpukek's proposed cancellation of community meeting due to COVID 19 and associated community restrictions
12-Mar-20	Email - Incoming	Email from Miawpukek re possible rescheduling of meeting when COVID restrictions lifted
12-Mar-20	Email – Outgoing/ Incoming	Email chain re Marathon proposal to hold conference call with Chief and others
18-Mar-20	Phone Call - Incoming	Phone call from Chief to discuss scheduling of conference call
19-Mar-20	Email - Outgoing	Email to Chief proposing dates for conference call
19-Mar-20	Email - Incoming	Email from Mkiawpukek proposing March 25 for call
24-Mar-20	Email - Outgoing	Email from Marathon proposing March 27 for call



Table 3A.2 Engagement Activities - Marathon Gold and Miawpukek First Nation (Miawpukek)

Date	Activity	Purpose and Focus
24-Mar-20	Email – Incoming/Outgoing	Miawpukek confirming participants to call and proposing March 30; Marathon agreement to date
24-Mar-20	Email - Incoming	Confirmation from Miawpukek re: timing of call
25-Mar-20	Email - Outgoing	Invitation to Miawpukek participants in call together with advance copy of call materials
30-Mar-20	Conference Call	Conference call with Miawpukek to provide overview of Project and discussion of issues: tailings, caribou, impact on water bodies
7-Apr-20	Phone Call - Outgoing	Call to Chief, no answer, left message
13-Apr-20	Phone Call - Outgoing	Call to Chief, no answer, left message
16-Apr-20	Phone Call - Outgoing	Phone Call with Chief to discuss:
		<ul> <li>request for information on local services, infrastructure and land and resource use for inclusion in the EIS</li> <li>Marathon offer to support TK Study</li> <li>Schedule of follow-up conference call</li> </ul>
16-Apr-20	Email - Outgoing	Marathon email follow up to phone Call setting out understanding of the call
16-Apr-20	Email - Outgoing	Email to Chief and Miawpukek representative with attached questionnaire requesting information re services/infrastructure/land and resource use information
23-Apr-20	Phone Call - Outgoing	Phone call with Chief to discuss status of questionnaire, continuing offer to support TK Study and proposed conference call
26-Apr-20	Email - Outgoing	Follow up to phone call providing call coordinates for conference call with Chief and other Miawpukek representatives
27-Apr-20	Phone Call - Incoming	Phone call from Chief proposing call, Thursday, April 20 to discuss TK Study and land and resource use
28-Apr-20	Email - Outgoing	Marathon follow up to phone call setting out understanding of next steps
28-Apr-20	Email - Outgoing	Invitation to Conference Call on April 30 to discuss TK Study
29-Apr-20	Email - Incoming	Confirmation of attendance at conference call
30-Apr-20	Conference Call	Parties discussed:
		<ul> <li>Miawpukek's ongoing land use research</li> <li>TK Study</li> <li>Miawpukek interests in central region</li> <li>Concern for caribou, species at risk, medicinal plants</li> <li>Follow up call with Chief planned.</li> </ul>
1-May-20	Email - Outgoing	Follow up to conference call reattaching questionnaire on services, infrastructure, land and resource use
4-May-20	Email – Outgoing/Incoming	Email chain re logistics of conference call with Chief
4-May-20	Email – Outgoing/Incoming	Email chain confirming date and time of call with Chief
5-May-20	Conference Call	Conference call with Chief and others to provide Project overview, next steps in engagement



Table 3A.2 Engagement Activities - Marathon Gold and Miawpukek First Nation (Miawpukek)

Date	Activity	Purpose and Focus
7-May-20	Email - Outgoing	Follow up to call providing Miawpukek with copy of presentation and Project area map
21-May-20	Email - Outgoing	Invitation to Miawpukek members to attend virtual public meetings May 26 & 27 together with poster; confirmation that Marathon prepared to hold separate meeting with Miawpukek
22-May-20	Email - Incoming	Acknowledgement of receipt of invite and undertaking to post on Facebook
25-May-20	Phone Call - Incoming	Call from Chief inquiring about contracting and procurement processes
26-May-20	Phone Call - Outgoing	Call to discuss start of construction and commitment to work together re economic opportunities. Chief indicated that would not oppose project if environmental concerns addressed
27-May-20	Phone Call - Incoming	Call from Chief to discuss land and resource use in area; Chief agreed Marathon could directly approach two Miawpukek representatives re possible land and resource use study
3-Jun-20	Email - Outgoing	Note re reopening of Exploration Camp and associated COVID-19 safety measures
3-Jun-20	Email - Outgoing	Note to Miawpukek – notice of employment opportunities - labourer and geologist
3-Jun-20	Email - Outgoing	Note to Miawpukek – employment opportunity – Housekeeper position
3-Jun-20	Email - Outgoing	Proposal for call to discuss potential land and resource use study
4-Jun-20	Email - Incoming	Miawpukek response proposing call following week
4-Jun-20	Email - Incoming	Miawpukek follow up, expressing willingness to collaborate
4-Jun-20	Email - Outgoing	Marathon response agreeing to call June 11 and seeking confirmation of Miawpukek participation
4-Jun-20	Phone Call - Outgoing	Call to discuss possibility of virtual community meeting while COVID restrictions in place, no answer, left message
4-Jun-20	Email - Outgoing	Follow up to phone call, explaining purpose of call and discussing interest in virtual meeting
4-Jun-20	Email – Incoming	Miawpukek confirmation that employment ads posted to Facebook
8-Jun-20	Email – Outgoing/Incoming	Follow up request for call to discuss land and resource use as per previous correspondence. Email chain re unavailability of one Miawpukek representative to participate in call
8-Jun-20	Email – Outgoing/Incoming	Marathon request for separate meeting in advance with single Miawpukek representative. No agreement to call with one representative.
9-Jun-20	Email – Outgoing/Incoming	Email chain. Second request to meet with one Miawpukek representative due to unavailability of other representative
9-Jun-20	Email - Outgoing	Notice to Miawpukek - Transmission of press release re reopening of Exploration Camp
9-Jun-20	Phone Call - Outgoing	Phone call to Chief. Chief not available so spoke to EA re timing of virtual meeting with Miawpukek membership



Table 3A.2 Engagement Activities - Marathon Gold and Miawpukek First Nation (Miawpukek)

Date	Activity	Purpose and Focus
11-Jun-20	Email - Incoming	Miawpukek follow-up to email chain of June 9th, expressing preference to hold call when both representatives available
15-Jun-20	Email - Incoming	Email from Chief's EA re Chief's intention to call to discuss virtual meeting
15-Jun-20	Phone Call - Incoming	Call from Chief to discuss virtual meeting. Discussed format, logistics, date and time
15-Jun-20	Email – Outgoing/Incoming	Email chain with representatives of Miawpukek to set virtual meeting arrangements
16-Jun-20	Phone Call - Outgoing	Call with Chief to discuss virtual meeting, Project update and procurement processes
17-Jun-20	Conference Call	Call with Chief's EA and Miawpukek Information Officer to discuss logistics of virtual meeting and posting of notices
17-Jun-20	Phone Call - Incoming	Incoming call from Chief to discuss upcoming virtual meeting and update on Project
19-Jun-20	Email - Outgoing	Transmission of information re existing conditions (EIS) to Miawpukek for review, comment and revision if necessary
22-Jun-20	Email - Outgoing	Follow up to previous e-mails requesting Miawpukek representatives to identify suitable date to speak re: land and resource use, TK Study
24-Jun-20	Phone Call - Incoming	Call from Chief to confirm details of virtual meeting
24-Jun-20	Webinair	Virtual meeting:
25-Jun-20	Email - Outgoing	Notice to Miawpukek – federal Participant Funding Program
29-Jun-20	Email - Outgoing	Request for call to discuss possible land use and TK study
29-Jun-20	Email – Outgoing/Incoming	Email chain re: timing of proposed to discuss land and resource use and TK Study
29-Jun-20	Email – Outgoing/Incoming	Email chain re call logistics
29-Jun-20	Email - Outgoing	Transmission of summer Quarterly Newsletter
29-Jun-20	Email - Outgoing	Update on federal Participant Funding Program
30-Jun-20	Email – Outgoing/Incoming	Email chain. Miawpukek request to reschedule call
1-Jul-20	Email - Outgoing	Note to Miawpukek – Project procurement database
2-Jul-20	Phone Call - Outgoing	Call to discuss Indigenous Knowledge, land and resource use and possible meeting in St. John's to review existing conditions (EIS)
2-Jul-20	Email - Incoming	Miawpukek follow-up to call transmitting certain maps of land use
2-Jul-20	Email - Outgoing	Notice to Miawpukek – employment opportunity - Geotech position
2-Jul-20	Email - Incoming	Confirmation that employment notices posted on Miawpukek's Facebook page
3-Jul-20	Email - Incoming	Confirmation of Chief's interest in meeting in St. John's



Table 3A.2 Engagement Activities - Marathon Gold and Miawpukek First Nation (Miawpukek)

Date	Activity	Purpose and Focus
7-Jul-20	Email - Outgoing	Email chain confirming meeting date of July 14 with Miawpukek
7-Jul-20	Phone Call - Outgoing	Phone call to discuss meeting agenda and participants – Miawpukek request to have CPAWS participate. Purpose of meeting to review EIS existing conditions (Indigenous groups) and to discuss potential land and resource use study, TK
8-Jul-20	Email - Outgoing	Confirmation of meeting in St. John's on July 14
12-Jul-20	Email - Outgoing	Meeting invitation with attachment (baseline conditions chapter EIS)
14-Jul-20	Meeting - in Person	Meeting:  review of EIS baseline information  discussion of Indigenous Knowledge and land and resource use in area of Project – Miawpukek invited to submit proposal for land and resource use and TK study  cacess to baseline studies in advance of EIS – review by MFN and additional information provided  monitoring and country foods  funding and next steps in engagement
17-Jul-20	Email - Outgoing	<ul> <li>Follow up to meeting:</li> <li>offer to provide baseline studies in advance of EIS submission subject to NDA</li> <li>invitation to Miawpukek to prepare proposal for land and resource use/TK study</li> <li>undertaking to discuss Miawpukek involvement in monitoring</li> </ul>
22-Jul-20	Email - Outgoing	Notice to Miawpukek - update on Federal Participant Funding Program
23-Jul-20	Email - Outgoing	Transmission of revised EIS baseline information for review
24-Jul-20	Email - Outgoing	Marathon inquiry as to status of offer to share baseline studies
28-Jul-20	Email - Incoming	Miawpukek response - NDA under review by legal team
28-Jul-20	Email - Outgoing	Marathon proposal re distribution of EIS and PLS to Miawpukek – that hard copy of EIS (without appendices) and PLS would be provided together with electronic version of all materials
28-Jul-20	Email - Incoming	Miawpukek agreement to EIS distribution proposal
28-Jul-20	Email - Outgoing	Marathon follow up re distribution of EIS
28-Jul-20	Email - Outgoing	Marathon transmission of revised NDA for review by Miawpukek legal team
2-Aug-20	Email - Outgoing	Transmission of Virtual Meeting Summary Report to Chief
8-Aug-20	Email - Outgoing	Marathon invitation to Miawpukek to participate in sampling as part of country food survey and request for call to discuss scope of sampling program
11-Aug-20	Phone Call - Outgoing	Call to Miawpukek to determine level of interest in participation in sampling program. Miawpukek indicated no interest but undertook to discuss with Chief and respond to Marathon
20-Aug-20	Email - Outgoing	Follow up to determine if MFN interested in participating in country food sampling – no response



Table 3A.3 Engagement Activities - Marathon Gold and Town of Buchans (Town)

Date	Activity	Purpose and Focus
19-Mar-19	Meeting – in Person	Public meeting to provide Corporate/Project update
21-Nov-19	Email - Outgoing	Introduction of Manager of Stakeholder Engagement
22-Nov-19	Email - Outgoing	Marathon follow up and Request for Meeting
22-Nov-19	Email - Incoming	Town email agreeing to meet December 4
26-Nov-19	Email - Outgoing	Marathon confirmation of meeting December 4
27-Nov-19	Email - Outgoing	Marathon request to reschedule meeting of December 4
27-Nov-19	Email - Incoming	E-mail chain re: rescheduling of meeting to December 6
6-Dec-19	Meeting - in Person	Meeting with Town Council to provide update on Project status
6-Dec-19	Email - Outgoing	Follow up to meeting and commitment to continued engagement
12-Dec-19	Email - Outgoing	E-mail chain exchanging contact information for planning purposes
12-Dec-19	Email - Outgoing	E-mail chain re: participants at December 5 meeting
14-Dec-19	Email - Outgoing	E-mail from Marathon to Town Manager re: calendar of community activities 2020
13-Jan-20	Email - Outgoing	E-mail from Marathon to Town Manager re: community activities 2020
17-Jan-20	Email - Outgoing	Proposed Meeting February 202
18-Jan-20	Phone Call - Outgoing	Telephone Call confirming date and location of community meeting
28-Jan-20	Email - Outgoing	Formal invitation to community meeting with poster
6-Feb-20	Meeting - in Person	Community Information Session – Corporate/Project update; commitment to return in spring for public information session on environmental assessment process
10-Feb-20	Email - Outgoing	Follow up to Community Information Session and commitment to continued engagement and to hold meeting in spring to discuss EA process
18-Feb-20	Email - Outgoing	Request for High School Contact Information
3-Mar-20	Email - Incoming	List of Hospital Services in Buchans
4-Mar-20	Email - Outgoing	Request for information re: services and infrastructure
5-Mar-20	Phone Call - Outgoing	Phone call to discuss new approach to sponsorship
5-Mar-20	Email - Outgoing	Email follow up to phone call attaching draft sponsorship process
5-Mar-20	Email - Outgoing	Offer to meet in Grand Falls-Windsor to discuss hospital services proposal
5-Mar-20	Email - Incoming	Buchans agreement to meet in Grand Falls-Windsor to discuss hospital services proposal
6-Mar-20	Email – Outgoing/Incoming	Email chain re meeting logistics
12-Mar-20	Email – Outgoing/Incoming	Email chain with Buchans and Millertown confirming meeting location in Grand Falls-Windsor
12-Mar-20	Email – Outgoing/Incoming	Email chain re participation of Central Health and Town request to reschedule meeting



Table 3A.3 Engagement Activities - Marathon Gold and Town of Buchans (Town)

Date	Activity	Purpose and Focus
16-Mar-20	Email - Outgoing	Email to Buchans and Millertown proposing cancellation of in-person meeting due to COVID-19 and offering conference call
16-Mar-20	Email – Outgoing/Incoming	Email chain re conference call logistics
16-Mar-20	Email - Incoming	Conference call coordinates - Central Health
17-Mar-20	Email - Outgoing	Follow up to Town re:
		<ul> <li>status of Town community investment proposal;</li> <li>notice of Marathon's intention to develop contingency plan for inperson community meeting due to COVID-19</li> </ul>
17-Mar-20	Email - Incoming	Town response advising that community investment proposal ready in a way
17-Mar-20	Email - Outgoing	Marathon confirmation of participation in conference call on March 19 re Medical Services
17-Mar-20	Email - Outgoing	Notice that face to face public information session may not proceed due to COVID-19 and that Marathon developing contingency plan
19-Mar-20	Email - Outgoing	Marathon proposal to reschedule call re hospital services due to absence of certain Town representatives
19-Mar-20	Email - Outgoing	Marathon Invitation to rescheduled conference call re hospital services
23-Mar-20	Mailout	Mailout of Spring Quarterly newsletter
25-Mar-20	Email – Outgoing/Incoming	Email chain re hospital services conference call logistics
25-Mar-20	Email - Incoming	Town request to reschedule hospital services call due to absence of Town participants
25-Mar-20	Email - Outgoing	Marathon response proposing call in a week's time
25-Mar-20	Email – Outgoing/Incoming	Email chain among participants agreeing to defer discussion of hospital services until future date
31-Mar-20	Email – Outgoing/Incoming	Email chain re views of Town on virtual meetings during COVID-19 and community support for same
2-Apr-20	Email - Incoming	Email request from Town to reallocate community investment funds
7-Apr-20	Phone Call - Outgoing	Phone call with Town to discuss proposal to reallocate community funds
13-Apr-20	Phone Call - Outgoing	Follow up phone call with Town to discuss community investment proposal
13-Apr-20	Facebook Poll	To confirm receipt of Spring Quarterly Newsletter
17-Apr-20	Email - Incoming	Town submission of Stadium Renovation Proposal for community investment fund
21-Apr-20	Phone Call - Outgoing	Phone call with Town representatives to discuss proposal and clarify certain issues.
26-Apr-20	Email - Outgoing	Marathon notice of approval of Town community investment proposal



Table 3A.3 Engagement Activities - Marathon Gold and Town of Buchans (Town)

Date	Activity	Purpose and Focus
1-May-20	Email – Outgoing/Incoming	Email chain re release of community investment funds to Town
3-May-20	Email - Outgoing	Marathon email to all communities requesting conference call to discuss virtual community meeting concept
4-May-20	Phone Call - Outgoing	Discussion with Town re opening of office in Grand Falls-Windsor and commitment to ongoing engagement
5-May-20	Email - Outgoing	Conference call invitation to communities
6-May-20	Conference Call	Conference call with communities to discuss:
		<ul> <li>logistics of virtual community meeting at end of May and community involvement in publicizing meeting</li> <li>Marathon's proposal to provide COVID-19 grant for community and regional initiatives.</li> </ul>
7-May-20	Facebook Poll	Seeking views of community as to best time of day for virtual meeting
7-May-20	Email - Outgoing	Transmitting virtual meeting notices to all Towns for posting on social media
12-May-20	Email - Outgoing	Marathon proposal to Buchans, Buchans Junction, Millertown re fabrication of face masks for Exploration Camp
12-May-20	Email - Incoming	Town submission of proposal for community COVID-19 funding
14-May-20	Email - Outgoing	Reminder to all towns re COVID-19 funding
21-May-20	Email - Outgoing	Notice to all communities of virtual meetings on May 26 <sup>th</sup> & 27 <sup>th</sup> and request to post notices in accessible locations in community
26-May-20	Webinair	1st Virtual Meeting - Corporate/Project Update
27-May-20	Webinair	2nd Virtual Meeting - Environmental Assessment Process
27-May-20	Email - Outgoing	Request to all communities for information on activities to promote virtual meetings on May 26th and May 27th
29-May-20	Email - Outgoing	Notice to all communities - employment opportunity – Housekeeping position
29-May-20	Phone Call - Outgoing	Phone call with Town to discuss proposed Community Cooperation Agreement
31-May-20	Email - Outgoing	Follow up email confirming Marathon's intention to negotiate Community Cooperation Agreement with Town and outline of mandate
31-May-20	Email - Incoming	Town's agreement to participate in Community Cooperation Agreement negotiations
2-Jun-20	Email - Outgoing	Notice to communities re: reopening of Exploration Camp and COVID-19 safety measures
3-Jun-20	Email - Outgoing	Notice to all communities - employment opportunities – Labourer and Geologist positions
4-Jun-20	Phone Call - Outgoing	Phone call with Town to discuss:
		scope and content of Community Cooperation Agreement potential regional funding proposal for COVID-19 funds



Table 3A.3 Engagement Activities - Marathon Gold and Town of Buchans (Town)

Date	Activity	Purpose and Focus
6-Jun-20	Email - Outgoing	Marathon request for information re community services and infrastructure for inclusion in EIS
8-Jun-20	Email - Incoming	Town email requesting consideration of possibility of common Community Cooperation Agreement
9-Jun-20	Email - Outgoing	Transmission to all communities of press release re camp reopening
12-Jun-20	Email - Outgoing	Transmission to all communities of questionnaire re information on local resource usage for inclusion in EIS
16-Jun-20	Email - Incoming	Email confirming interest in negotiating individual Community Cooperation Agreement and identification of community contact for purpose of negotiations
16-Jun-20	Email - Outgoing	Marathon undertaking to provide draft Community Cooperation Agreement for review by Town
21-Jun-20	Email - Outgoing	Email to Town confirming approval of community COVID-19 funding proposal
22-Jun-20	Email - Outgoing	Email to all communities re: regional COVID donation to South and Central Health Foundation
22-Jun-20	Email - Incoming	Town acknowledgement of community COVID-19 contribution
25-Jun-20	Email - Outgoing	Notice to all communities re: federal Participant Funding Program
26-Jun-20	Email - Incoming	Town proposal to resume hospital services discussion
29-Jun-20	Email - Outgoing	Marathon transmission of draft Community Cooperation Agreement for Town review
29-Jun-20	Email - Outgoing	Marathon email to Buchans and Millertown confirming continued interest in discussing hospital services proposal
29-Jun-20	Email - Outgoing	Marathon transmission of Summer Quarterly newsletter to all communities
29-Jun-20	Email - Outgoing	Marathon notice to all communities - update on federal Participant Funding Program
30-Jun-20	Email - Incoming	Buchans note re distribution of community COVID-19 funding
1-Jul-20	Email - Outgoing	Notice to all towns of Project procurement database
2-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity - Health and Safety Coordinator
2-Jul-20	Email - Outgoing	Notice to all communities – reminder of request for local resource use information for inclusion in EIS
2-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity - Geotech position
2-Jul-20	Email - Incoming	Town response providing information re local resource usage
7-Jul-20	Email - Incoming	Town response – identification of community needs and interests – Community Cooperation Agreement
17-Jul-20	Email - Outgoing	Marathon request for call with Town to discuss needs and interests – Community Cooperation Agreement
21-Jul-20	Email - Incoming	Town agreement to participate in call re Community Cooperation Agreement



Table 3A.3 Engagement Activities - Marathon Gold and Town of Buchans (Town)

Date	Activity	Purpose and Focus
22-Jul-20	Phone Call - Outgoing	Call with Town to discuss:
		<ul> <li>terms and conditions of Community Cooperation Agreement</li> <li>application of portion of community COVID-19 funds to local scholarship</li> </ul>
23-Jul-20	Email - Outgoing	Marathon email follow up to call
		<ul> <li>transmitting revised Community Cooperation Agreement</li> <li>confirming transfer of portion of COVID-19 funds to local scholarship fund</li> </ul>
23-Jul-20	Email - Incoming	Note from Town re recognition of community COVID funding
25-Jul-20	Email – Outgoing/Incoming	Email chain proposing call to discuss recognition of Marathon's COVID funding
27-Jul-20	Phone Call - Outgoing	Phone call to discuss recognition of COVID funding on social media, pictures and testimonials.
3-Aug-20	Email - Outgoing	Email to Town re: status of Town Council review of draft Community Cooperation Agreement
3-Aug-20	Email - Incoming	Email from Town confirming agreement to terms of draft Community Cooperation Agreement
4-Aug-20	Email - Outgoing	Transmission of final Community Cooperation Agreement to Town for signature
6-Aug-20	Conference Call	Call with Towns and Central Health to discuss hospital services proposal and to set up schedule for monthly calls on subject
7-Aug-20	Facebook Poll	To determine views of communities re virtual versus in person public information sessions for remainder of 2020
17-Aug-20	Email - Incoming	Transmission of Community Cooperation Agreement signed by Town
19-Aug-20	Email - Incoming/Outgoing	Email chain between August 14 - 19 re: transfer of certain funds to local scholarship fund

Table 3A.4 Engagement Activities – Marathon Gold and Town of Millertown (Town)

Date	Activity	Purpose and Focus
19-Mar-19	Meeting – in Person	Corporate/Project update
21-Nov-19	Email - Outgoing	Introduction of Manager of Stakeholder Engagement
22-Nov-19	Email - Outgoing	Marathon follow up and Request for Meeting on December 4
27-Nov-19	Email - Outgoing	Marathon request to reschedule meeting of December 4
27-Nov-19	Email – Outgoing/Incoming	E-mail chain re scheduling of meeting
6-Dec-19	Meeting - in Person	Meeting with Town Council to provide update on Project status
06-Dec-19	Email - Outgoing	Follow up to meeting and commitment to continued engagement
09-Dec-19	Email - Outgoing	Marathon request for Community Calendar information



Table 3A.4 Engagement Activities – Marathon Gold and Town of Millertown (Town)

Date	Activity	Purpose and Focus
16-Dec-19	Email - Outgoing	Marathon request for contact information
16-Dec-19	Email - Incoming	E-mail re: Millertown Junction contact
16-Dec-19	Email - Incoming	E-mail re: Millertown Junction contact
16-Dec-19	Email – Outgoing/Incoming	E-mail chain re: Millertown calendar of community events 2020
20-Dec-20	Email - Incoming	Town transmission of new Welcome Sign
17-Jan-20	Email - Outgoing	Marathon email re: Proposed Community Information Sessions
19-Jan-20	Email – Outgoing/Incoming	E-mail chain re: timing and logistics of community information session
27-Jan-20	Phone Call - Outgoing	Telephone call re: arrangements for upcoming community information session
28-Jan-20	Email - Outgoing	Formal Invitation to community information session with poster
30-Jan-20	Email – Outgoing/Incoming	Email chain re Red Indian Lake fishing derby
03-Feb-20	Email – Outgoing/Incoming	Email chain re final details community information session
04-Feb-20	Email - Outgoing	Information re: Marathon participation at Millertown Come Home Year
05-Feb-20	Meeting - in Person	Community Information Session – Corporate/Project update; commitment to return in spring for public information session to discuss environmental assessment process
11-Feb-20	Email - Outgoing	Follow up to Meeting and commitment to continued engagement and to hold meeting in spring to discuss EA process
11-Feb-20	Phone Call - Incoming	Phone Call to discuss:  Community investment Hospital Services proposal
24-Feb-20	Email - Incoming	Draft proposal by Town for allocation of community investment funds
25-Feb-20	Phone Call - Incoming	Phone call to advise:  To advise of nomination of Come Home Committee for a Business Excellence Award  To discuss community investment proposal. Marathon commitment to phone on February 28 to discuss proposal after internal review.
28-Feb-20	Phone Call - Outgoing	Marathon call to review Town's community investment proposal
03-Mar-20	Email - Outgoing	Marathon forwarding list of hospital services to Buchans and Town
04-Mar-20	Email - Outgoing	Request for information re services and infrastructure for EIS
04-Mar-20	Email - Incoming	Final Town Proposal – community investment funds
05-Mar-20	Email - Outgoing	Marathon approval of Town proposal - community investment proposal
05-Mar-20	Email - Outgoing	Email chain re transfer of funds to Town
05-Mar-20	Email - Outgoing	Offer to meet in Grand Falls-Windsor to discuss hospital proposal



Table 3A.4 Engagement Activities – Marathon Gold and Town of Millertown (Town)

Date	Activity	Purpose and Focus
06-Mar-20	Email - Incoming	Town agreement to meet in Grand Falls-Windsor and attaching hospital proposal
06-Mar-20	Email - Outgoing	Marathon acknowledgement of receipt of proposal
09-Mar-20	Email - Incoming	Town acknowledgement of receipt of community investment funds
12-Mar-20	Email - Outgoing	Marathon confirmation of meeting location in Grand Falls-Windsor.
16-Mar-20	Email - Outgoing	Email to Central Health, Buchans and Millertown proposing cancellation of face-to-face meeting due to COVID-19 and offering conference call
17-Mar-20	Email - Outgoing	Invitation to hospital services conference call with coordinates
17-Mar-20	Email - Outgoing	Notice that planned face-to-face public information session may not proceed due to COVID-19 and that Marathon developing contingency plan
19-Mar-20	Email - Outgoing	Marathon invitation to rescheduled hospital services conference call
23-Mar-20	Mailout	Mailout of Spring quarterly newsletter
25-Mar-20	Email – Outgoing/Incoming	Email chain among participants agreeing to defer discussion of hospital services until a future date
31-Mar-20	Email - Outgoing	Marathon email seeking views of Town on virtual meeting concept during COVID-19 restrictions
06-Apr-20	Email - Outgoing	Marathon follow up to email of March 31 re virtual meeting
07-Apr-20	Email – Outgoing/Incoming	Email chain proposing call with Town to discuss virtual meetings and community investment
08-Apr-20	Phone Call - Outgoing	Phone call with Town to discuss:
		<ul><li>community investment, including reallocation of funds</li><li>community support for virtual meeting concept</li></ul>
13-Apr-20	Facebook Poll	To confirm receipt of Spring Quarterly Newsletter
01-May-20	Phone Call - Incoming	Re: opening of office in Grand Falls-Windsor
01-May-20	Phone Call - Outgoing	Phone call to discuss decision to open local office in Grand Falls-Windsor
01-May-20	Phone Call - Incoming	Phone call to discuss local benefits and engagement processes
03-May-20	Email - Outgoing	Marathon email to all communities requesting conference call to discuss virtual community meeting concept
05-May-20	Email - Outgoing	Conference call invitation to all communities
06-May-20	Conference Call	Conference call with communities to discuss:
		<ul> <li>logistics of virtual community meeting at end involvement of community in publicizing meeting</li> <li>Marathon's proposal to provide COVID-19 grant for community and regional initiatives</li> </ul>
7-May-20	Facebook Poll	Seeking views of community as to best time of day for virtual meeting
07-May-20	Email - Outgoing	Transmitting virtual meeting notices to all communities for posting on social media



Table 3A.4 Engagement Activities – Marathon Gold and Town of Millertown (Town)

Date	Activity	Purpose and Focus
09-May-20	Phone Call - Incoming	Phone call re: availability of wood cutting operations in Millertown.
12-May-20	Email - Outgoing	Marathon proposal to Buchans, Buchans Junction, Millertown re fabrication of face masks for Exploration Camp
12-May-20	Email - Incoming	Agreement of Millertown to fabricate face masks and query as to quantity
12-May-20	Email - Outgoing	Marathon to Town re quantities of masks
12-May-20	Email - Incoming	Millertown agreement to fabricate face masks
14-May-20	Email - Outgoing	Reminder to all communities re proposals for COVID 19 funding
19-May-20	Phone Call - Incoming	Call to discuss Logistics Coordinator position.
19-May-20	Phone Call - Outgoing	Marathon call with Town to discuss hiring processes, COVID-19 funding initiatives and local benefits
19-May-20	Email - Incoming	Email query re hiring processes
19-May-20	Email - Outgoing	Marathon response describing hiring process and commitment to continued engagement and local benefits
19-May-20	Email - Incoming	Query from Town re use of local wood cutting operations
19-May-20	Email - Outgoing	Email from Town re resumes and Marathon response
20-May-20	Email - Outgoing	Marathon response to woodcutting operations query
21-May-20	Email - Outgoing	Notice to all communities of virtual meetings on May 26 <sup>th</sup> and May 27 <sup>th</sup>
22-May-20	Email - Incoming	Email requesting follow up to earlier email re hiring concerns
22-May-20	Phone Call - Outgoing	Phone call to Town to discuss hiring; no answer, left message
22-May-20	Email - Outgoing	Marathon email follow up to phone call
26-May-20	Phone Call - Outgoing	Phone call to discuss Town concerns re hiring process. Town agreed issues resolved
26-May-20	Email - Incoming	Transmission of Millertown proposals re COVID -19 community funding
26-May-20	Webinair	1st Virtual Meeting – Corporate/ Project update
27-May-20	Webinair	2 <sup>nd</sup> Virtual Meeting – Environmental Assessment Process
27-May-20	Email - Outgoing	Request to all communities for information on activities to promote virtual meetings on May 26th and May 27th
29-May-20	Email - Outgoing	Notice to all communities – employment opportunity - Housekeeping position
29-May-20	Email - Incoming	Millertown acknowledgement of receipt of employment opportunity notice
31-May-20	Email - Outgoing	Marathon offer to enter into Community Cooperation Agreement with Town
02-Jun-20	Email - Outgoing	Notice to all communities re: reopening of Exploration camp and COVID-19 safety measures
02-Jun-20	Email – Outgoing/Incoming	Email chain re request for call to discuss business opportunities



Table 3A.4 Engagement Activities – Marathon Gold and Town of Millertown (Town)

Date	Activity	Purpose and Focus
03-Jun-20	Email - Incoming	Town response agreeing to enter into Community Cooperation Agreement negotiations and identifying town's needs and priorities
03-Jun-20	Email - Outgoing	Reminder e-mail to Badger and Town re regional COVID-19 initiatives
03-Jun-20	Email - Outgoing	Notice to all communities – employment opportunity - Labourer and Geologist positions
04-Jun-20	Phone Call - Outgoing	Phone call to discuss:
		<ul> <li>possible terms of Community Cooperation Agreement</li> <li>business and employment opportunities</li> <li>community investment - water treatment system</li> </ul>
04-Jun-20	Email - Incoming	Town follow up to phone call with list of potential business opportunities
06-Jun-20	Email - Outgoing	Marathon request for information re community services and infrastructure for inclusion in EIS
09-Jun-20	Email - Outgoing	Transmission to all communities of press release re camp reopening
12-Jun-20	Email - Outgoing	Transmission to all communities of questionnaire re information on local resource usage for inclusion in EIS
16-Jun-20	Phone Call - Incoming	Town query re: surveying services Exploration Camp
16-Jun-20	Email - Outgoing	Marathon response to Town query re surveying services
18-Jun-20	Email – Outgoing/Incoming	Email chain re possible video meeting with council
19-Jun-20	Phone Call - Outgoing	Marathon call to discuss timing of proposed council meeting
20-Jun-20	Email - Outgoing	Follow up to phone call and query re: Victoria Bridge
21-Jun-20	Email - Outgoing	Confirmation of Millertown COVID -19 community funding initiatives
21-Jun-20	Email - Incoming	Millertown acknowledgement of Marathon approval for COVID-19 community funding initiatives
22-Jun-20	Email - Outgoing	Notice to all communities re regional COVID -19 contribution to South and Central Health Foundation
23-Jun-20	Email - Incoming	Request for phone call to discuss potential storage facility
25-Jun-20	Email - Outgoing	Notice to all communities re: federal Participant Funding Program
29-Jun-20	Email - Outgoing	Notice to all communities – federal Participant Funding Program update
30-Jun-20	Email - Outgoing	Marathon query re accuracy of baseline information re water supply in Millertown
01-Jul-20	Email - Outgoing	Notice to all communities of Project procurement database
02-Jul-20	Email - Outgoing	Transmission of Summer quarterly newsletter
02-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity – Health and Safety Coordinator position
02-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity - Geotech position



Table 3A.4 Engagement Activities – Marathon Gold and Town of Millertown (Town)

Date	Activity	Purpose and Focus
02-Jul-20	Email - Outgoing	Notice to all communities – reminder of request for local resource use information for inclusion in EIS
06-Jul-20	Email - Incoming	Town request for call to discuss hiring practices
09-Jul-20	Phone Call - Outgoing	Phone call with Town to discuss hiring policies at exploration camp
13-Jul-20	Email - Outgoing	Town response to water supply query
22-Jul-20	Email - Incoming	Town update re distribution of COVID-19 community funds
24-Jul-20	Email - Outgoing	Follow up re information on community needs and priorities
30-Jul-20	Phone Call - Incoming	Phone call from to discuss hiring processes, support for local businesses and engagement
31-Jul-20	Phone Call - Outgoing	Follow up phone call to continue discussion of employment opportunities
31-Jul-20	Phone Call - Incoming	Phone call follow-up from Town to continue discussion of employment and associated matters and Community Cooperation Agreement terms and conditions
31-Jul-20	Email - Incoming	Email from Town re employment, support for business and communications
31-Jul-20	Email - Outgoing	Preliminary Marathon response to Town's email of July 31
03-Aug-20	Email - Outgoing	Transmission of template Community Cooperation Agreement for review by Town
04-Aug-20	Email - Incoming	Millertown transmission of hospital proposal in advance of meeting
05-Aug-20	Email - Outgoing	Marathon response to email of July 31 re employment and local benefits
6-Aug-20	Conference Call	Call with Buchans, Millertown and Central Health to discuss hospital services proposal and to schedule monthly calls on subject
06-Aug-20	Email - Incoming	Follow up to meeting re healthy lifestyle program
11-Aug-20	Phone Call - Outgoing	Phone Call to Town to discuss terms and conditions of draft Community Cooperation Agreement
20-Aug-20	Facebook Poll	To determine views of communities re virtual versus in person public information sessions for remainder of 2020
20-Aug-20	Email - Outgoing	Marathon query re status of town review of draft Community Cooperation Agreement
26-Aug-20	Phone Call - Outgoing	Phone call to Town re status of review of draft Community Cooperation Agreement - no answer, left message
27-Aug-20	Email - Incoming	Confirmation that Town Council reviewing draft Community Cooperation Agreement and asking for deadline for response
27-Aug-20	Email - Outgoing	Marathon response requesting redraft by September 3
02-Sep-20	Email - Outgoing	Millertown response to query re Community Cooperation Agreement – anticipated response submission to Marathon by September 5



Table 3A.5 Engagement Activities – Marathon Gold and Local Service District of Buchans Junction (LSD)

Date	Activity	Purpose and Focus
9-Dec-19	Phone Call - Incoming	Local Service District request for engagement with Marathon. Discussion of interest in Project and main features of community.
9-Dec-19	Email - Outgoing	Marathon follow-up email summarizing phone call and committing to future engagement
10-Dec-19	Email - Outgoing	Marathon to LSD outlining approach to engagement
17-Jan-20	Email -Outgoing/Incoming	Marathon proposal for community information session and LSD agreement to meeting
18-Jan-20	Email-Outgoing	Marathon confirmation of community information session meeting date and request for call with LSD to discuss schedule
20-Jan-20	Phone Call - Outgoing	Call to confirm meeting arrangements
29 -Jan-20	Email - Outgoing	Formal invitation to LSD residents - community information session
30-Jan-20	Phone Call - Outgoing	Call to finalize meeting arrangements
5-Feb-20	Meeting – in Person	Community Information Session – Corporate/Project update; commitment to return in spring for public information session to discuss environmental assessment process
10-Feb-20	Email - Outgoing	Marathon follow up to meeting and committing to continuing engagement and to hold meeting in spring to discuss EA process
18-Feb-20	Email – Outgoing/Incoming	Email chain – LSD query - Project schedule and Marathon response
4-Mar-20	Email - Outgoing	Marathon request for information re: services and infrastructure
5-Mar-20	Email - Incoming	LSD response to Marathon request for information re services and infrastructure
5-Mar-20	Phone Call – Outgoing	Phone call to discuss new approach to sponsorship
5-Mar-20	Email - Outgoing	Email follow up to phone call attaching draft sponsorship process
17-Mar-20	Email - Outgoing	Notice that planned in person public information session may not proceed due to COVID-19 and that Marathon developing contingency plan
18-Mar-20	Phone Call - Outgoing	Phone call to discuss community investment initiatives and confirming local contact for this purpose
23-Mar-20	Mailout	Spring Quarterly Newsletter
24-Mar-20	Email - Outgoing	Email from Marathon to confirm LSD receipt of newsletter
25-Mar-20	Email - Incoming	LSD proposal for use of community sponsorship funds
31-Mar-20	Email - Outgoing	Email re cancellation of planned public information session due to COVID-19 and asking community views on virtual meeting concept
31-Mar-20	Email – Outgoing/Incoming	Email chain – LSD support for virtual meeting concept
1-Apr-20	Email – Outgoing	Email to LSD re: clarification of community funding proposal
1-Apr-20	Phone Call - Incoming	Phone Call to discuss funding proposal and clarify certain aspects. LSD undertaking to provide additional information



Table 3A.5 Engagement Activities – Marathon Gold and Local Service District of Buchans Junction (LSD)

Date	Activity	Purpose and Focus
2-Apr-20	Email - Incoming	LSD transmission of additional information re community investment proposal
13-Apr-20	Facebook Poll	To confirm receipt of Spring Quarterly Newsletter
16-Apr-20	Phone Call - Incoming	Phone call from LSD inquiring re: status of community investment proposal
19-Apr-20	Email - Outgoing	Marathon response to LSD query – community investment proposal under internal review
1-May-20	Email - Outgoing	Marathon confirmation of approval of community investment proposal
1-May-20	Phone Call - Outgoing	Follow up phone call to discuss conditions of community investment funding approval
2-May-20	Email - Incoming	Response of LSD to approval of community investment proposal
3-May-20	Email - Outgoing	Marathon email to all communities requesting conference call to discuss virtual community meeting concept
3-May-20	Phone Call - Incoming	Phone call to confirm local contact for proposed conference call re virtual meeting
4-May-20	Email - Outgoing	Forwarding e-mail re conference call to discuss virtual meeting to local contact
5-May-20	Email - Outgoing	Conference call invitation to communities
5-May-20	Phone Call - Outgoing	Discussion with LSD re opening of office in Grand Falls-Windsor and commitment to ongoing engagement
6-May-20	Conference Call	Conference call with communities to discuss:
		regional initiatives.
7-May-20	Facebook Poll	Seeking views of community as to best time of day for virtual meeting
7-May-20	Email - Outgoing	Transmitting virtual meeting notices to all communities for posting on social media
7-May-20	Email - Incoming	LSD confirmation of social media postings
12-May-20	Email - Outgoing	Marathon proposal to Buchans, Buchans Junction, Millertown re fabrication of face masks
14-May-20	Email - Outgoing	Reminder to all towns re COVID-19 funding proposals
14-May-20	Phone Call - Incoming	Phone call to discuss options for COVID 19 community funding
14-May-20	Email – Outgoing/Incoming	Email chain re aspects of LSD's COVID 19 community funding proposal
15-May-20	Email – Outgoing/incoming	Email chain re LSD COVID-19 funding
21-May-20	Email - Outgoing	Notice to all communities of virtual meetings on May 26 <sup>th</sup> & 27 <sup>th</sup> and request to post notices in accessible locations in community
26-May-20	Webinair	1st Virtual Meeting – Corporate/Project update



Table 3A.5 Engagement Activities – Marathon Gold and Local Service District of Buchans Junction (LSD)

Date	Activity	Purpose and Focus
27-May-20	Webinair	2 <sup>nd</sup> Virtual Meeting - Environmental Assessment Process
27-May-20	Email - Outgoing	Request to all communities for information on activities to promote virtual meetings on May 26 <sup>th</sup> and May 27 <sup>th</sup>
29-May-20	Email - Outgoing	Notice to all communities - employment opportunity – Housekeeping position
31-May-20	Email - Outgoing	Marathon offer to negotiate Community Cooperation Agreement
2-Jun-20	Email - Outgoing	Notice to communities re: reopening of Exploration Camp and COVID-19 safety measures
3-Jun-20	Email - Outgoing	Notice to all communities - employment opportunities - Labourer and Geologist positions
6-Jun-20	Email - Outgoing	Transmission of information request community infrastructure and services information for inclusion in EIS
8-Jun-20	Email - Outgoing	Marathon follow up to previous email on Community Cooperation Agreement
9-Jun-20	Email - Outgoing	Transmission to all communities of press release re camp reopening
9-Jun-20	Phone Call - Outgoing	Call to discuss scope and content of proposed Community Cooperation Agreement and principal community interests
11-Jun-20	Email – Outgoing/ Incoming	Email chain re pictures of bridge repair for inclusion in summer quarterly newsletter
11-Jun-20	Email - Incoming	LSD response to information request re: community infrastructure and services
12-Jun-20	Email - Outgoing	Transmission to all communities of questionnaire re information on local resource usage for inclusion in EIS
17-Jun-20	Email - Incoming	Community Cooperation Agreement - LSD identification of interests and needs
17-Jun-20	Email - Incoming	LSD response to query re local resource usage
21-Jun-20	Email - Outgoing	Confirmation of approval of COVID 19 community funding proposal
22-Jun-20	Email - Outgoing	Notice to all communities re: COVID 19 regional funding initiative and donation to South and Central Health Foundation
24-Jun-20	Email - Incoming	Acknowledgement and thanks for COVID funding
25-Jun-20	Email - Outgoing	Notice to all communities re federal Participant Funding Program
29-Jun-20	Email - Outgoing	Transmission of draft Community Cooperation Agreement including community needs and priorities
29-Jun-20	Email - Incoming	LSD Initial approval of draft CA and commitment to review by LSD Council
29-Jun-20	Email - Outgoing	Marathon transmission of Summer Quarterly newsletter to all communities
29-Jun-20	Email - Outgoing	Marathon notice to all communities - update on federal Participant Funding Program
1-Jul-20	Email - Outgoing	Notice of Project procurement database



Table 3A.5 Engagement Activities – Marathon Gold and Local Service District of Buchans Junction (LSD)

Date	Activity	Purpose and Focus
2-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity - Health and Safety Coordinator position
2-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity - Geotech position
20-Jul-20	Email - Outgoing	Transmission of Draft Community Cooperation Agreement with minor revisions for LSD review
23-Jul-20	Email - Incoming	LSD approval of Community Cooperation Agreement and proposed signing on/after July 30
4-Aug-20	Email - Outgoing	Transmission of revised Community Cooperation Agreement for signature by LSD
17-Aug-20	Email - Outgoing	Marathon query re status of Community Cooperation Agreement transmitted for signature
17-Aug-20	Email - Incoming	Email response confirming that Community Cooperation Agreement will be signed after August 25
20-Aug-20	Facebook Poll	To determine views of communities re virtual versus in person public information sessions for remainder of 2020
26-Aug-20	Email - Incoming	Transmission of Community Cooperation Agreement signed by LSD
26-Aug-20	Email - Incoming	Transmission of photo consent forms and pictures of COVID – 19 Community funding initiatives
27-Aug-20	Email - Incoming	LSD Report on expenditure of 2020 community investment funds

Table 3A.6 Engagement Activities - Marathon Gold and Town of Badger (Town)

Date	Activity	Purpose and Focus
26-Nov-19	Email - Outgoing	Introduction of Manager of Stakeholder Relations and request for Meeting
28-Nov-19	Phone Call - Incoming	Phone call from Town agreeing to meeting invitation
29-Nov-19	Text Messages	Exchange of text messages re: time and place of proposed meeting
5-Dec-19	Meeting - in Person	Meeting with Town Council to provide update on Project status followed by Q & A session with councillors
06-Dec-19	Email - Outgoing	Follow up to meeting and commitment to continuing engagement
09-Dec-19	Email – Outgoing/Incoming	Exchange of contact information with Town Manager
17-Dec-19	Email - Outgoing	Request for information re: planned community activities 2020
18-Dec-19	Email - Incoming	Town transmission of 2020 Community Calendar
19-Dec-19	Email - Outgoing	Acknowledgement and thanks for community calendar
17-Jan-20	Email – Outgoing/Incoming	Proposed Community Information Session: logistics
28-Jan-20	Email - Outgoing	Formal Invitation to Community Information Session with poster



Table 3A.6 Engagement Activities - Marathon Gold and Town of Badger (Town)

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Table 3A.6 Engagement Activities - Marathon Gold and Town of Badger (Town)

Date	Activity	Purpose and Focus
07-May-20	Email - Outgoing	Transmission of virtual meeting notices to all Towns for posting on social media
14-May-20	Email - Outgoing	Reminder to all Towns re COVID- 19 funding proposals
21-May-20	Email - Outgoing	Notice to all communities of virtual meetings on May 26 <sup>th</sup> and May 27 <sup>th</sup>
26-May-20	Webinair	1st Virtual meeting – Corporate/Project update
27-May-20	Webinair	2 <sup>nd</sup> Virtual Meeting - environmental assessment update
27-May-20	Email - Outgoing	Request to all communities for information on activities to promote virtual meetings on May 26 <sup>th</sup> and May 27 <sup>th</sup>
29-May-20	Email - Outgoing	Notice to all communities – employment opportunity - Housekeeping position
31-May-20	Email - Outgoing	Invitation to enter into negotiations for Community Cooperation Agreement
02-Jun-20	Email - Outgoing	Notice to all communities re reopening of Exploration Camp and COVID-19 safety measures
03-Jun-20	Email - Outgoing	Reminder re: COVID 19 community funding proposals
03-Jun-20	Email - Incoming	Badger proposal re COVID-19 - chromebooks for local school
03-Jun-20	Email - Incoming	Response to e-mail of May 27 providing information on timing/location of posting of virtual meeting notices
03-Jun-20	Email – Outgoing/Incoming	Email chain re chromebooks – COVID-19 community funding – age groups served and number of students
03-Jun-20	Email – Outgoing/Incoming	Email chain re request for call to discuss Community Cooperation Agreement
03-Jun-20	Email - Outgoing	Notice to all communities – employment opportunities – Labourer and Geologist positions
05-Jun-20	Email - Outgoing	Email proposing call to discuss scope of proposed Community Cooperation Agreement
05-Jun-20	Phone Call - Outgoing	Phone call with Mayor. Town interest in n Community Cooperation Agreement confirmed and Town Manager identified as contact. Discussion of COVID-19 community funding initiative
06-Jun-20	Email - Outgoing	Marathon request for information re community services and infrastructure for inclusion in the EIS
08-Jun-20	Email - Incoming	Town response to request for information on community services and infrastructure
08-Jun-20	Email - Outgoing	Email re Community Cooperation Agreement and request for call to discuss potential terms and conditions
08-Jun-20	Phone Call - Outgoing	Call to discuss process for conclusion of Cooperation Agreement and discussion of community needs and interests
09-Jun-20	Email - Outgoing	Transmission to all communities of press release re: camp reopening
12-Jun-20	Email - Outgoing	Notice to all communities requesting information on local resource usage for inclusion in EIS



Table 3A.6 Engagement Activities - Marathon Gold and Town of Badger (Town)

Date	Activity	Purpose and Focus
21-Jun-20	Email - Outgoing	Email confirming approval of COVID-19 community funding for local initiatives and request for call to discuss process for transmission of funds
22-Jun-20	Email - Incoming	Acknowledgement and thanks for COVID funding
22-Jun-20	Email - Outgoing	Notice to all communities re donation to South and Central Health Foundation for regional COVID-19 initiative
24-Jun-20	Email – Outgoing/Incoming	Email chain re timing of call to discuss transmission of funds for community COVID- 19 initiatives
24-Jun-20	Phone Call - Outgoing	Phone call to discuss distribution of COVID -19 funding and transfer of funds
25-Jun-20	Email - Outgoing	Notice to all communities re: federal Participant Funding Program
29-Jun-20	Email - Outgoing	Transmission of draft revised Community Cooperation Agreement for completion by Town
29-Jun-20	Email - Outgoing	Transmission of summer Quarterly newsletter
29-Jun-20	Email - Outgoing	Marathon notice to all communities - update on federal Participant Funding Program
01-Jul-20	Email - Outgoing	Notice to all communities of Project procurement database
02-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity – Health and Safety Coordinator position
02-Jul-20	Email - Outgoing	Notice to all communities – reminder of request for local resource usage information for inclusion in EIS
02-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity Geotech position
07-Jul-20	Email - Outgoing	Email re: status of Chromebook initiative in light of provincial funding
15-Jul-20	Email - Incoming	Response of Town to Marathon
15-Jul-20	Email - Incoming	Badger proposal for community investment funds
15-Jul-20	Email - Outgoing	Marathon acknowledgement of proposal for community investment funds
15-Jul-20	Email - Incoming	Badger identification of needs and priorities for inclusion in Community Cooperation Agreement
15-Jul-20	Email - Outgoing	Marathon commitment to provide revised Community Cooperation Agreement for review by Town Council
17-Jul-20	Email - Outgoing	Marathon transmission of revised Community Cooperation Agreement for review by Town
27-Jul-20	Email - Incoming	Email inquiry re status of Council review of draft Community Cooperation Agreement
11-Aug-20	Phone Call - Outgoing	Call to inquire re status of Council review of Community Cooperation Agreement -no answer, left message
18-Aug-20	Phone Call - Outgoing	Phone call re status of Badger review of Community Cooperation Agreement - advised that contact out until August 25
20-Aug-20	Facebook Poll	To determine views of communities re virtual versus in person public information sessions for remainder of 2020



Table 3A.6 Engagement Activities - Marathon Gold and Town of Badger (Town)

Date	Activity	Purpose and Focus
26-Aug-20	Phone Call - Outgoing	Phone Call with Town Manager to discuss status of Community Cooperation Agreement - advised that Town Council had approved signing
26-Aug-20	Email - Incoming	Transmission of Community Cooperation Agreement signed by Mayor

Table 3A.7 Engagement Activities – Marathon Gold and Town of Bishop's Falls (Town)

Date	Activity	Purpose and Focus
22-Nov-19	Email - Outgoing	Introduction of Manager of Stakeholder Relations and request for meeting
26-Nov-19	Email – Outgoing/Incoming	E-mail chain re: proposed meeting on December 4, 2019
27-Nov-19	Email - Outgoing	Marathon request to reschedule meeting proposed for December 4
27-Nov-19	Email – Outgoing/Incoming	E-mail chain re meeting: timing, location and logistics
5-Dec-19	Meeting - in Person	Meeting with Mayor and Town Council to provide update on Project status
06-Dec-19	Email - Outgoing	Follow up to Meeting and commitment to continuing engagement
09-Dec-19	Email - Outgoing	Request for Community Calendar
11-Dec-19	Email - Outgoing	Transmission of Community Calendar
17-Dec-19	Email - Outgoing	Request for information re: community events
08-Jan-20	Email – Outgoing/Incoming	Email chain re: Town transmission of information re upcoming community events
17-Jan-20	Email - Outgoing	Re proposed community information session
21-Jan-20	Email - Outgoing	Follow-up email re proposed community information session
21-Jan-20	Email - Incoming	Initial response re proposed community information session
21-Jan-20	Email – Outgoing/Incoming	Email chain re proposed community information session and undertaking to raise issue at Town Council meeting
22-Jan-20	Email - Incoming	Confirmation of Town Council agreement to proposed community information session
28-Jan-20	Email - Outgoing	Formal invitation to community information session with attached poster
28-Jan-20	Email - Incoming	Response of Mayor to invitation to community information session
04-Feb-20	Email – Outgoing/Incoming	Email chain confirming meeting arrangements – timing, location
07-Feb-20	Meeting - in Person	Community Information Session – Corporate/Project update; commitment to return in spring for public information session to discuss environmental assessment process



Table 3A.7 Engagement Activities – Marathon Gold and Town of Bishop's Falls (Town)

Date	Activity	Purpose and Focus
11-Feb-20	Email - Outgoing	Follow up to Community Information session and commitment to continuing engagement and to hold meeting in spring to discuss EA process
12-Feb-20	Email - Outgoing	Confirmation of Marathon sponsorship of event - Lion's Club Winter Carnival
04-Mar-20	Email - Outgoing	Introduction of Stantec consultant and request for information re community services and infrastructure for inclusion in EIS
04-Mar-20	Email - Incoming	Response of Bishop's Falls to information request – agreement to provide information
09-Mar-20	Email - Outgoing	Email requesting call with Mayor to discuss new approach to community investment
11-Mar-20	Email – Outgoing/Incoming	Email chain re timing of call
11-Mar-20	Phone Call - Outgoing	Phone call with Mayor to discuss new approach to community investment
11-Mar-20	Email - Outgoing	Follow up to phone call attaching draft sponsorship process
17-Mar-20	Email - Outgoing	Notice of that face-to face community information session to discuss EA process could not proceed due to COVID-19 and that Marathon developing contingency plan
17-Mar-20	Email - Incoming	Town response to notice of cancellation – general agreement that in- person meetings could not proceed
23-Mar-20	Email – Outgoing/Incoming	Email chain providing clarification of approach to community investment and eligible projects
23-Mar-20	Mailout	Spring quarterly newsletter
30-Mar-20	Email - Incoming	Town submission of Community Investment proposal
31-Mar-20	Email - Outgoing	Email to Mayor advising of potential virtual meeting concept and seeking views as to acceptability
31-Mar-20	Email - Incoming	Response of Mayor, agreeing to virtual meeting concept
31-Mar-20	Email - Outgoing	Email requesting certain revisions to community investment proposal
31-Mar-20	Email - Incoming	Town submission of revised funding proposal
13-Apr-20	Facebook Poll	To confirm receipt of Spring Quarterly Newsletter
16-Apr-20	Email - Outgoing	Email advising that community investment proposal approved
21-Apr-20	Email – Outgoing/Incoming	Email chain re mechanics of transfer of funds
03-May-20	Email - Outgoing	Marathon email to all communities requesting conference call to discuss virtual meeting concept
05-May-20	Phone Call - Outgoing	Discussion with Mayor re opening of office in Grand Falls-Windsor and commitment to continuing engagement
05-May-20	Email - Outgoing	Conference call invitation to all communities
05-May-20	Email – Incoming/Outgoing	Email re press release to be issued by Bishop's Falls re Marathon community investment; Marathon response



Table 3A.7 Engagement Activities – Marathon Gold and Town of Bishop's Falls (Town)

Date	Activity	Purpose and Focus
06-May-20	Conference Call	Conference call with all communities to discuss:  Iogistics of virtual community meeting at end of May and community involvement in publicizing meeting  Marathon's proposal to provide COVID-19 funding for community and regional initiatives
06-May-20	Email – Outgoing/Incoming	Email chain re draft press release re community investment funding
07-May-20	Facebook Poll	Seeking views of community as to best time of day for virtual meeting
07-May-20	Email - Outgoing	Transmittal of virtual meeting notices to all communities for posting on social media
08-May-20	Email - Incoming	Confirmation that notice of meeting had been posted on social media
14-May-20	Email - Outgoing	Email all mayors re COVID 19 funding
21-May-20	Email - Outgoing	Notice of virtual meeting and request to post notice on town social media
21-May-20	Email - Incoming	Confirmation that notices posted
21-May-20	Email - Incoming	Bishop's Falls COVID-19 community funding proposal
26-May-20	Webinair	1 <sup>st</sup> Virtual Meeting – Corporate/Project update
27-May-20	Webinair	2 <sup>nd</sup> Virtual Meeting - Environmental Assessment Process
27-May-20	Email - Outgoing	Request to all communities for information on activities to promote virtual meetings on May 26 <sup>th</sup> and May 27 <sup>th</sup> meetings
28-May-20	Email - Incoming	Response of Town transmitting requested information
29-May-20	Email - Outgoing	Notice to all communities – employment opportunity - Housekeeping position
31-May-20	Email - Outgoing	Invitation to enter into negotiations to conclude Community Cooperation agreement
01-Jun-20	Email - Incoming	Email response confirming Town interest in negotiating Community Cooperation Agreement
01-Jun-20	Email – Outgoing/Incoming	Email chain setting up call to discuss Community Cooperation Agreement
02-Jun-20	Email - Outgoing	Notice to all communities re: reopening of Exploration Camp and COVID-19 safety measures
02-Jun-20	Phone Call - Outgoing	Discussion with Mayor of scope and potential content of Cooperation Agreement, community interests and priorities and identification of Town contact
03-Jun-20	Email - Outgoing	Notice to all communities – employment opportunity - labourer and geologist positions
06-Jun-20	Email - Outgoing	Marathon request for information re community services and infrastructure for inclusion in EIS
08-Jun-20	Email - Outgoing	Email requesting call to discuss potential terms of Community Cooperation Agreement
09-Jun-20	Email - Outgoing	Transmission to all communities of press release re camp reopening



Table 3A.7 Engagement Activities – Marathon Gold and Town of Bishop's Falls (Town)

Date	Activity	Purpose and Focus
10-Jun-20	Email – Outgoing/Incoming	Email chain scheduling call to discuss Community Cooperation Agreement
10-Jun-20	Email - Incoming	Town response providing requested information on community services and infrastructure
12-Jun-20	Email - Outgoing	Notice to all communities requesting information on local resource usage for inclusion in EIS
12-Jun-20	Phone Call - Outgoing	Call to discuss terms of Community Cooperation Agreement and undertaking by Town to provide draft for Marathon review and comment
17-Jun-20	Email - Incoming	Transmittal of Bishops Falls draft Community Cooperation Agreement for Marathon review and comment
18-Jun-20	Email - Incoming	Town response providing information on local resource usage
21-Jun-20	Email - Outgoing	Confirmation of Marathon's approval for COVID-19 community funding initiatives and request to discuss transmission of funds
22-Jun-20	Email - Outgoing	Notice to all communities of regional COVID-19 contribution to South and Central Health Foundation
22-Jun-20	Email - Incoming	Town acknowledgement of COVID-19 community funding
22-Jun-20	Email - Outgoing	Marathon redraft of Community Cooperation Agreement for Town review and comment
25-Jun-20	Email - Outgoing	Notice to all communities re federal Participant Funding Program
26-Jun-20	Email - Incoming	Email advising that Town Council considering COVID-19 funding uses
26-Jun-20	Email - Incoming	Town transmission of revised Community Cooperation Agreement for Marathon review
29-Jun-20	Email - Outgoing	Transmission of summer Quarterly newsletter
29-Jun-20	Email - Outgoing	Marathon notice to all communities - update on federal Participant Funding Program
01-Jul-20	Email - Outgoing	Notice to all communities of Project procurement database
02-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity - Health and Safety coordinator position
02-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity - Geotech position
13-Jul-20	Email - Outgoing	Marathon response to Town's redraft of Community Cooperation Agreement with slight revisions
14-Jul-20	Email - Incoming	Town's approval of draft Community Cooperation Agreement and commitment to refer to Town Council for review and approval
23-Jul-20	Email - Outgoing	Marathon query re status of Council review of draft Community Cooperation Agreement
24-Jul-20	Email - Incoming	Confirmation of Council approval and undertaking to follow up with details of signing
27-Jul-20	Email - Incoming	Next steps to signing
28-Jul-20	Email - Incoming	Copy of Community Cooperation Agreement signed by Mayor



Table 3A.7 Engagement Activities – Marathon Gold and Town of Bishop's Falls (Town)

Date	Activity	Purpose and Focus	
28-Jul-20	Email - Incoming	Proposed COVID-19 Community Funding Guidelines - Bishop's Falls	
28-Jul-20	Email - Incoming	Marathon query re aspect of Town's proposed COVID-19 Guidelines and response	
03-Aug-20	Email - Outgoing	Marathon request for call to discuss proposed funding Guidelines	
04-Aug-20	Phone Call - Outgoing	Phone call to discuss funding categories and criteria	
05-Aug-20	Email - Incoming	Transmittal of updated COVID funding guidelines based on telephone discussion	
20-Aug-20	Facebook Poll	To determine views of communities re virtual versus in person public information sessions for remainder of 2020	
01-Sep-20	Email - Incoming	Transmittal of applications for COVID-19 funding with request for Marathon's input	
04-Sep-20	Email – Outgoing	Transmittal of Marathon's comments and questions re: various applications for COVID-19 community funding	

Table 3A.8 Engagement Activities – Marathon Gold and Town of Grand Falls-Windsor (Town)

Date	Activity	Purpose and Focus
20-Mar-19	Meeting – in Person	Corporate/Project update
7-Nov-19	Meeting – in Person	Introductory meeting with Economic Development Officer
21-Nov-19	Email - Outgoing	Introduction of Manager of Stakeholder Engagement
22-Nov-19	Phone Call - Outgoing	Phone Call to discuss logistics for December 5 Workshop in Grand Falls-Windsor with Indigenous groups
22-Nov-19	Email – Outgoing/Incoming	E-mail chain re Workshop arrangements
25-Nov-19	Email – Outgoing/Incoming	E-mail chain re Workshop arrangements
09-Dec-19	Email - Outgoing	E-mail chain of thanks and request for information re upcoming community activities
17-Dec-19	Email - Outgoing	Follow up re request for information re community activities
19-Dec-19	Email – Outgoing/Incoming	E-mail chain re: list of town's 2020 activities for engagement planning purposes
17-Jan-20	Email – Outgoing/Incoming	Email chain re arrangements for proposed community information session in February
28-Jan-20	Email - Outgoing	Formal Invitation to Community Information Session with poster
06-Feb-20	Meeting - in Person	Community Information Session – Corporate/Project update; commitment to return in spring for public information session to discuss environmental assessment process
10-Feb-20	Email - Outgoing	Follow up to community information session and commitment to ongoing communication and to hold meeting in spring to discuss EA process



Table 3A.8 Engagement Activities – Marathon Gold and Town of Grand Falls-Windsor (Town)

Date	Activity	Purpose and Focus	
03-Mar-20	Phone Call - Outgoing	Phone Call to discuss Project and request for information re services and infrastructure for inclusion in EIS. No answer, left message	
05-Mar-20	Email - Outgoing	Email follow up to call, setting out information request	
06-Mar-20	Email - Incoming	Town response agreeing to provide information and expressing commitment to engagement with Marathon	
09-Mar-20	Email – Outgoing/Incoming	Email chain re scheduling of call to discuss Marathon's approach to community investment	
09-Mar-20	Phone Call - Outgoing	Phone call with Mayor to discuss new approach to sponsorship	
09-Mar-20	Email - Outgoing	Marathon follow up to phone call attaching draft sponsorship process	
09-Mar-20	Email - Outgoing	Transmission of Project power point presentation and offer to discuss	
17-Mar-20	Email - Outgoing	Notice that planned face-to-face public information session may not proceed due to COVID-19 and that Marathon developing contingency plan	
23-Mar-20	Mailout	Spring quarterly newsletter	
26-Mar-20	Email – Outgoing/Incoming	Email chain between March 23 and March 26 re: scheduling of conference call with all communities to discuss virtual meeting concept	
31-Mar-20	Email – Outgoing/Incoming	Email to Mayor seeking views of community re: virtual public information session and response supporting virtual meeting.	
01-Apr-20	Email – Outgoing/Incoming	Email chain re: agenda for call on April 2, 2020	
02-Apr-20	Phone Call - Outgoing	Call with Economic Development Officer to discuss:  virtual meeting logistics  Town contacts  supplier workshops  measures to strengthen relationship between Marathon and Grand Falls-Windsor  Confirmation that Grand Falls-Windsor supports the virtual meeting concept	
13-Apr-20	Facebook Poll	To confirm receipt of Spring Quarterly Newsletter	
22-Apr-20	Email – Outgoing/Incoming	Email chain re possible initiatives for community investment	
03-May-20	Email - Outgoing	Marathon email to all communities requesting conference call to discuss virtual meeting concept	
04-May-20	Phone Call - Outgoing	Phone call to discuss upcoming conference call, virtual meeting concept and community investment	
05-May-20	Email - Outgoing	Conference call invitation to all communities	
05-May-20	Phone Call - Outgoing	Discussion with Town re opening of office In Grand Falls-Windsor and commitment to ongoing engagement	



Table 3A.8 Engagement Activities – Marathon Gold and Town of Grand Falls-Windsor (Town)

Date	Activity	Purpose and Focus	
06-May-20	Conference Call	Conference call with all communities to discuss:	
		<ul> <li>logistics of virtual community meeting at end of May and community involvement in publicizing meeting</li> <li>Marathon's proposal to provide COVID-19 funding for community and regional initiatives</li> </ul>	
07-May-20	Facebook Poll	Seeking views of community as to best time of day for virtual meeting	
07-May-20	Email - Outgoing	Transmitting virtual meeting notices to all communities for posting on social media	
14-May-20	Email - Outgoing	Reminder to all communities re identification of COVID-19 funding initiatives	
14-May-20	Email – Outgoing/Incoming	Email chain re request for call to discuss sponsorship and COVID-19 funding initiatives	
15-May-20	Phone Call - Outgoing	Phone call to discuss potential funding initiatives (Community investment and COVID)	
21-May-20	Email - Outgoing	Notice to all communities of virtual meetings on May 26th and May 27th and request to post notices in community at accessible locations	
25-May-20	Email - Incoming	Grand Falls-Windsor COVID-19 regional funding proposal	
26-May-20	Webinair	1st Virtual Meeting – Corporate/Project Update	
17-May-20	Webinair	2 <sup>nd</sup> Virtual Meeting – Environmental Assessment Process	
27-May-20	Email - Outgoing	Request to all communities for information on activities to promote virtual meetings on May 26 <sup>th</sup> and May 27 <sup>th</sup>	
29-May-20	Email - Outgoing	Notice to all communities – employment opportunity – Housekeeping position	
31-May-20	Email - Outgoing	Email requesting views on regional COVID donation	
31-May-20	Email - Outgoing	Offer to negotiate Community Cooperation Agreement with Town	
01-Jun-20	Phone Call - Outgoing	Call to discuss potential regional COVID-19 initiatives	
01-Jun-20	Email - Outgoing	Follow up queries re: COVID-19 regional funding proposal	
02-Jun-20	Email - Outgoing	Notice to communities re reopening of Exploration Camp and associated COVID-19 safety measures	
03-Jun-20	Phone Call - Outgoing	Phone call to discuss regional COVID-19 funding proposal	
03-Jun-20	Email - Outgoing	Notice to all communities – employment opportunities - Labourer and Geologist positions	
04-Jun-20	Email - Outgoing	Follow up email from Marathon re: negotiation of Community Cooperation Agreement; request for identification of contact person	
04-Jun-20	Email – Outgoing/Incoming	Email chain scheduling call to discuss Community Cooperation Agreement	
04-Jun-20	Phone Call - Outgoing	Call to discuss terms and scope of Community Cooperation Agreement and Town contact	
05-Jun-20	Email - Incoming	Grand Falls-Windsor inquiry as to status of PPE proposal	
06-Jun-20	Email - Outgoing	Follow up email from Marathon re: Community Cooperation Agreement and response to COVID-19 query	



Table 3A.8 Engagement Activities – Marathon Gold and Town of Grand Falls-Windsor (Town)

Date	Activity	Purpose and Focus	
09-Jun-20	Email - Outgoing	Transmission to all communities of press release re: camp reopening	
12-Jun-20	Email - Outgoing	Transmission to all communities of questionnaire re information on local resource usage	
15-Jun-20	Phone Call - Outgoing	Call to discuss COVID-19 regional funding proposal - South and Central Health Foundation	
15-Jun-20	Email - Outgoing	Follow up to Phone Call	
21-Jun-20	Email – Incoming (Letter attached) /Outgoing	Grand Falls-Windsor COVID-19 community funding proposal and Marathon confirmation of receipt of	
22-Jun-20	Email - Outgoing	Notice to all communities of regional COVID-19 donation to South and Central Health Foundation	
24-Jun-20	Email - Outgoing	Confirmation of contact for purposes of Community Cooperation Agreement negotiations	
24-Jun-20	Email – Outgoing/Incoming	Email chain re proposed call to discuss COVID-19 funding	
25-Jun-20	Phone Call - Outgoing	Phone Call to discuss:	
		<ul><li>Community Cooperation Agreement</li><li>Proposed community COVID-19 initiatives</li></ul>	
25-Jun-20	Email - Outgoing	Notice to all communities re federal Participant Funding Program	
29-Jun-20	Email - Outgoing	Transmission of draft Community Cooperation Agreement for Town review	
29-Jun-20	Email - Outgoing	Marathon transmission of summer quarterly newsletter to all communities	
29-Jun-20	Email - Outgoing	Marathon notice to all communities – update on federal Participant Funding Program	
01-Jul-20	Email - Outgoing	Notice to all communities of Project procurement database	
02-Jul-20	Email - Outgoing	Notice to all communities – employment opportunity – Health and Safety Coordinator position	
02-Jul-20	Email - Outgoing	Notice to all communities – reminder of request for local resource use information for inclusion in EIS	
02-Jul-20	Email - Outgoing	Notice to all communities -employment opportunity - Geotech position	
03-Jul-20	Email – Outgoing/Incoming	Email chain re: questionnaire re local resource usage	
07-Jul-20	Email - Incoming	Town response providing information on local resource usage	
09-Jul-20	Email - Incoming	Transmission of Grand Falls-Windsor redraft of Community Cooperation Agreement	
09-Jul-20	Meeting - in Person	Meeting with Economic Development Officer to discuss:          progress of EA          Project update          potential opportunities for future collaboration	
10-Jul-20	Phone Call - Outgoing	Call with Town to clarify certain aspects of draft Community Cooperation Agreement	



Table 3A.8 Engagement Activities – Marathon Gold and Town of Grand Falls-Windsor (Town)

Date	Activity	Purpose and Focus	
16-Jul-20	Email – Outgoing/Incoming	Email chain re status of office Grand Falls-Windsor	
03-Aug-20	Email - Outgoing	Marathon request for call to discuss Grand Falls-Windsor draft Community Cooperation Agreement	
13-Aug-20	Phone Call - Incoming	Phone call to discuss terms of Community Cooperation Agreement	
14-Aug-20	Email - Outgoing	Transmission of revised Community Cooperation Agreement for consideration by Council	
14-Aug-20	Email – Outgoing/Incoming	Email chain re potential meeting in St. John's	
18-Aug-20	Meeting - in Person	Meeting to discuss:	
		<ul><li>joint virtual meeting on mental health in workplace</li><li>opportunities for collaboration on training initiatives</li></ul>	
19-Aug-20	Email - Incoming	Confirmation of Town's agreement to terms of Community Cooperation Agreement and Town proposal for community investment funds	
19-Aug-20	Email - Outgoing	Transmission of final Community Cooperation Agreement for Mayor's signature	
20-Aug-20	Facebook Poll	To determine views of communities re virtual versus in person public information sessions for remainder of 2020	
20-Aug-20	Email - Incoming	Correspondence re: business permit for office in GFW	
27-Aug-20	Email - Outgoing	Marathon query re community investment proposal	
27-Aug-20	Email – Outgoing/Incoming	Email chain re community investment proposal and recognition of Marathon funding	
02-Sep-20	Email – Outgoing/Incoming	Transmission of Community Cooperation Agreement signed by Mayor and Marathon acknowledgement	

Table 3A.9 Engagement Activities – Marathon Gold and Fish and Wildlife Organizations

Date	Agency	Activity	Purpose and Focus
17-Jun-19	ERMA	Meeting -In Person	Corporate/Project update
14-Jan-20	Atlantic Salmon Federation (ASF)	Email - Incoming	Email invitation to meet to ASF and response
15-Jan-20	Atlantic Salmon Federation	Phone Call - Outgoing	Phone call to ASF confirming meeting on January 24 in Corner Brook
15-Jan-20	Atlantic Salmon Federation	Email - Outgoing	Email confirming meeting
20-Jan-20	Atlantic Salmon Federation	Email - Incoming	Email response ASF meeting details and participants
22-Jan-20	Atlantic Salmon Federation	Email - Outgoing	Email chain re logistics of meeting
22-Jan-20	Atlantic Salmon Federation	Email - Outgoing	Email transmission of materials to meeting participants



Table 3A.9 Engagement Activities – Marathon Gold and Fish and Wildlife Organizations

Date	Agency	Activity	Purpose and Focus
23-Jan-20	Atlantic Salmon Federation	Email - Outgoing	Email from Marathon to ASF requesting change in meeting time
23-Jan-20	NL Outfitters Association (NLOA)	Phone Call - Outgoing	Phone Call to NOLA offering to meet - no answer, left voicemail
23-Jan-20	NL Outfitters Association	Email - Outgoing	Email follow up to phone call
24-Jan-20	NL Outfitters Association	Phone Call - Incoming	Phone call from NOLA EA to advise that Foster is out of office for next several weeks
26-Jan-20	Atlantic Salmon Federation	Meeting - in Person	Meeting with ASF Corner Brook
27-Jan-20	Atlantic Salmon Federation	Email - Outgoing	Follow up to meeting and scheduling of conference call
28-Jan-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email – Incoming/Outgoing	ASF response with contact info; Marathon transmission of materials
17-Feb-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Conference Call	Conference call with ASF and SAEN to review changes to Project; Marathon delivery of Power Point presentation
20-Feb-20	NL Outfitters Association	Phone Call - Outgoing	Call with Executive Director, NLOA to arrange meeting – Director unavailable until week of March 16 but requested information
20-Feb-20	NL Outfitters Association	Email - Outgoing	Email confirming contents of call and transmitting links to Project information with undertaking to schedule meeting later in March
11-Mar-20	NL Outfitters Association	Email - Incoming	Email response NOLA confirming receipt of materials and interest in meeting
11-Mar-20	NL Outfitters Association	Email - Outgoing	Email to NLOA proposing meeting on March 19
11-Mar-20	NL Outfitters Association	Email – Incoming/Outgoing	Email response from NLOA proposing in person meeting on March 20; Marathon unavailable
16-Mar-20	NL Outfitters Association	Email - Outgoing	Email chain re logistics of meeting on March 19
17-Mar-20	NL Outfitters Association	Email - Outgoing	Email to NLOA proposing to meet virtually due to COVID 19 restrictions
17-Mar-20	NL Outfitters Association	Email - Incoming	Email response proposing conference call on March 24
23-Mar-20	NL Outfitters Association	Email - Outgoing	Email chain re timing and logistics of proposed call



Table 3A.9 Engagement Activities – Marathon Gold and Fish and Wildlife Organizations

Date	Agency	Activity	Purpose and Focus
23-Mar-20	NL Outfitters Association	Phone Call - Outgoing	Phone call to discuss logistics of virtual meeting – Marathon to deliver Project update presentation
23-Mar-20	NL Outfitters Association	Email - Outgoing	Follow up to Phone Call attaching presentation for conference call on March 24 2020
24-Mar-20	NL Outfitters Association	Email - Outgoing	Email chain re timing of presentation on March 24
30-Mar-20	NL Outfitters Association	Conference Call	Conference call with NLOA to present Project overview; Marathon request for map of outfitting operations
30-Mar-20	NL Outfitters Association	Email - Outgoing	Follow up to conference call, attaching newsletter and request for land and resource use information
23-Apr-20	NL Outfitters Association	Email - Incoming	Email from NLOA re conference call and response to request for map
30-Apr-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email - Outgoing	Email re status of Project's environmental assessment with newsletter attached
1-May-20	NL Outfitters Association	Email - Outgoing	Email transmitting questionnaire for land and resource use information
5-May-20	NL Outfitters Association	Email - Outgoing	Email chain scheduling call to discuss questionnaire
5-May-20	NL Outfitters Association	Email - Incoming	Email chain re call timing
7-May-20	NL Outfitters Association	Phone Call - Outgoing	Call to discuss questionnaire; Marathon to revise
7-May-20	NL Outfitters Association	Email - Outgoing	Transmittal of revised questionnaire to NLOA
7-May-20	NL Outfitters Association	Email - Outgoing	NLOA confirmation of receipt; mutual agreement to transmit responses to each other
Date	Agency	Activity	Purpose and Focus
8-May-20	NL Outfitters Association	Email - Incoming	email chain re submission of response to questionnaire
21-May-20	NL Outfitters Association	Email – incoming/Outgoing	Submission of completed questionnaire and Marathon acknowledgement
21-May-20	NL Outfitters Association	Email - Outgoing	Transmission of notice of virtual public meetings for circulation to NLOA members



Table 3A.9 Engagement Activities – Marathon Gold and Fish and Wildlife Organizations

Date	Agency	Activity	Purpose and Focus
25-May-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email - Outgoing	Transmission of notice of virtual public meetings for circulation to interested parties
26-May-20	NL Outfitters Association	Email - Outgoing	Query status of questionnaire response
5-Jun-20	NL Outfitters Association	Email - Incoming	NLOA response and undertaking to recirculate questionnaire
9-Jun-20	NL Outfitters Association	Email - Outgoing	Transmission of questionnaire response
12-Jun-20	NL Outfitters Association	Email - Outgoing	Marathon request for third reminder to NLOA members re questionnaire
25-Jun-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email - Outgoing	Transmission of response to questionnaire re baseline land and resource use information
25-Jun-20	NL Outfitters Association	Email - Outgoing	Notice of federal Participant Funding Program
26-Jun-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email - Outgoing	Notice of federal Participant Funding Program
26-Jun-20	NL Outfitters Association	Email - Outgoing	Email chain re conditions of participant funding and access to application form
26-Jun-20	NL Outfitters Association	Email - Outgoing	Marathon undertaking to follow up with Agency re difficulties in accessing application
29-Jun-20	NL Outfitters Association	Email - Outgoing	Transmission of Summer Quarterly Newsletter
29-Jun-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email - Outgoing	Transmission of Summer Quarterly Newsletter
29-Jun-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email - Outgoing	Update on federal Participant Funding Program
29-Jun-20	NL Outfitters Association	Email - Outgoing	Update on federal Participant Funding Program
22-Jul-20	NL Outfitters Association	Email - Outgoing	Reminder re deadline participant funding
Date	Agency	Activity	Purpose and Focus
22-Jul-20	Atlantic Salmon Federation, Salmonid Association of Eastern Newfoundland (SAEN)	Email - Outgoing	Reminder re deadline participant funding



Table 3.10 Engagement Activities – Marathon Gold and Civil Society Organizations

Date	Agency	Activity	Purpose and Focus
18-Feb-20	CPAWS Nature NL	Email - Outgoing	E-mail to ENGOs with offer to meet to discuss Project
	Nature Conservancy of Canada		
	WWF		
	Sierra Club		
21-Feb-20	CPAWS	Phone Call - Outgoing	Phone Call to NGOs to confirm
	Nature NL		receipt of e-mail
	Nature Conservancy of Canada		
24-Feb-20	CPAWS	Phone Call - Incoming	Incoming phone call re: meeting and discussion of other interested parties. CPAWs confirmed interest in meeting and undertook to contact other ENGOs
24-Feb-20	CPAWS	Email - Outgoing	Email to CPAWs confirming substance of call and reforwarding initial invitation for circulation to other ENGOs
25-Feb-20	CPAWS	Email - Incoming	Response from CPAWs confirming that invite has been sent to other NGOs
26-Feb-20	CPAWS	Email - Outgoing	Email to CPAWS indicating that no other groups had responded so meeting would be rescheduled.
26-Feb-20	CPAWS	Email - Incoming	Email from CPAWS indicating interest in meeting at later date
27-Feb-20	Nature Conservancy of Canada	Phone Call - Outgoing	Phone call with Megan Lafferty re: meeting - discussed timing of meeting, purpose and general requirements
27-Feb-20	CPAWS	Email - Outgoing	Email to two groups indicating that
	Nature Conservancy of Canada		meeting would have to be rescheduled to week of March 16; asking for indication of availability and suggestions for other participants
3-Mar-20	Nature Conservancy of Canada	Phone Call - Incoming	Phone call from NCC decling invitation to participate in meeting as NCC had no interest in Project area. Undertaking by Marathon to continue to provide periodic Project information
3-Mar-20	CPAWS	Email - Incoming	Email chain with CPAWS re potential face to face meeting in central and identification of other participants



Table 3.10 Engagement Activities – Marathon Gold and Civil Society Organizations

Date	Agency	Activity	Purpose and Focus
11-Mar-20	CPAWS	Email - Outgoing	Email to CPAWS re proposed in person meeting in Gander on March 19
25-Mar-20	CPAWS	Email - Incoming	CPAWS request for meeting week of March 30
25-Mar-20	CPAWS	Email - Outgoing	Email chain re Marathon agreement to meet and proposing times and dates
25-Mar-20	Nature Conservancy of Canada	Email - Incoming	Email to NCC re status of Project and attaching Project power point presentation and Spring Quarterly Newsletter
30-Mar-20	CPAWS	Email - Incoming	Email chain re upcoming conference call and potential participants
31-Mar-20	CPAWS	Conference Call	Call with CPAWS to provide overview of Project and associated regulatory processes
31-Mar-20	CPAWS	Email - Outgoing	Marathon follow up to call with Project power point presentation and Spring Quarterly newsletter attached
21-May-20	CPAWS  Nature Conservancy of Canada	Email - Outgoing	Notice of and invitation to virtual community information session with request to circulate to other interested parties
25-May-20	CPAWS	Email - Outgoing	Email chain re logistics of participation in public information session
26-Jun-20	CPAWS  Nature Conservancy of Canada	Email - Outgoing	Notice of federal Participant Funding Program
29-Jun-20	CPAWS  Nature Conservancy of Canada	Email - Outgoing	Transmission of Summer Quarterly Newsletter
29-Jun-20	CPAWS  Nature Conservancy of Canada	Email - Outgoing	Update on federal Participant Funding Program
9-Jul-20	CPAWS	Email - Outgoing	Invitation to attend meeting in St. John's with Miawpukek to review existing conditions information (EIS) and land and resource use
9-Jul-20	CPAWS	Email – Outgoing/Incoming	Email chain re participation in meeting with Miawpukek
12-Jul-20	CPAWS	Email - Outgoing	Meeting invitation and materials



Table 3.10 Engagement Activities – Marathon Gold and Civil Society Organizations

Date	Agency	Activity	Purpose and Focus
14-Jul-20	CPAWS	Meeting - in Person	Meeting with Marathon and Miawpukek to review existing conditions information, land and resource usage in the area of the Project, issues and concerns and participation in monitoring
22-Jul-20	CPAWS  Nature Conservancy of Canada	Email - Outgoing	Update on federal Participant Funding Program



# **APPENDIX 3B**

Project Review Report



# Project Review Meeting – Marathon Gold/Miawpukek First Nation/Qalipu Mi'kmaq First Nation Grand Falls – December 5, 2019

**Participants:** 

Qalipu Mi'kmaq First Nation (Qalipu): Francis Skeard

Andrew Barker Jonathan Strickland Alyssa Hunter

Miawpukek First Nation (Miawpukek): Ross Hinks

Marathon Gold (Marathon): Matt Manson

James Powell Tara Oak Mary Hatherly Jodi Hackett

#### **Meeting Summary**

The purpose of the meeting was to provide information to representatives of Miawpukek and Qalipu. respecting preliminary Project design and to seek input from the First Nations respecting location of infrastructure and related matters. A revised Project description and agenda had been circulated in advance to participants. The meeting commenced with introductions of all parties.

Meeting discussions were based on three power point presentations delivered by Marathon:

- Corporate Overview
- EA Process, including Stakeholder Engagement
- Project Description

Issues raised during first presentation included the relationship between the Project and Indigenous rights. Both Nations indicated that the project is on unceded Mi'kmaq traditional territory and that corporate policies and values should reflect this point. Further, because the Project is, in the view of the Nations, on unceded Mi'kmaq territory, there are concerns about lasting impact on land and resources and a strong interest in rehabilitation. Marathon indicated that it is committed to sustainable development and the achievement of social licence. In its view, the social licence rests upon the concept of 'permission' – the permission of Indigenous groups, communities, employees and all who are potentially affected by the Project. values its relationship with Indigenous groups potentially affected by the Project and is committed to minimizing adverse impacts upon Indigenous groups and stakeholder

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The second power point presentation Marathon explained the regulatory processes, including timelines, applicable to the Valentine Gold Project. With respect to the environmental assessment process, the Nations questioned the basis for Marathon's decision to continue to proceed under CEAA, 2012, rather than the new Impact Assessment Act. The new Impact Assessment Act directs proponents to undertake robust engagement with Indigenous groups and also directs integration of traditional knowledge into the EIS to a much greater and more explicit extent than CEAA, 2012. Marathon explained that the decision to remain subject to CEAA 2012 rather than opting into the new act was driven by considerations of schedule and uncertainty respecting timelines in the new legislation. Qalipu suggested that this rationale should be communicated to membership so that there would be no confusion or misunderstanding.

With respect to engagement, Marathon indicated that the federal Guidelines for the Valentine Project EIS captured the spirit of the new legislation with respect to Indigenous engagement and that Marathon was committed to constructive and meaningful engagement with both Nations, the Grand Falls meeting representing the first step in building relationships. The Nations pointed out that engagement was not confined to the EA process but should continue over the life of the Project. The need for ongoing communication is particularly critical in the event of an accident or malfunction. Qalipu expressed the view that not only should the First Nations be informed in a timely manner in the event of an incident but that they should be involved in the development of a communication protocol. Groups have had some experience in the offshore and have insights as to the particular contents of a communication protocol. Marathon will take this suggestion into consideration.

The remainder of the session was devoted to a discussion of the project components (infrastructure and locations), mining processes and associated potential environmental effects. The discussion is summarized by reference to issues raised by participants:

#### 1. Water Treatment:

A number of questions were asked about water treatment, including treatment of run-of, sewage treatment and water quality if flooding open pits. Water treatment will be addressed in the EIS but in general, Marathon advised that with respect to runoff, it is subject to a legal obligation to collect, contain and treat any water prior to release. Sewage from the accommodations camp will be subject to treatment. Every effort will be made to recycle water to the greatest extent possible.

#### 2. Heap Leach and Mill Options

Marathon described two options for dealing with the extraction of gold from low grade ore: heap leach versus mill. The heap leach process, which is commonly used in gold mines, involves the stacking of low-grade ore and treatment of the ore with a cyanide solution and includes a number of storage ponds to manage the heap leach solutions. Marathon has fully considered the potential environmental effects of the heap leach system and is now considering as an alternative the stockpiling and milling of lower grade ore near end of mine life. As Marathon indicated, both options have potential adverse effects – however, public perception is that heap leach process may be more problematic from an environmental perspective due to concerns with cyanide.

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Parties then discussed the possible relocation of Project infrastructure in the event that the heap leach option is abandoned in favour of stockpiling and milling, thus reducing the Project footprint. Marathon pointed out that there were constraints upon Marathon's ability to relocate infrastructure. Such constraints are both physical (topography, existing water bodies such as the Victoria reservoir) and legal (e.g. that can't cover up areas of potential mineralization, the requirement of public access to waterbodies).

#### 3. Tailings Pond

Parties discussed possible options for treatment of tailings. Marathon advised that Golder had been retained to assess various options and that groups will be advised of option chosen.

Discussion of treatment of tailings included questions around potential impact on waterfowl and frequency of testing. General concern is with the toxicity of the tailings pond and consequences of potential breach given occurrences elsewhere and impact on water quality, dam integrity and wildlife and birds.

#### 4. Infrastructure and Project activities

The discussion of infrastructure touched on a number of aspects of operations including the following:

- a. Camp: The status of drilling, both current and future, at existing site was discussed. Questions were also asked respecting the disposition of new camp infrastructure at end of mine life.
   Marathon advised that no final decision respecting disposition has been made infrastructure could be destroyed or sold but will definitely be removed.
- b. Flexibility in Location of Infrastructure: Parties discussed the degree of flexibility in the location of infrastructure, specifically moving milling to another site. Marathon explained that the location of infrastructure was contingent on a number of factors, including cost, existing natural features (dam, reservoir). While there may be some flexibility (e.g. concentrator at one site, mill at another), have also to take into account potential environmental impacts of increased project footprint. Matter is under review but clear that the camp will not be downstream of the tailings facility. A question was asked about the lowering of the Victoria reservoir to minimize impact of tailings breach.
- c. Blasting: Parties discussed the potential impact of blasting activities upon dam integrity and stability. Marathon advised that there will be modelling of vibrations and that blasting will be monitored during production.

#### 5. Fish and Wildlife

Participants discussed the potential impact of mining operations on wildlife with specific reference to caribou which is concern to both groups. There are 5 herds in the area, 2 of which migrate through the proposed Project area. Qalipu indicated that it has valuable information respecting caribou derived from two sources. First, Qalipu has collected extensive traditional knowledge

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which relates to caribou. Secondly, Qalipu has scientific expertise in woodland caribou projects. Miawpukek indicated that it also has expertise in this area and in addition to information relevant to caribou, has expertise with respect to fish. Marathon acknowledged the concerns of both groups and undertook to keep them informed of the results of any studies undertaken with respect to the impact of the Project on fish and wildlife.



# Marathon Gold – Qalipu Mi'kmaq First Nation – Miawpukek First Nation Valentine Gold Project Design Meeting Shalup Centre, 7 Church Road, Grand Falls, NL December 5, 2019

# Agenda

1.	8:30 – 8:45:	Roundtable Introductions
2.	8:45 – 9:15:	Marathon Gold Corporate Presentation
3.	9:15 - 9:45:	Overview of Valentine EA Process and Indigenous Engagement
4.	9:45 – 10:30:	Presentation and Review/Discussion of Valentine Gold Project
5.	10:30 – 10:45:	Health Break
6.	10:45 – 12:00:	Presentation and Review/Discussion of Valentine Gold Project
7.	12:00 – 1:00:	Lunch Break (Lunch provided)
8.	1:00 – 2:00:	Presentation and Review/Discussion of Valentine Gold Project
9.	2:00 – 2:30:	Closing Remarks

# Environmental Assessment Registration/ Project Description

Valentine Gold Project Newfoundland and Labrador

April 5, 2019



## **Abbreviations**

AACEI Association for the Advancement of Cost Engineering International

AARL Anglo-American Research Laboratory
AC CDC Atlantic Canada Conservation Data Centre

A<sub>i</sub> Bond Abrasion Index

ARD/ML Acid Rock Drainage/Metal Leaching

ATV All-terrain vehicle dBA A-weighted decibels

BV Bed Volumes

BWi Bond Ball Mill Work Index
CDA Canadian Dam Association

CEA Agency Canadian Environmental Assessment Agency

CIC Carbon in Column
CIL Carbon in Leach

cm Centimeter

CN<sub>WAD</sub> Weak acid dissociable cyanide

COSEWIC Committee on the Status of Endangered Wildlife in Canada

CWi Bond Crusher Work Index
DFO Fisheries and Oceans Canada
EA Environmental Assessment

ECCC Environment and Climate Change Canada

EEM Environmental Effects Monitoring
EIS Environmental Impact Statement
ELC Ecological Land Classification

EMS Environmental Management System

EPCM Engineering, Procurement, Construction Management

EPP Environmental Protection Plan
ESA Endangered Species Act

FEL Front End Loader

FNI Federation of Newfoundland Indians

GHGs Greenhouse Gas

HADD Harmful Alteration, Disruption or Destruction of Fish Habitat

HDPE High Density Polyethylene

hr(s) Hour(s) HV High Voltage

HVAC high-voltage alternating current

H:V Horizontal to Vertical

Hz Hertz

**ICR** Intensive Cyanidation Reactor ISO International Standards Association

km Kilometer Kilovolt k۷ L Liter

LV Low Voltage

m<sup>3</sup>/h Cubic Meter per Hour

m Meter

MAC Mining Association of Canada **MARC** Maintenance and Repair Contract Meters Below Ground Surface mbgs

Motor Control Centres MCC

Minute min

Million Meters Mm Millimeter mm

**MDMER** Metal and Diamond Mining Effluent Regulations

**MSDS** Material Safety Data Sheet Million Tonnes Per Annum Mtpa

MV Medium Voltage MW

Megawatt

NL Newfoundland and Labrador

**NLDFLR** Newfoundland and Labrador Department of Fisheries and Land Resources

**NLDMAE** Newfoundland and Labrador Department of Municipal Affairs and

Environment

**NLDNR** Newfoundland and Labrador Department of Natural Resources

**NLDTCII** Newfoundland and Labrador Department of Tourism, Culture, and Industrial

Innovation

**NL-EHJV** Newfoundland and Labrador Eastern Habitat Joint Venture

**NLOA** Newfoundland and Labrador Outfitters Association

**NLOWE** Newfoundland and Labrador Organization of Women Entrepreneurs

NOC **National Occupation Codes** 

NS Nova Scotia

**OLTC** on-line tap changer **ONAF** Oil Natural Air Forced ONAN Oil Natural Air Natural PAG Potentially Acid Generating PAX Potassium Amyl Xanthate PDA Project Development Area

PEA Preliminary Economic Assessment

POL Petroleum, Oil, Lubricants
ROM Run-of-Mine Material

SAG Semi-Autogenous Grinding

SAEN Salmonid Association of Eastern Newfoundland

SAR Species at risk
SARA Species at Risk Act
SMBS Sodium Metabisulphite

SOCC Species of Conservation Concern

SPAWN Salmon Preservation Association for the Waters of Newfoundland

SSAC Species Status Advisory Council

t Tonnes

TC Transport Canada t/h Tonnes per hour tpd Tonnes Per Day

TSF Tailing Storage Facility

UPS Uninterruptible Power Source

V Volt

VC Valued Component

VFD Variable Frequency Drives

VLIC Valentine Lake Intrusive Complex VMS Volcanogenic Massive Sulfide

VSD Variable-speed Drive

Introduction April 5, 2019

# 1.0 INTRODUCTION

Marathon Gold Corporation (Marathon) is planning to develop a gold mine at Valentine Lake, located in the west-central region of the Island of Newfoundland, southwest of the town of Millertown, Newfoundland and Labrador (NL). The Valentine Gold Project (the Project) will consist primarily of open pit mines, waste rock disposal piles, crushing and stockpiling areas, heap leach processing and conventional milling and processing facilities, tailings management area, personnel accommodations, and supporting infrastructure including roads, power lines, buildings, and water and effluent management facilities. This document is intended to meet the requirements of a Registration of an undertaking pursuant to the provincial *Environmental Protection Act*, 2002 (Gov NL 2002a) and a Project Description pursuant to the *Canadian Environmental Assessment Act*, 2012 (Government of Canada 2012a).

This report is based in large part on the Preliminary Economic Assessment (PEA) (Lycopodium 2018) prepared for the Project in October 2018 by Lycopodium Minerals Canada Ltd (Lycopodium), with input from John T. Boyd Company (BOYD), Apex Geoscience Ltd., and Stantec Consulting Ltd (Stantec). In addition, a number of environmental baseline studies have been completed for the Project. The information presented in this report draws upon this Project-specific data, as well as publicly-available information.

# 1.1 Name of Undertaking

Valentine Gold Project

# 1.2 Proponent Information

Marathon is a Toronto-based gold exploration company, with 100% ownership of the Valentine Gold Project. It is a public, advanced exploration stage company whose common shares trade on the TSX Exchange (MOZ) and OTCQX (MGDPF) in the USA. Marathon was incorporated in 2010 and has its head office in Toronto with satellite offices in Pasadena and Mt. Pearl, NL. Contact information is contained in Table 1-1 and additional corporate information can be found at <a href="https://www.marathon-gold.com">www.marathon-gold.com</a>.

Table 1-1 Contact Details for Marathon Gold Corporation

Title	Contact Details
President and CEO	Phillip C. Walford, P.Geo.  10 King Street East, Suite 501 Toronto, ON, Canada, M5C 1C3 Phone: +1 (416) 987-0711 pwalford@marathon-gold.com
Principal Contact for the Purposes of the Environmental Assessment (EA)	James Powell, M.Eng. P.Eng. Director of Environment and Stakeholder Engagement P.O. Box 4006, Pearlgate PO, Mt. Pearl, NL, A1N 0A1 Phone: +1 (709) 730-5046 jpowell@marathon-gold.com

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Since 2010, Marathon's work has been focused on its Valentine Gold property, which is currently accessible year-round by road. Marathon maintains a fully permitted, 60-person, all-season exploration camp at the 240 km<sup>2</sup> property.

Marathon has two other properties in its portfolio. An exploration property with potential for gold and base metals located on the Baie Verte Peninsula in north-central NL is approximately 13 km south of the currently producing Point Rousse Property operated by Anaconda Mining Inc. The second property is a historic gold producing property in Oregon, USA.

# 1.3 Project Regulatory Framework

Marathon plans to develop and operate an open pit gold mine with a nominal throughput of 9,000 tonnes (t) of material per day for the milling facility and 9,000 t of material per day for the heap leach facility, equivalent to 6.0 million tonnes per annum (Mtpa). It will therefore be subject to legislative requirements under both the federal *Canadian Environmental Assessment Act*, 2012 (CEAA 2012) and the provincial *Environmental Protection Act*, 2002, as follows:

- The Project is captured under Section 16 (c) of the *Regulations Designating Physical Activities*, 2012 (Government of Canada 2012b) as a gold mine, other than a placer mine, with an ore production of 600 t/d or more and will therefore require a description of the designated project be submitted to the Canadian Environmental Assessment Agency (CEA Agency).
- The Project is included under Section 33(2) of the provincial Environmental Assessment Regulations, 2003 (Gov NL 2003a). As a designated undertaking, it must be registered with the Minister of Municipal Affairs and Environment.

Although there is no formal harmonization agreement between the province and the federal government, a proponent is typically permitted to prepare a single set of environmental assessment (EA) documents that address the requirements of both levels of government. The purpose of this Registration / Project Description is therefore to satisfy the federal regulatory requirements pursuant to the *Prescribed Information for the Description of a Designated Project Regulations* (Government of Canada 2012c) and the provincial requirements for a registration of an undertaking pursuant to the *Environmental Assessment Regulations*. Submission of the Registration / Project Description serves to initiate both the federal and provincial EA processes, informing both governments of the proponent's intention to develop a project. It is also intended to provide regulators with sufficient information regarding the proposed undertaking, the existing baseline conditions, and the potential effects of a project so as to allow a determination regarding the nature of the EA process required before Project approvals can be granted. A separate Summary of the Project Description has been submitted to the CEA Agency in English and French as per the requirements of the federal EA process.

Project Information April 5, 2019

# 2.0 PROJECT INFORMATION

# 2.1 Overview of the Project

The Project is located in the west-central region of the Island of Newfoundland, approximately 55 km southwest of Millertown, NL (Figure 2-1). The Project Development Area (PDA) is accessed by an existing gravel access road, approximately 80 km in length, south from the Town of Millertown, which is situated approximately 6 km off the Buchans Highway. This access route in turn provides reliable road access to the Trans-Canada Highway, which transects the Island of Newfoundland from east to west and connects the major populated centres, airports, and sea ports. Access to the Project is from the northeast side of the property via the existing Crown Lands access road. Future site access will be via the main security gate near the process plant. The process plant site will be fenced to clearly delineate the mine area and deter unauthorized access.

The proposed development is comprised of four potential mining areas: the Leprechaun, Sprite, Marathon, and Victory Deposits. Standard surface mining techniques will be used to mine gold ore from open pits. High-grade ore material (9,000 t per day or tpd) will be processed through the mill where it will be crushed, milled and put through floatation and cyanidation processes to recover the gold. Tailings will be treated in the process plant area to remove the cyanide and subsequently deposited in an engineered tailings storage facility. Low grade material from the open pits (9,000 tpd) will be sent to the heap leach area where it will be crushed, and the gold recovered through heap leaching and carbon in column gold adsorption. Gold doré bars will be shipped from site to market in secured trucks.

Other Project components and activities that are associated with the primary mining, milling, and processing activities include site and haul road construction and maintenance, mine waste rock management, electrical power supply and distribution, process and potable water supply and distribution, site wide stormwater and effluent management, treatment, and discharge, fuel storage and fueling stations, mine and plant workshops and services, administrative office, personnel accommodations and lunchrooms, and security.

A preliminary layout of mine infrastructure is shown in Figure 2-2. The location of specific components may be altered somewhat based on future regulator and stakeholder engagement, project planning and detailed engineering, however it is currently expected that the Project footprint will be contained within the PDA as shown in Figure 2-2. The Project Area, also shown in Figure 2-2, is defined by Marathon's mineral license boundaries, and this area is considered in the context of a larger study area for some of the environmental baseline work described herein.

The Project components and activities associated with construction, operations, and rehabilitation and closure are further defined in Section 3.

Project Information April 5, 2019

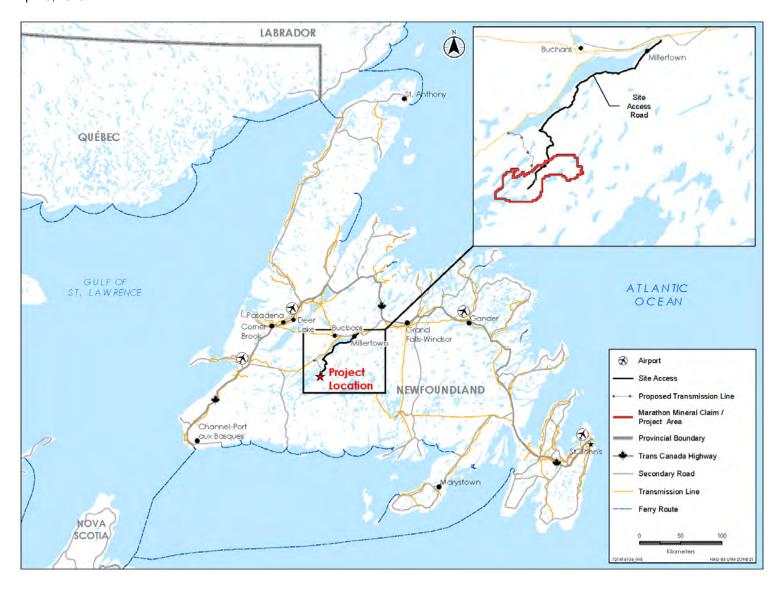


Figure 2-1 Location of Valentine Gold Project

Project Information April 5, 2019

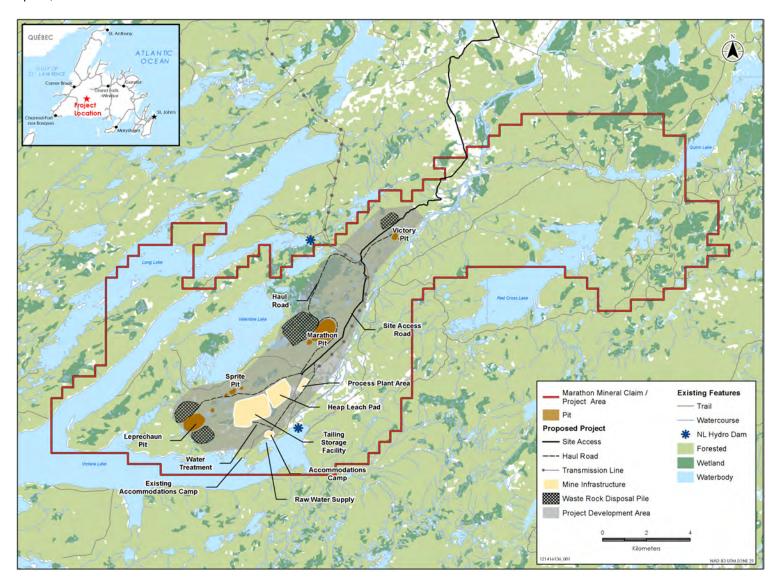


Figure 2-2 Project Development Area / Project Area

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Upon cessation of mining, the operation will be closed, and the site components will be rehabilitated in accordance with applicable regulations at the time of closure. Rehabilitation and closure planning is a requirement under the Newfoundland and Labrador *Mining Act* (Gov NL 1999). A Rehabilitation and Closure Plan has not yet been developed for this Project. A formal plan will be completed as part of the EA and progressive engineering, and will describe the methods to restore the site to as close to pre-development conditions as practicable or to a suitable condition for an alternate use upon Project closure. It will outline the methods to be used for progressive and closure rehabilitation, and post-closure monitoring. Further information regarding the general approach to rehabilitation and closure is provided in Section 3.4.

# 2.2 Purpose, Rationale and Need for the Undertaking

The property has historically been explored by several mining companies since the 1960s, with its first recognition as a gold prospect occurring in 1983. It now comprises 14 contiguous mineral licenses held by Marathon, for a landholding of 240 km², also referred to for the purposes of the EA as the Project Area. Under the provisions of the *Mineral Act* (Gov NL 1990), Marathon has the right to conduct exploration for minerals within their licences. Since 2010, Marathon has been actively exploring within these licenses, with the goal of developing the site into an active gold mine should the results of exploration and the PEA (Lycopodium 2018) demonstrate its financial viability. Marathon's exploration work between 2010 and the present included expanding the size of the Leprechaun deposit and making significant new discoveries of the Marathon, Sprite, and Victory deposits. Based on the exploration results, the financial analysis of the PEA (Lycopodium 2018) has demonstrated that the Project has robust economics and recommended the continued development of the Project.

In addition to the return on investment to shareholders and investors, development of this Project would generate substantial employment, expenditures and associated benefits to the province. The mining industry is a major contributor to the provincial economy, particularly in rural areas. The nearby towns of Millertown, Buchans, Badger, Grand Falls-Windsor, and Springdale have been actively supporting the mining industry, with several suppliers and contractors available to support the Project. Skilled mining personnel are available from within the province, as well as elsewhere in Canada. Mineral exploration companies and the provincial government have adopted proactive strategies to attract, recruit, diversify, and retain skilled workers associated with, and committed to, the mining industry.

Based on Project planning to date, the Project is anticipated to generate over 1 million person-hours (hrs) of work during construction, with peak employment during operation of 466 people and an average employment rate of 442 people. Refer to Section 3.7 for additional information on Project employment and expenditures.

In addition to employment benefits, this Project represents a direct benefit to the province through mining, corporate, gasoline, and other taxes over the life of the Project, currently estimated at over \$480 million CDN. In addition, further benefits to the province would result from the Project as a result of the indirect services required for the Project and its employees, including construction, supply and technical services, security and catering services, and the potential for spinoff businesses.

Project Information April 5, 2019

Overall, this Project development and operation is consistent with the provincial government's goal of continuing to support and encourage the growth of the mining industry in the province as detailed in their Mining the Future 2030 plan.

## 2.3 Alternatives to the Project

Marathon has two alternatives to proceeding with the development of this Project. It can:

- continue to conduct exploration and feasibility studies on the Property to further define the prospect, with the goal of developing the Project at a future date; or
- not develop the Project and stop exploration activities.

Given the results of the PEA, Marathon believes it has conducted the exploration activities and studies needed to justify progressing the Project through the EA process at this time. The latter option would not be consistent with corporate goals and objectives and would not provide return on investment to date.

While alternatives to the Project are limited, there are several alternatives within the Project that may be further assessed and refined as the Project proceeds through the EA and permitting processes. These include, but are not limited to, access road routing, production rates and related infrastructure sizing, further consideration of new and emerging technologies, and siting of Project infrastructure within the PDA.

# 2.4 Project Location and Setting

The Project is located in rural west-central Newfoundland, in the province of NL (Figure 2-1), approximately 45 km south of the nearest community of Buchans, and approximately 55 km southwest of the town of Millertown, or approximately 80 km by road.

The Project is accessed by road via Millertown, with provincial highways connecting Millertown and Buchans to the Trans-Canada Highway. It is anticipated that most materials, equipment, and supplies will be brought to the Project site by road from larger communities in Newfoundland, such as Grand Falls-Windsor and Gander, and ultimately via the Marine Atlantic-operated ferry which connects North Sydney, Nova Scotia (NS) with Port-aux-Basques on the west coast of the Island, approximately 540 km distance by road from the Project, or by ferry to Argentia, approximately 480 km by road. The Project is also located approximately 210 km from the airport in Gander and approximately 320 km from the airport in Deer Lake.

The center of the Property is located at Universal Transverse Mercator 494550 m Easting and 5362789 m Northing, Zone 21, North American Datum 1983, (NAD83 Zone 21). It is located within National Topographic System map sheets: 12A/06 and 12A/07. This part of the Island is boreal forest, characterized by mainly coniferous trees, with cold winters (average -4.5°C) and warm summers (average 16°C). It is a rural area, with a history of past mining exploration and development activities and other land and resource uses, including commercial forestry, outfitting, and recreational land use. The environmental setting of the Project Area is further described in Section 4.

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As described in Section 2.2, the Project Area comprises 14 contiguous mineral licenses (Figure 2-3; Table 2-1), for a landholding of 240 km<sup>2</sup>. These mineral licenses are 100% controlled by Marathon and are reportedly held in good standing. The PDA hosts four gold deposits, namely Leprechaun, Marathon, Sprite, and Victory, which are the focus of this Project, as well as several other early stage gold prospects. The collective deposits and occurrences are located within a 20 km long northeast trending zone (Figure 2-2). A number of photos of the site are contained in Appendix A.

Table 2-1 Valentine Property License Summary

License ID	Issuance Date	Years Held	Renewal Date	No. of Claims	Area km2	Expenditure Due Date
010899M	27-Apr-04	13	27-Apr-19	246	61.5	28-Apr-25
010943M	27-Apr-04	13	27-Apr-19	256	64	28-Apr-25
013809M	06-Sep-07	10	06-Sep-22	18	4.5	06-Sep-20
013810M	06-Sep-07	10	06-Sep-22	19	4.75	06-Sep-19
017230M	09-Feb-10	7	09-Feb-20	256	64	09-Feb-23
017231M	09-Feb-10	7	09-Feb-20	2	0.5	09-Feb-22
018687M	29-Mar-11	6	29-Mar-21	6	1.5	29-Mar-23
018688M	29-Mar-11	6	29-Mar-21	29	7.25	29-Mar-22
016740M	26-Nov-09	8	26-Nov-19	4	1	26-Nov-24
019443M	17-Oct-11	6	17-Oct-21	6	1.5	17-Oct-23
019444M	17-Oct-11	6	17-Oct-21	6	1.5	17-Oct-23
019628M	29-Dec-11	6	29-Dec-21	21	5.25	29-Dec-25
020482M	08-Oct-12	5	08-Oct-22	77	19.25	08-Oct-20
022477M	06-Nov-14	3	06-Nov-19	14	3.5	06-Nov-22
			Totals	960	240	
Source: Lycopod	lium (2018) as take	n from DNR webs	ite October 29, 201	8		

Seasonal and temporary dwellings occur within the Project Area; there are 9 registered cabins, and one outfitter operating within the Project Area. Additional information on these seasonal dwellings is available in Sections 4.3.1 and 4.3.2. The PDA is also 120 km from the Miawpukek First Nation federal reserve at Conne River. Traditional land and resource use by Qalipu Mi'kmaq First Nation members has been documented near Victoria Lake (in the vicinity of the Project Area) (FNI 2002). Additional information is available in Section 4.3.4. There are no federal lands located within 200 km of the Project Area.

# 2.5 Funding and Federal Lands

Marathon has not applied for federal or provincial funding for the development or operation of this Project to date, however potential funding opportunities may be considered in the future. In general, it is anticipated that the bulk of the Project costs will be funded through private investors.

The Project will not occur on or involve the use of federal lands.

Project Information April 5, 2019

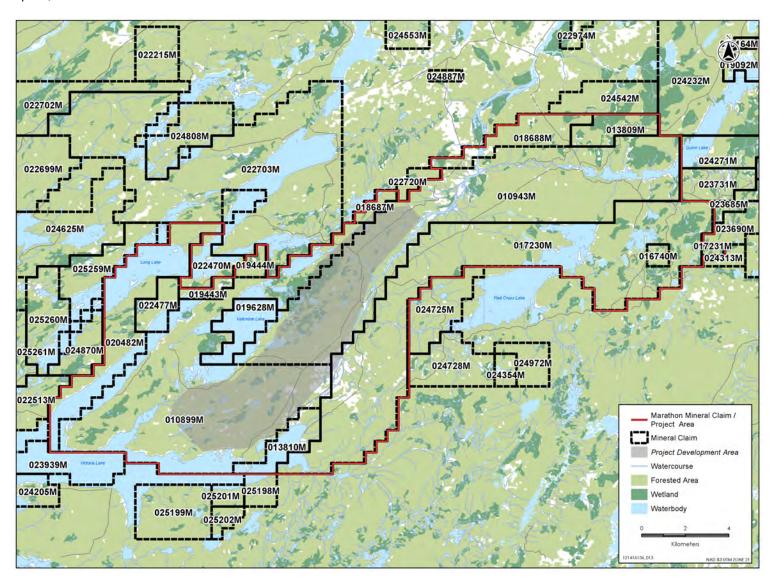


Figure 2-3 Marathon License Boundary and Adjacent Claims

Project Information April 5, 2019

# 2.6 Other Required Environmental Approvals and Permits

The primary environmental regulatory requirements of the provincial and federal governments is the EA, as discussed in Section 1.3. In addition to EA approval under CEAA 2012, the Project is subject to other federal legislation, including:

- Canadian Environmental Protection Act, 1999
- Fisheries Act
- Migratory Birds Convention Act, 1994
- Species at Risk Act (SARA)
- Navigation Protection Act

The federal and provincial governments have a responsibility to uphold legislation and regulations related to species at risk, and an EIS for this Project would assess the potential effects of the Project on these species and propose appropriate mitigation measures. It would also assess and propose mitigation for migratory birds, which are protected under the *Migratory Birds Convention Act*, along with their eggs, nests, and young.

Other required environmental permits and approvals are typically fulfilled once a release is granted from the EA review processes. These permits and approvals include water use authorizations, fish and fish habitat authorization, emissions and discharge approvals, approvals for placement of some Project components (e.g., tailings management, water control structures), and other Project development related items. Each of these permits or authorizations are applied for separately with relevant information included in the applications. Permits can only be issued after the Project is released from EA. Specific permits, approvals, and authorizations that may apply to the Project are listed below. Note that municipal approvals, authorizations, and permits are not anticipated, as the Project is not located within a municipality.

Table 2-2 provides a preliminary list of approvals, authorizations, and permits that may be required from various provincial and federal agencies for the Project. It is not considered exhaustive. Marathon currently has mineral licenses and a range of permits in place for their existing exploration activities and accommodations camp.

Table 2-2 Environmental Approvals, Authorizations, and Permits that May Be Required

Environmental Permit, Approval or Authorization Activity	Issuing/Approval Agency	
Provincial		
Release from EA Process	NLDMAE – Minister	
Approval of Environmental Protection Plan		
Monitoring Plan for Certificate of Approval	NLDMAE – Pollution	
Certificate of Approval for Construction and Operation (Industrial Processing Works)	Prevention Division	
Certificate of Approval for Generators		
Approval of Environmental Contingency Plan/Emergency Spill Response		

Project Information April 5, 2019

Table 2-2 Environmental Approvals, Authorizations, and Permits that May Be Required

Environmental Permit, Approval or Authorization Activity	Issuing/Approval Agency	
Permit to construct a Non-Domestic Well	NLDMAE – Water Resources	
Certificate of Environmental Approval to Alter a Body of Water	Management Division	
Culvert Installation	7	
Fording/Bridge		
Pipe Crossing/Water Intake		
Stream Modification or Diversion		
Other Works Within 15 m of a Body of Water		
Water Use License		
Permit to Construct a Potable Water System	7	
Permit to Occupy Crown Land	NL Department of Fisheries and Land Resources (NLDFLR) – Crown Lands Division	
Permit to Control Nuisance Animals	NLDFLR – Wildlife Division	
Operating Permit to Carry out an Industrial Operation During Forest Fire Season on Crown Land	NLDFLR – Forestry and Agrifoods Agency	
Permit to Cut Crown Timber		
Permit to Burn		
Surface and Mining Leases	NL Department of Natural	
Development Plan	Resources (NLDNR) – Mineral Development and Mineral Lands Division	
Rehabilitation and Closure Plan		
Financial Assurance	— Mineral Lands Division	
Mill License		
Quarry Development Permit		
Blasters Safety Certificate	Service NL – Government Service Centre	
Approval for Storage and Handling of Gasoline and Associated Products		
Fuel Storage Tank Registration		
Approval for Used Oil Storage Tank System (Oil/Water Separator)		
Certificate of Approval for a Waste Management System		
Certificate of Approval for a Sewage / Septic System		
Application to Develop Land for Septic		
National Building Code –Fire, Life Safety and Building Safety		
Buildings Accessibility Registration and Permit		
Food Establishment License		
Federal		
Release from EA Process	CEA Agency	
Fisheries Act Authorization permitting serious harm to fish <sup>1</sup>	Fisheries and Oceans Canada (DFO)	
Tailings Impoundment Area Designation	Environment and Climate	
Initiate Metal and Diamond Mining Effluent Regulations (MDMER) process with ECCC including notification, identification of final discharge point, effluent monitoring, and environmental effects monitoring (EEM)	Change Canada (ECCC)	
Approval of MDMER Emergency Response Plan		

Project Information April 5, 2019

Table 2-2 Environmental Approvals, Authorizations, and Permits that May Be Required

Environmental Permit, Approval or Authorization Activity	Issuing/Approval Agency
Approval to Interfere with Navigation <sup>1</sup>	Transport Canada
License to Store, Manufacture, or Handle Explosives (Magazine License)	Natural Resources Canada

<sup>1.</sup> The federal government has proposed to amend the Fisheries Act and the Navigation Protection Act, as early as 2019, renaming the latter, the Canadian Navigable Waters Act. As proposed, many of the provisions from a previous version of the Fisheries Act will be re-instated, reverting in large part to the concept of fish habitat protection, prohibiting harmful alteration, disruption or destruction of fish habitat (HADD) as prescribed in the Fisheries Act prior to 2012. Applications for HADD authorization and proposed compensation in the event of a HADD will likely be required. Other key amendments include strengthening the role of Indigenous peoples in application reviews, introduction of a new permitting framework and codes of practice, and the introduction of new decision-making criteria. The proposed amendments to the Navigation Protection Act will apply to all waters that have the potential for navigation, rather than a prescribed list of waterways, and will have provisions for increased Indigenous input into applications for use of navigable waters by project proponents.

# 2.7 Overview of Consultation and Engagement

Since commencing exploration and environmental baseline activities in 2010, Marathon has and will continue to be committed to sustainable exploration and development of the province's rich resource potential, and realizes the importance of building strong, long-term relationships and investments in people and communities. A key element of this commitment is the need to actively consult with members of the general public and special interest groups, communities, Indigenous groups, associations, and regulators who have interest in or may be affected by the Project. Throughout the life of the Project, Marathon aims to achieve positive and constructive relationships with stakeholders. Further information on Marathon's consultation and engagement policies and activities to date is found in Section 6.

Description of the Undertaking April 5, 2019

# 3.0 DESCRIPTION OF THE UNDERTAKING

# 3.1 Project Components

The key Project components are shown in Figures 3-1 and 3-2, and are further described below. An overview of the construction activities associated with these Project components is provided in Section 3.2 and a general description of the operational components is provided in Section 3.3. Further, a preliminary Project schedule is provided in Section 3.5. The key components of Marathon's Project are as follows:

- Site Access Road
- On Site Access Roads, Plant Site Roads, and Haulage Roads
- Open Pits
- Waste Rock Disposal Piles
- · Organics and Overburden Stockpiles
- Stormwater Management Infrastructure
- Run of Mine (ROM) Stockpile
- Heap Leach Process Facilities:
  - Heap Leach Crushing Circuit
  - Heap Leach Pad
  - Heap Leach Solution and Event Ponds
  - Carbon in Column (CIC) Leach Process
- Process Plant Facilities:
  - Crusher and Mill Feed Stockpile
  - Grinding Circuit (Mill)
  - Gravity Recovery Circuit and Intensive Cyanidation Reactor
  - Floatation Circuit
  - Carbon in Leach (CIL) Process
  - Cyanide Destruction
  - Carbon Acid Wash, Elution, and Regeneration Circuit
  - Electrowinning and Goldroom
  - Reagent Storage
- Gold Shipment to Market
- Tailings Storage Facility (TSF)
- Water Treatment Plant
- Substation and Power Distribution
- Water Intake and Distribution
- Other Plant Site Buildings:
  - Plant Administration, Workshop, and Warehouse
  - Laboratory
  - Administration and Lunchroom
  - Mine Services and Workshop
  - Security
- Accommodation Camp
- Plant Site Stormwater Pond and Sanitary Effluent
- Fuel Storage and Fueling Stations

Description of the Undertaking April 5, 2019

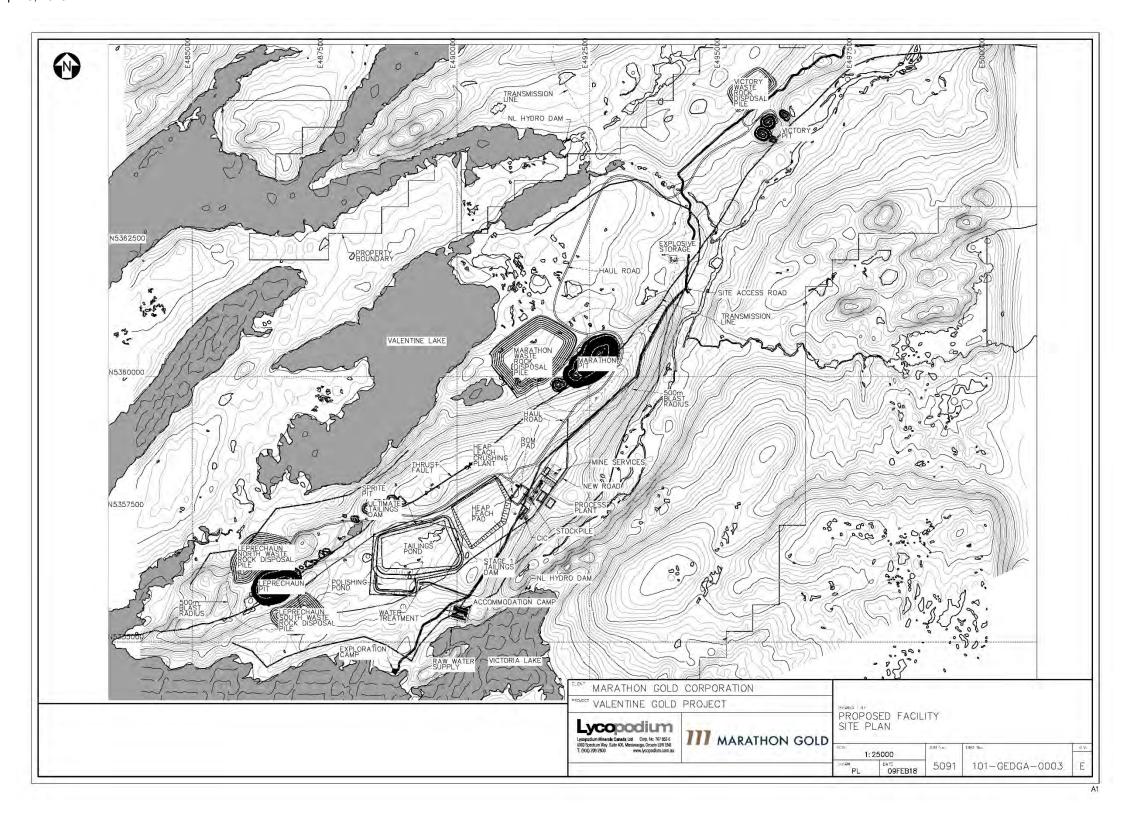


Figure 3-1 Overall Site Plan

Description of the Undertaking April 5, 2019

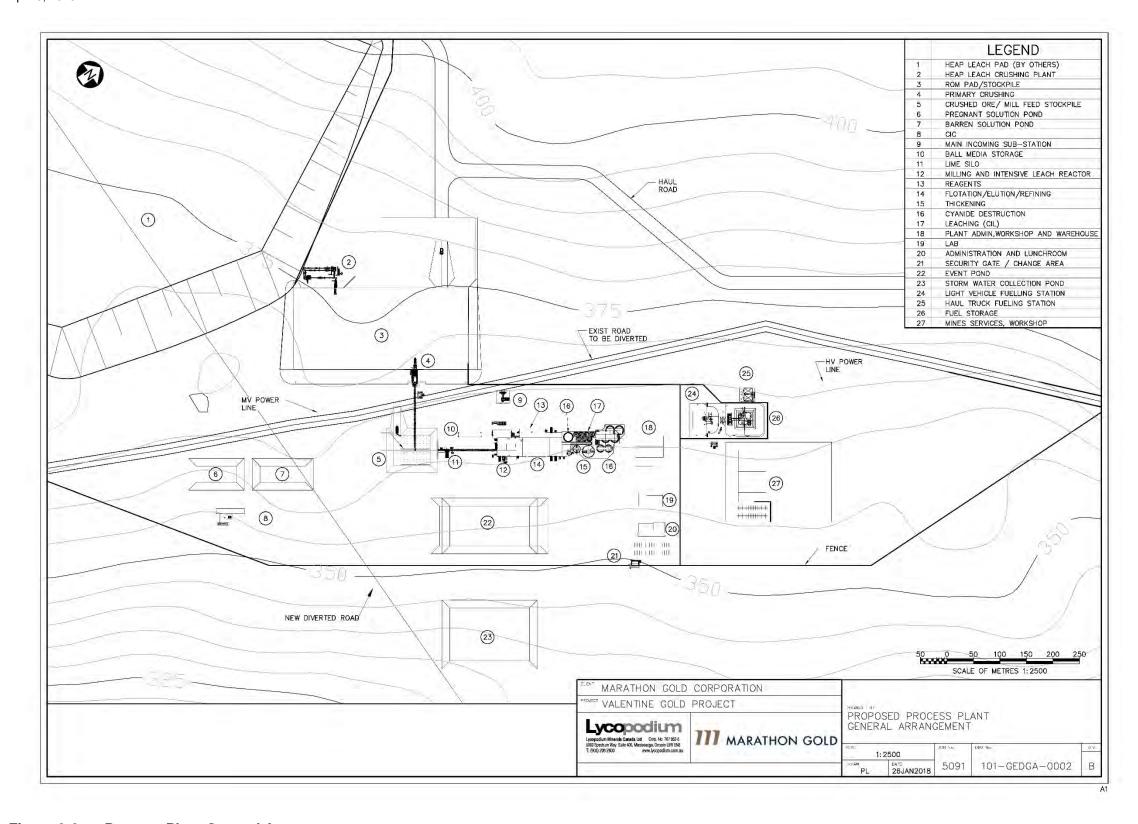


Figure 3-2 Process Plant General Arrangement

Description of the Undertaking April 5, 2019

#### 3.1.1 Roads

# 3.1.1.1 Access Road to Site

Access to the Project is via existing gravel access roads from Millertown as shown in Figure 3-3, owned by the Crown and primarily maintained (e.g., grading, snow clearing) by Marathon. The initial 8 km of road leaving Millertown is owned, operated, and maintained by the province. From the turnoff near the Millertown Dam, the following 80 km of class D gravel road extending to Marathon's existing exploration camp will be upgraded to class A standard 7.3 m wide driving surface and will include ditching on both sides and cross drainage by culverts. Rock and gravel for the road upgrade will be sourced from strategically located borrow pits along the 88 km route, the locations of which will be confirmed through field investigation. As Project planning and engineering proceed, evaluation of the existing culverts and bridges along the 80 km stretch of road will be further evaluated to determine if upgrades or replacement are required.

Marathon is currently investigating the possibility of using a different Crown road that is currently being extended towards the Project Area for forestry access. This alternative road will be a shorter, less winding road, passing less cabins, and would overall be a better road for access to the Project. Marathon will continue consultation with the provincial government to determine if this alternative site access road can be used for the Project. Marathon does not currently have the complete route determined to connect this road to the site, and in general, the viability of this alternative will be further assessed as part of the engineering progression and EA process.

## 3.1.1.2 Plant Site Roads

Plant site roads will provide access to the administration area, process plant facilities, and mine services area. These roads will generally be 6 m wide and will be constructed flush with bulk earthworks pads to allow storm water sheet flow across the site, thereby avoiding the need for deep surface drains and culvert crossings within the plant area.

## 3.1.1.3 On Site Access and Haulage Roads

A number of on site access roads will be constructed to access infrastructure such as the TSF, open pits, and other site infrastructure. These access roads will be designed for smaller heavy equipment and light vehicles, and pipeline and electrical corridors.

Connections between the open pits, waste rock piles, the ROM stockpiles, and the mine services and fueling areas will be to haulage road construction specifications to accommodate haul truck loads, grades, and passing (2-way traffic) requirements, and will be 25 m in width. The width and grades of these roads will vary accordingly. Where possible, haulage roads will be kept separate from other site access roads for safety reasons.

Description of the Undertaking April 5, 2019

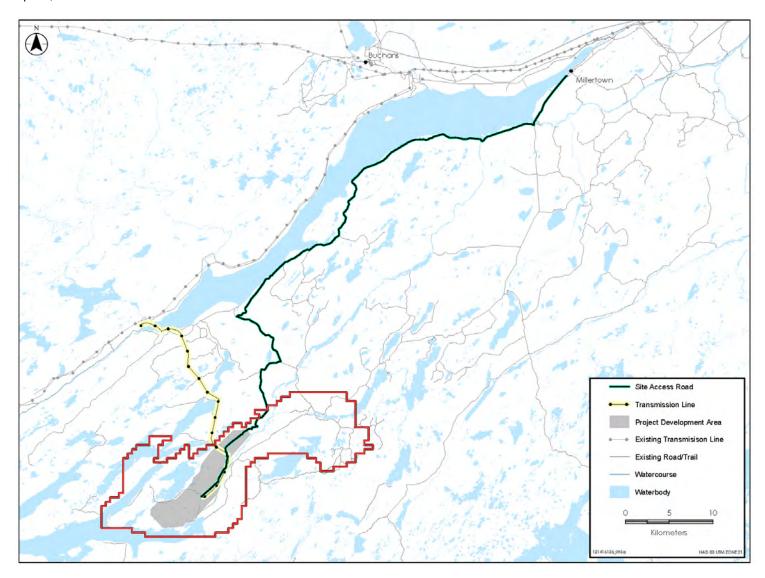


Figure 3-3 Routing of Access Road and Transmission Line

Description of the Undertaking April 5, 2019

# 3.1.2 Open Pits

The Project comprises four mining areas: Leprechaun in the southwest, the Sprite Zone adjoining Leprechaun towards the northeast, the Marathon deposit located about 4.1 km northeast of the Sprite Zone, and the Victory Deposit located 5.5 km northeast of the Marathon Deposit. These four mining areas are shown below in Figure 3-4.

Ultimate pit limits were developed for three deposits using a pit optimization process. Based on the initial results, mineral resources for the Sprite Zone have not been sufficiently explored/defined to determine an ultimate pit limit. As Marathon believes that the additional work will be completed in time to include Sprite in the Project engineering and approvals (EA and permitting), a general description is included in this document. The 'downstream' effects of adding ore, waste rock, and adjustments to other Project components are expected to be relatively modest as the open pit at Sprite is anticipated to be small in comparison with the Leprechaun and Marathon pits. For example, the additional waste rock is expected to be accommodated within the Leprechaun waste rock disposal pile with minimal increase to the current footprint. Similarly, the TSF can be raised or expanded in footprint slightly to accommodate this small change. Similar, relatively minor changes may also be required if additional resources are identified within the other three open pits.

Standard surface mining techniques will be used to create an open pit within each of the four mining areas. The Leprechaun pit design comprises four mining phases and has maximum approximate dimensions of 900 m southwest to northeast by 600 m southeast to northwest, and a maximum depth of 300 m below current ground level. The Marathon pit design includes seven mining phases with one phase being a small standalone pit slightly southwest of the main Marathon pit. The Marathon pit has approximate dimensions of 1,200 m southwest to northeast by 700 m southeast to northwest and a maximum depth of 400 m below current ground level. The Victory pit design consists of four mining phases with one small pit located slightly northeast of the main Victory pit. The Victory pit has approximate dimensions of 540 m southwest to northeast by 280 m southeast to northwest, and a maximum depth of 130 m below current ground level. For the Sprite pit, it is assumed that the dimensions will be similar to Victory.

Description of the Undertaking April 5, 2019

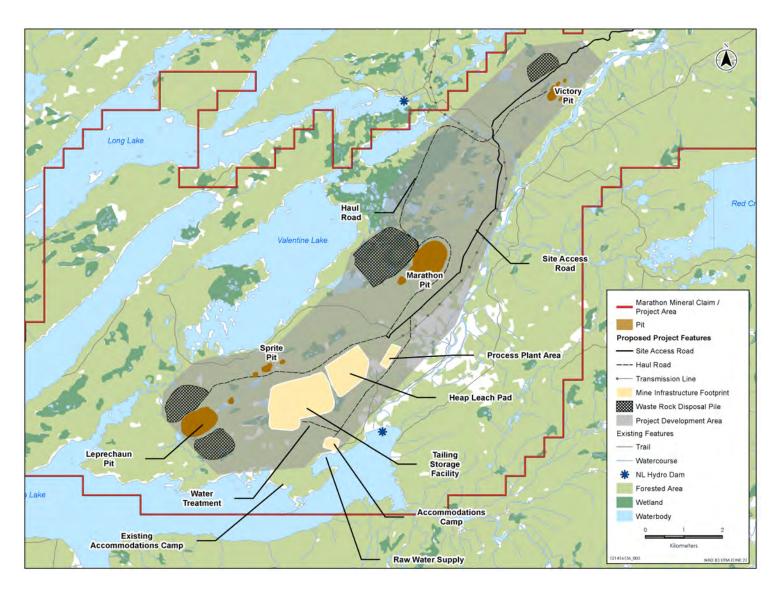


Figure 3-4 Location of Project Deposits

Description of the Undertaking April 5, 2019

# 3.1.3 Mine Waste Rock Disposal Piles

Four waste rock disposal piles are envisioned for the Project as shown in Figure 3-1. The Leprechaun waste rock disposal pile is split in two areas located directly north and southeast of the Leprechaun and Sprite pits. Waste rock produced from the Leprechaun and Sprite pits will be stored in this area. The Marathon waste rock disposal pile is located just north of the Marathon pit. The Victory waste rock disposal pile is located north of the Victory pits.

Mine waste disposal piles will be constructed according to design recommendations and assume a final closure slope angle of 30°. To accomplish this, the waste rock disposal piles will be constructed in single lifts with a 35° face angle and a 6.1 m safety bench.

Based on acid rock drainage / metal leaching (ARD/ML) testing to date, mine waste rock is generally expected to be non-acid-generating. Some geological units within the open pits show low potential for ARD/ML, however the majority of the rock is showing to be acid-buffering and therefore with basic materials management, the waste rock disposal piles can be developed to ensure no ARD/ML issues will occur. Further test work is ongoing to confirm the initial test results. Where waste rock will be used for site earthworks and grading during construction and operational development, necessary test work will be conducted to prevent potentially acid-generating materials from being used in construction.

# 3.1.4 Organics and Overburden Stockpiles

As the open pits are expanded during operations, organic and overburden materials will be excavated. Marathon will develop a detailed material balance for mined materials incorporating strategic planning with respect to the re-use of waste materials for construction, progressive rehabilitation, or longer-term storage for final rehabilitation. This material balance will minimize the Project footprint and re-handling of materials, while maximizing the progressive rehabilitation opportunities related to waste rock disposal piles and other areas of the site.

Similarly, for general site construction and development where excess organic and overburden materials must be stockpiled for future site rehabilitation, these materials may be windrowed along linear corridors (e.g., road, pipelines) or stored in relatively small stockpiles around the site and in close proximity to where these materials will be re-used. Longer term stockpiles will be seeded to reduce erosion due to wind and precipitation.

# 3.1.5 Stormwater Management Infrastructure

Stormwater management across the site will be implemented and operated as follows:

- Diversion of non-contact water where possible. Channels and berms will be constructed around the
  crest of the open pits or up-hill of waste disposal piles and other developed areas in order to divert
  natural precipitation and surface runoff away to natural water drainage areas and away from contact
  with the mining operations, where possible.
- Precipitation and groundwater entering the open pits will be managed in-pit via sloped pit floors and catchment sumps, as required. These catchment sumps are the first opportunity to reduce

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sedimentation and chemistry impacts (e.g. residual ammonia), and appropriately sized sumps with screened intakes and hydrocarbon absorption booms will be employed in-pit. Water collecting in these in-pit sumps will be pumped to the crest of the pit and discharged into an engineered stormwater pond, as required. Stormwater ponds will be appropriately sized for retention and removal (by gravity) of suspended solids (sediment) and discharge from these ponds will be compliant with the applicable regulatory requirements (i.e., MDMER).

- Precipitation runoff from waste rock disposal piles and other developed areas of the site will be collected
  via ditches and channels and directed to a downstream stormwater management ponds similar to those
  to be constructed for management of water from the open pits.
- Stormwater ponds will be constructed in-ground, and/or using earthen berms and till, clay, or synthetic liners, if required, for water retention.
- Stormwater ponds will be located based on topography and geotechnical conditions. Where possible, water collected in pit, or in the stormwater ponds will be used for other purposes on site rather than discharged to the environment.
- If dams are required in order to create stormwater management infrastructure, the design, construction, operations, and closure of any dams will be in accordance with the Canadian Dam Association (CDA) and Mining Association of Canada (MAC) guidelines as well as any provincial and federal requirements.

# 3.1.6 ROM Stockpile

The ROM stockpile is located at the northwest corner of the process plant area and immediately east of the Heap Leach Pad. The stockpile pad is located and sized to allow management of low and high grade ores, destined for the heap leach circuit and process plant circuit, respectively.

# 3.1.7 Heap Leach Process Facilities

The Heap Leach process is a relatively simple, low-cost method of extracting gold from low grade ore that is not economical to send to the primary process plant circuit. The process has been used in the gold, silver, and copper industries since the 1960's and is estimated to be used to process approximately 12% of the world's gold output today. The components of the Heap Leach process include:

- Heap Leach Crushing Circuit
- Heap Leach Pad
- Heap Leach Solution and Event Ponds
- CIC Leach Process
- Elution Circuit

The heap leach process involves the creation of a large, lined pad on which crushed, low-grade ore will be stacked with perforated pipes laid within the ore material at regular horizontal and vertical intervals. A barren solution is pumped into the pile via the piping network constructed within the stacked ore. The solution drains through the ore, collecting gold, and to the bottom of the pile, where the drainage pipe system, above a double-lined containment system, collects the pregnant solution (containing gold) and sends it to a leach reactor system where the gold is absorbed in carbon. The gold-rich carbon is then sent to the elution circuit

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in the process plant for gold extraction and carbon/solution recycling. The heap leach process design criteria are provided in Table 3-1 below.

Table 3-1 Heap Leach Process Design Criteria

Parameter	Units	Value			
Plant Throughput	tpd	9,000			
Gold Head Grade – Range per Mine Plan	g/t Au	0.41 - 0.57			
- Blended Average	g/t Au	0.49			
- Design	g/t Au	0.57			
Silver Head Grade	g/t Au	Trace (negligible)			
Crushing Plant Availability	%	75			
Leach and CIC Availability	%	91.3			
Bond Crusher Work Index (CWi)	kWh/t	15.0			
SMC Axb		87.5			
Material Specific gravity	tonne/m <sup>3</sup>	2.68			
Angle of Repose	degrees	35			
Material Moisture Content	%	5.0			
Primary Crusher		C140 or Equivalent			
Secondary Crusher		Metso HP6 or equivalent			
Tertiary Crusher		Metso HP800 or equivalent			
Secondary and Tertiary Screen		Metso MF4285-2 or equivalent			
Feed Size	F100	800			
Crushing Plant Product Size	P80	9.0			
Crushing Plant Product Size	P100	13.0			
Sodium Cyanide Addition	kg NaCN/t material	0.28 <sup>[1]</sup>			
Lime Addition	kg/t material	0.51			
Estimated total pad area	m <sup>2</sup>	887,364			
No. of pads	#	1			
Lift Height	m	10			
No. of Lifts	#	3			
Tonnes Carbon per Column	tonnes	2.5			
Number Adsorption Column	#	6			
Number of Carbon Strip /Day	#	0.25			

# 3.1.7.1 Heap Leach Crushing Circuit

A three-stage crushing circuit will reduce the ROM material from 800 mm to a P<sub>80</sub> of 9.0 mm (P<sub>100</sub> of 13.0 mm). Feed to the crushing plant will be accomplished via a front-end loader dumping into a feed bin. ROM material will be drawn from the feed bin at a controlled rate of 460 t/h via a variable-speed vibrating grizzly

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feeder to feed the primary jaw crusher. ROM material that is at the primary crusher product size will bypass the jaw crusher to reduce the load and wear on it. Primary crushing product, together with secondary and tertiary crusher products, will be sent to a double deck screen. The oversize material is further crushed by the secondary cone crusher, midsize material is crushed in a tertiary cone crusher, and the undersize material from the screen is considered as the final crushed product which will be transferred onto a conveyor to the heap leach area for material stacking. A weightometer will be placed underneath the crushing plant product conveyor to track and monitor material tonnage being conveyed. The measurements from the weightometer will also be used to control the speed of the vibrating grizzly feeder and the rate at which lime is added.

The crushing plant will include the following key equipment:

- Feed bin
- Vibrating grizzly feeder
- Primary jaw crusher
- Secondary cone crusher
- · Tertiary cone crusher
- Secondary and tertiary crushing screen
- Mill feed apron feeder [variable-speed drive (VSD)]
- Material handling equipment

# 3.1.7.2 Heap Leach Pad

The heap leach pad is located adjacent to the mill and TSF sites as shown in Figure 3-4, and will be designed to contain the estimated 21.5 Mm<sup>3</sup> of low-grade ore to be treated in the current life of mine plan.

The pad design incorporates natural, local topography, constructed containment berms, and a double-lined containment system to form the pad on which the crushed, low-grade ore will be stacked. The location and layout of the pad were selected primarily based on site topography and proximity to Project infrastructure. The overall design has been developed based on the environmental setting of the Project, and similar operations and designs used within Canada.

## Ore Stacking

Crushed ore material from the heap leach crushing plant conveyors will be discharged onto a series of mobile grasshopper conveyors and stacked on the leach pad via a radial stacker. To control pH, pebble quicklime will be added onto the crushing plant conveyor via a lime feeder suspended from a lime silo. The number of grasshopper conveyors in use will vary based on the distance from the end of conveyor to the exact location of material being stacked.

The stacking process will include the following key equipment:

- Material handling equipment (e.g., front end loaders)
- Radial stacker

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## Heap Leaching

The low-grade ore material will be placed on the pad in lifts of 10 m, and will ultimately be terraced with maximum terrace heights of 30 m. The slopes of the terraces will be 2.5H:1V which fulfil the closure slope stability requirement. A total of three vertical lifts, each 10 m in height, will be placed for heap leaching of the material. The pad will be constructed to approximately 942 m x 942 m in size.

Barren cyanide solution will be injected directly into the barren solution line discharging from the barren solution pond. The barren solution pump will be housed in a weather enclosure and pipeline will be installed below the finished ground surface for frost protection. This solution will be indirectly heated in a barren solution heater before being applied to the heap leach pad. Anti-scalant will also be added to prevent scaling. The cyanide and anti-scalant bearing solution will be applied onto the leach pad at a rate of 5 L/m²/h through a piping network consisting of drip irrigation systems. A dozer/tractor with an emitter burial attachment will bury the lines below the surface of the crushed material. Based on the preliminary column leach test results, a leach period of 130 days is required for optimal gold recovery. Pregnant solution drains from the leach pad to the pregnant solution pond, which in turn will pump the solution to the adsorption plant for further processing. This pregnant solution transfer pump will be housed in a weather enclosure and pipeline will be installed below surface. Barren solution from the adsorption plant will be returned to the barren solution pond via an insulated line. In the case of a rainstorm event, solution overflowing from the pregnant or barren solution pond will be directed to the storm water pond.

Once the leaching process is complete, water is cycled through the heap leach pile to remove (or "rinse") all of the process solutions and chemicals from the pipes and the heap leach pile. All rinse water is then treated in the water treatment plant prior to recycling or discharge. The rinse process will be terminated once the water returning from the pile meets environmental discharge criteria.

The heap leaching will include the following key equipment:

- · Dozer/tractor with low ground pressure tracks
- Emitter burial attachment
- · Barren solution heater
- Distribution pumps and pipes

## 3.1.7.3 Heap Leach Solution and Event Pond

A series of storage ponds are required to manage the heap leach solution associated with the heap leach process; these include:

- Pregnant Solution Pond
- Barren Solution Pond
- Event Pond

The pregnant and barren ponds are lined storage ponds for the solutions that will be used throughout the heap leach process. The event pond will be used to collect overflow from the heap leach pad during precipitation events. These ponds are sized to handle the 100-year rain event for 24 hrs. These ponds

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will be lined to reduce the potential environmental impacts, and measures will be implemented to prevent access by wildlife.

## 3.1.7.4 Carbon in Column Leach Process

The adsorption circuit will consist of a single train of six open, up-flow columns, each with a 2.5 t carbon capacity, and will operate as an expanded bed contactor (Figure 3-5).

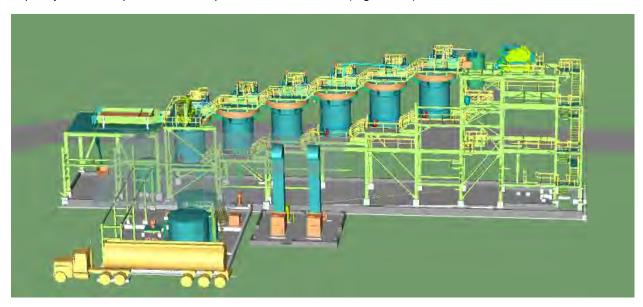


Figure 3-5 CIC Circuit

Pregnant solution containing dissolved gold will be pumped from the pregnant solution pond to the carbon columns to remove gold via carbon adsorption. The adsorption circuit will be operated manually on a daily basis to allow counter-current contact with the carbon to achieve the targeted carbon loading. Solution will enter into the bottom of each column via an annular ring at the center of the column and exit from the top. Dart valves will be used to control flow to a column and to bypass the feed to the next column if required. The first column will contain solution with the highest gold concentration and carbon with the highest gold loading. As the solution passes through the next five columns, the gold concentration will drop off, leaving the weakest solution in contact with the freshest carbon (or most recently stripped carbon) in the last column. Solution exiting the last column will pass over the carbon safety screen to capture, and provide a visual check on, carbon escaping from the columns. The screen underflow will flow to the barren solution pond. This line will be insulated or buried.

Carbon advancement between the columns will be manually controlled by the operator by using carbon advance pumps on each column. Loaded carbon will be transferred from the first column to pass over the loaded carbon screen prior to transport via mobile truck to the acid wash and elution columns at the mill. Subsequently, carbon advancement will progress up the carbon adsorption train from the last column, with regenerated and screened carbon trucked from the mill, added to the last column.

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The carbon adsorption circuit will include the following key equipment:

- Six adsorption columns
- Loaded carbon screen
- Carbon safety screen
- Carbon advance pumps

## 3.1.8 Process Plant Facilities

The process design is comprised of the following circuits:

- · Primary crushing of ROM material.
- A covered crushed material (mill feed) stockpile to provide buffer capacity ahead of the grinding circuit.
- Grinding (milling) circuit: semi-autogenous grinding (SAG) mill with trommel screen, ball mill and cyclones.
- Pebble recycle via front end loader (FEL) reclaim.
- Gravity recovery from ball mill discharge by two semi-batch centrifugal gravity concentrators, followed
  by intensive cyanidation of the gravity concentrate and electrowinning of the pregnant leach solution in
  a dedicated cell located in the goldroom.
- Trash screen and rougher flotation.
- Thickening of flotation concentrate and flotation tails prior to leaching.
- Regrind mill for the flotation concentrate.
- Flotation concentrate leach and CIL, and flotation tails CIL.
- Acid washing of loaded carbon and elution followed by electrowinning and smelting to produce doré. A
  doré bar is a semi-pure alloy of gold, which can be transported to a refinery for further purification.
  Carbon regeneration by rotary kiln.
- Cyanide destruction of tailings using Air/SO<sub>2</sub> process and tailing management facility.

# Plant Design Criteria

The key process design criteria for the mill are listed in Table 3-2. A rendering of the mill, flotation and CIL plant is provided in Figure 3-6.



Figure 3-6 Mill, Flotation and CIL Plant

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Table 3-2 Key Milling Plant Process Design Criteria

Parameter	Units	Value
Plant Throughput	tpd	9,000
Gold Head Grade – Range per Mine Plan	g/t Au	1.04 – 4.56
- Blended Average	g/t Au	2.2
– Design	g/t Au	3.26
Silver Head Grade	g/t Au	Trace (negligible)
Crushing Plant Availability	%	75
Plant Availability	%	91.3
Bond Crusher Work Index (CWi)	kWh/t	15.0
Bond Ball Mill Work Index (BWi)	kWh/t	15.9
SMC Axb		87.5
Bond Abrasion Index (Ai)	g	0.235
Primary Crusher		C140 or Equivalent
Material Specific gravity	tonne/m <sup>3</sup>	2.68
Angle of Repose	degrees	35
Moisture content	%	5.0
SAG Mill		6.70 m dia. x 3.75 m EGL
Ball Mill		Overflow type – 6.10 m dia. x 8.54 m EGL
Grind Size (P <sub>80</sub> )	μm	75
Cyclone Cluster	#	16 operating + 4 stand-by
Cyclone size	mm	400
Sodium Cyanide Addition	kg NaCN/t material	0.98
Lime Addition (90% purity)	kg/t material	0.25
Frother	kg/t material	0.025
Promotor (Aero 208)	kg/t material	0.06
Potassium Amyl Xanthate (PAX)	kg/t material	0.11
Copper Sulphate	kg/t material	0.30
SMBS	kg/t material	0.70
Caustic	kg/t material	0.42
Flocculant	kg/t material	0.032
Flotation Conc. Pre-aer & CIL Tanks	#	1+6
Flotation Tails CIL Tanks	#	4
Tonnes Carbon per Column	t	5
Number of Carbon Strip /Day	#	1.0

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# 3.1.8.1 Crusher and Mill Feed Stockpile

Figure 3-7 provides a rendering of the primary crushing and mill feed stockpile. Material will be hauled from the mine and dumped on the ROM pad for blending and re-handling into the ROM hopper. Provision for direct tipping to the ROM hopper will be provided. Material from the ROM hopper will be crushed by a primary jaw crusher. A ROM hopper apron feeder will be used to regulate feed at 457 t/h into a vibrating grizzly and the jaw crusher. A fixed rock breaker will be used to break oversize rocks at the top of the feed bin. Pebbles from the SAG mill will be dumped on crusher discharge conveyor by a FEL. The crushed material is conveyed to a covered stockpile, which will provide approximately 24-hrs of storage.

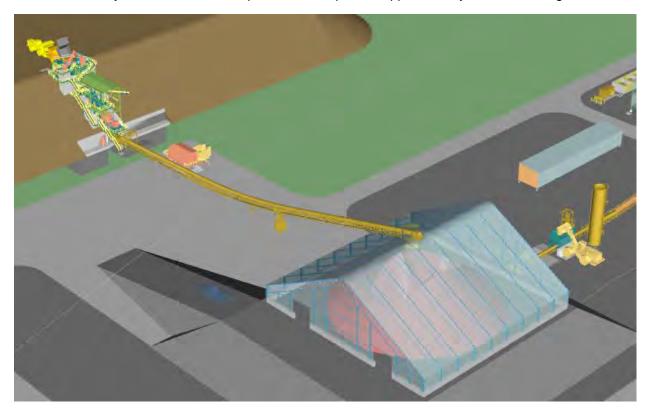


Figure 3-7 Primary Crushing and Mill Feed Stockpile

The mill feed stockpile will be equipped with apron feeders to regulate feed at 375 t/h into the SAG mill. Crushed material drawn from the stockpile will feed the SAG mill and ball mill circuit via the mill feed conveyor.

The material handling and crushing circuit will include the following key equipment:

- ROM hopper
- Apron feeder (with VSD)
- Vibrating grizzly
- Fixed rock breaker
- Primary jaw crusher

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- Mill feed apron feeder (VSD)
- · Material handling equipment

# 3.1.8.2 Grinding Circuit (Mill)

The grinding circuit will consist of a SAG mill followed by ball mill in closed circuit with hydro-cyclones. The SAG mill grate aperture size will be 12.5 x 20 mm. The SAG mill will discharge through a trommel where the pebbles will be screened out and carried back to the crusher discharge conveyor via front end loader. Trommel undersize discharges into the cyclone feed pumpbox, along with ball mill discharge material. Water is added to the cyclone feed pumpbox to obtain appropriate density prior to pumping to the cyclones.

Cyclone overflow gravitates to the rougher flotation conditioning tank via a trash screen. Cyclone underflow, together with gravity circuit tails and gravity screen oversize, flow by gravity to the ball mill for further size reduction. The Ball mill product will discharge onto a launder containing a slot to allow a portion of the stream to gravitate into a pumpbox to be pumped to the gravity circuit.

The grinding circuit will include the following key equipment:

- SAG mill 3,000 kW VSD
- Ball mill 5,400 kW
- Cyclone feed pumpbox
- Classification cyclones

# 3.1.8.3 Gravity Recovery Circuit

The gravity circuit comprises two parallel centrifugal concentrators complete with feed scalping screens. Feed to the circuit is extracted from the ball mill discharge launder and pumped to the scalping screens. Gravity scalping screen oversize at +2 mm will report by gravity to the ball mill feed, while the gravity tails will gravitate to the mill discharge pump box. Scalping screen undersize is fed to the centrifugal concentrator.

Operation of the gravity concentrator will be semi-batch and the gravity concentrate will be collected in the concentrate storage cone and subsequently leached by the intensive cyanidation reactor circuit (ICR).

The gravity recovery circuit will include the following key equipment:

- Gravity feed scalping screen
- Gravity concentrators

# 3.1.8.4 Intensive Cyanidation Reactor

Concentrate from the grinding circuit gravity concentrators will be sent to the intensive cyanidation reactor (ICR) to recover the contained gold by cyanide leaching. The concentrate from the gravity concentrators will be discharged to the ICR gravity concentrate storage cone and de-slimed before transfer to the ICR.

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ICR leach solution (2% NaCN, 2% NaOH and Leach Aid) will be made up within the heated ICR reactor vessel feed tank. From the feed tank the leach solution will be circulated though the reaction vessel for approximately 20 hrs, then drained back into the feed tank. The leached residue within the reaction vessel will be washed, with wash water recovered to the reaction vessel feed tank, and then the solids will be pumped to the flotation concentrate regrind mill.

The ICR pregnant leach solution will be pumped from the reaction vessel feed tank to the ICR pregnant solution tank, located near the goldroom.

ICR pregnant solution will be pumped to the goldroom for gold recovery as gold sludge using a dedicated electrowinning cell. The sludge will be combined with the sludge from the carbon elution electrowinning cells and smelted or may be smelted separately for metallurgical accounting purposes.

The ICR circuit will include the following key equipment:

- Gravity concentrate storage cone
- Intensive cyanidation reactor
- Reactor vessel feed tank heater
- Leach Aid screw feeder
- ICR pregnant solution tank
- ICR electrowinning cell

## 3.1.8.5 Flotation Circuit

Cyclone overflow will gravitate over the trash screen, to remove foreign material prior to flotation. Trash will report to the trash bin which will be periodically removed for emptying. Screen undersize will gravitate to the rougher conditioner tank. Reagents will be added into the rougher conditioner tank and mixed thoroughly.

The rougher flotation cells will consist of eight 70 m<sup>3</sup> forced-air tank cells in series. Rougher concentrate will gravitate into the flotation concentrate thickener. The rougher tailings will gravitate to flotation tailings thickener. Flocculant will be added into each thickener.

Flotation concentrate thickener feed rate is 18.75 t/h while flotation tails thickener feed rate is 356 t/h. Flotation tails thickener underflow will report to number seven CIL tank, and flotation concentrate thickener underflow and ICR residue will report to the concentrate regrind mill. Fine grinding will be achieved via attrition and abrasion of the particles in a vertical, agitated, mill containing small ceramic beads as the grinding medium.

The flotation, thickening and regrinding circuit will include the following key equipment:

- Trash screen
- Rougher flotation tank cells
- Flotation concentrate thickening
- Flotation tails thickening
- Regrind mill

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#### 3.1.8.6 Carbon in Leach Process

CIL tanks consist of two sets of adsorption tanks. The first set of CIL tanks accepts regrind mill discharge together with barren solution from electrowinning cells; these streams will be discharged into the leaching circuit pre-leach tank before CIL tanks. The second set of tanks accepts tails from first set of tanks as well as flotation tails thickener underflow. One interim carbon screen is used between these two CIL circuits to prevent slurry from the large CIL tank from going to the small CIL tanks.

The first leach circuit for processing ground concentrate will consist of one pre-aeration tank and five CIL tanks. The CIL tanks will be identical in size, with a total circuit residence time of 48 hrs at 46% w/w density in the tanks with solids flowrate of 18.8 t/h. The second set is three identical CIL tanks, larger in size than the concentrate CIL tanks, with total residence time of 24-hrs at 53% w/w and 375.2 t/h solids flowrate. Air will be sparged to each of the tanks to maintain adequate dissolved oxygen levels for leaching.

Quicklime will be added to ensure that the slurry pH is suitable for cyanidation. Cyanide solution will be added into the first tank of the reground concentrate CIL tanks.

Fresh / regenerated carbon from the carbon regeneration circuit will be returned to the last tank of the CIL circuit, and will be advanced counter currently to the slurry flow by pumping slurry and carbon from last CIL tank to previous CIL tank, and so on. The intertank screen in each CIL tank will retain the carbon whilst allowing the slurry to flow by gravity to the downstream tank. This counter-current process will be repeated until the carbon, by then loaded with gold, reaches the first CIL tank. Recessed impeller pumps will be used to transfer slurry between CIL tanks and from the lead tank to the loaded carbon screen mounted above the acid wash column in the elution circuit.

Slurry from the last CIL tank will gravitate to the vibrating carbon safety screen to recover carbon leaking from worn screens or overflowing tanks. Screen underflow will gravitate to the cyanide destruction unit. Screen oversize (recovered carbon) will be collected in a fine carbon bin for potential return to the circuit.

The leach and carbon adsorption circuit will include the following key equipment:

- Flotation concentrate pre-aeration tank
- Flotation concentrate CIL tanks
- Flotation concentrate and tails CIL tanks
- Loaded carbon screen
- Intermediate carbon screen
- Carbon safety screens

# 3.1.8.7 Cyanide Destruction

Plant tailings from the CIL circuit is detoxified to a weak acid dissociable cyanide (CN<sub>WAD</sub>) concentration of <1 ppm, to comply with environmental requirements, prior to deposition in the TSF. The CIL tails at 52% solids will flow by gravity to the cyanide destruction tank. The tank will operate with a total residence time of approximately 120 mins to reduce CN<sub>WAD</sub> design levels from approximately 150 ppm to less than 1 ppm.

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Cyanide destruction is undertaken using the SO<sub>2</sub>/air method. The reagents required being air, caustic, copper sulphate, and sodium metabisulphite (SMBS). The cyanide destruction tanks are equipped with air addition points and an agitator to thoroughly mix the air and reagents with the tailings slurry.

Detoxified tailings will be pumped to the TSF for final deposition with decant water from the TSF returned for use as process water. Overflow from the TSF will be discharged to a polishing pond for further treatment and monitoring before discharge into the environment.

The main equipment in this area includes:

- One agitated cyanide destruction tank
- Air supply system
- Reagent supply systems

# 3.1.8.8 Carbon Acid Wash, Elution, and Regeneration Circuit

#### Carbon Acid Wash

Prior to carbon stripping (elution), loaded carbon will be treated with a 3% hydrochloric acid solution to remove calcium, magnesium and other salt deposits that would otherwise render the elution less efficient or be 'baked on' in the subsequent elution and carbon regeneration steps and ultimately foul the carbon.

Loaded carbon from the loaded carbon recovery screen will flow by gravity to the acid wash column. Additionally, loaded carbon from the heap leach facility will be brought by truck and hydraulically transferred into the same acid wash column.

Entrained water will be drained from the column and the column then refilled with a 3% hydrochloric acid solution, from the bottom up. Once the column is filled with the carbon, it will be left to soak in the acid for 30 mins after which the spent acid will be rinsed from the carbon and discarded to the cyanide destruction tank.

The acid washed carbon will then be transferred to the elution column for carbon stripping.

The acid wash circuit includes the following key equipment:

Acid wash column – 5 t capacity.

## Carbon Stripping (Elution)

Carbon stripping (elution) will use a split Anglo-American Research Laboratory (AARL) process.

The elution sequence will commence with the injection of a set volume of water into the bottom of the elution column, along with the simultaneous injection of cyanide and sodium hydroxide solution to achieve a 2% w/w NaOH and 2% w/w NaCN solution. Once the prescribed volume has been added, the pre-soak period will commence. During the pre-soak, the caustic/cyanide solution will be circulated through the column and the elution heater until a temperature of 95°C is achieved.

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Upon completion of the pre—soak period, the last four bed volumes (BV) of low grade (lean) eluate from the previous elution will be pumped through the heat exchanger and elution heater, then through the elution column to the pregnant eluate tank at a rate of 2 BV/hr. At this stage the temperature of the eluent passing through the column will be raised to 125° - 130°C and the gold will be stripped off the loaded carbon.

Eluate will flow up and out of the top of the column, passing through the heat exchanger via the elution discharge strainers and to the pregnant eluate tank.

Once the lean eluate storage volume is exhausted, heated incoming strip water (4 BV) will be used to continue the strip, followed by 2 BV of water to cool the carbon. The last 4 BV will be directed to the lean eluate tank for use in the next strip.

Upon completion of the cool down sequence, the carbon will be hydraulically transferred to the carbon regeneration kiln feed hopper via a de-watering screen.

The stripping circuit includes the following key equipment:

- Elution column 5 t capacity.
- Strip solution heater with heat exchangers.
- Strip water, lean eluate and pregnant eluate tanks.

## Carbon Regeneration (Reactivation)

Carbon will be reactivated in a diesel fired rotary kiln. Dewatered barren carbon from the stripping circuit will be held in a 10 t kiln feed hopper. A screw feeder will meter the carbon into the reactivation kiln, where it will be heated to 650° - 750°C in an atmosphere of superheated steam to restore the activity of the carbon. Carbon discharging from the kiln will be quenched in water and screened on a carbon sizing screen to remove undersized carbon fragments. The undersize fine carbon will be collected in a filter and bagged to be sold or disposed, depending on its residual gold loading. Reactivated carbon will be returned to the CIL circuit or trucked to the heap leach adsorption circuit.

As carbon is lost by attrition, new carbon is added to the circuit after attritioning in a carbon conditioning hopper to remove fines. The new carbon will then be transferred via the carbon sizing screen into the circuit the same way as reactivated carbon.

The carbon reactivation circuit includes the following key equipment:

- Carbon dewatering screen
- Regeneration kiln including feed hopper and screw feeder
- Carbon quench tank
- Carbon sizing screen
- CIL barren carbon hopper
- Carbon fines hopper
- Carbon fines filter
- Fresh carbon conditioning hopper

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## 3.1.8.9 Electrowinning and Goldroom

Gold will be recovered from the pregnant eluate by electrowinning and smelted to produce doré bars.

The pregnant eluate is pumped through two electrowinning cells with stainless steel mesh cathodes. Gold will be deposited on the cathodes and the resulting barren solution will gravitate back into the barren solution tank for reuse or pumped to the leach circuit. One additional electrowinning cell will be dedicated for processing ICR pregnant solution.

The gold-rich sludge will be washed off the steel cathodes in the electrowinning cells using high pressure water sprays and will gravitate to the sludge hopper. The sludge will be drained, filtered, dried, mixed with fluxes and smelted in an induction furnace to produce gold doré.

The electrowinning and smelting process will take place within a secure and supervised goldroom equipped with access control, intruder detection and closed-circuit television equipment.

The electrowinning circuit and goldroom includes the following key equipment:

- Electrowinning cells with rectifiers
- Sludge pressure filter
- Drying oven
- Flux mixer
- Induction smelting furnace with bullion moulds and slag handling system
- Bullion vault and safe
- Dust and fume collection system
- Goldroom security system

# 3.1.8.10 Reagent Storage

For the management of unexpected reagent spills, the reagent preparation and storage facilities will be located within containment areas designed to accommodate more than the content of the largest tank, in the event of a leak or spill. Where required, each reagent system will be located within its own containment area to facilitate its return to its respective storage vessel and to avoid the mixing of incompatible reagents. Storage tanks will be equipped with level indicators, instrumentation, and alarms to prevent spills from occurring during normal operation. Appropriate ventilation, fire and safety protection, eyewash stations, and Material Safety Data Sheet (MSDS) stations will be located throughout the facilities. Sumps and sump pumps will be installed for spillage control.

# 3.1.9 Gold Shipment to Market

Gold product to be exported from site would be limited to armored trucks, owned and operated by a third party, used to transport the doré bars to market via the site access road from Millertown, then via provincial highways.

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# 3.1.10 Tailings Storage Facility (TSF)

# 3.1.10.1 Design Requirements and Concept

The TSF has a preliminary design to accommodate the estimated 30 Mm<sup>3</sup> of tailings material that will be produced over the life of the mine and is based on an average annual throughput of 3.0 Mtpa for the mill. The preliminary layout for the TSF is shown in Figure 3-8.

The overall design objective of the TSF is to protect the regional groundwater and surface water resources during both operations and long term (post-closure), achieve safe and efficient tailings storage and effluent management during operations, and to achieve effective rehabilitation upon mine closure. The design of the TSF has considered the following:

- Reducing the impact and risks to the surrounding environment
- Permanent, secure, and total confinement of solid waste materials within the engineered TSF
- Control, collection, and removal of effluent from the tailings during operations for recycling as process water to the maximum practical extent
- The inclusion of monitoring features for the facility to demonstrate performance goals are achieved and design criteria and assumptions are met
- Staged development of the TSF over the life of the Project to defer capital cost and allow for efficient
  use of waste materials from pit stripping as construction materials for the TSF

A conventional downstream embankment construction concept is planned based on the mine plan and assessment of site topography. The TSF is currently sited in the middle of the PDA, southwest of both the mill and heap leach pad sites.

The preliminary design has the TSF embankments being raised in five stages and will be constructed out of mine waste rock, and locally sourced borrow materials.

To date, ARD/ML test work has shown potential for some high grade ore to be potentially acid generating, however based on the geology, further metallurgical testing and ARD/ML testing on source rock, and labscale process tailings, is expected to show that the combined tailings will be non-acid-generating. The current TSF design allows for a permanent water cover over the deposited tailings in the event that the results of the detailed test work require this ARD/ML preventative measure.

A polishing pond will be constructed downstream of the tailings impoundment The polishing pond has similar construction as the TSF. The polishing pond will be constructed as part of the initial TSF construction phase and the crest will have an elevation 380.0 m.

The polishing pond will be capable of retaining effluent from the tailings impoundment prior to release to the environment via the water treatment plant. The pond will be engineered to manage the design precipitation and flooding events to maintain the stability of the TSF overall, and prevent unplanned effluent discharge to the environment.

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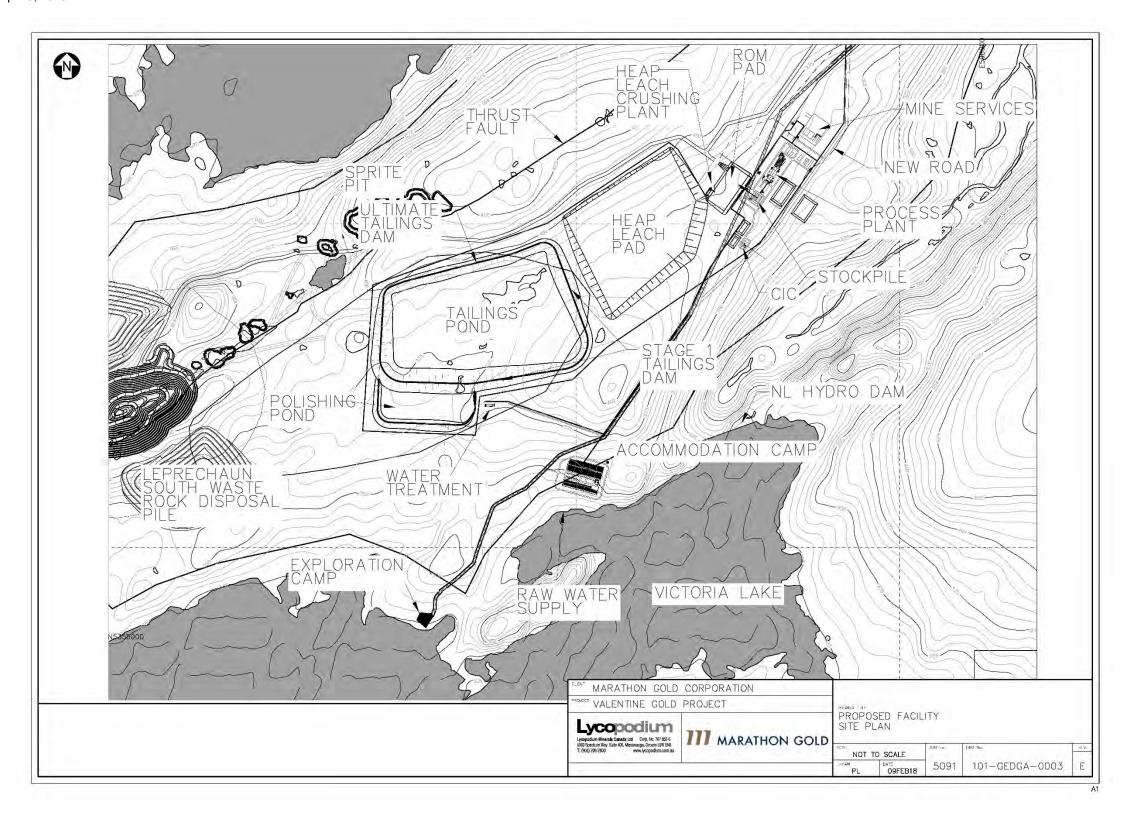


Figure 3-8 Tailings Storage Facility

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The dams required for the tailings impoundment will be designed, constructed, operated, and closed in accordance with the CDA and MAC guidelines, as well as all applicable provincial and federal requirements. Where possible, dams will be breached at closure to eliminate the long-term liabilities associated with dam structures.

## 3.1.11 Water Treatment Plant

A dedicated water (effluent) treatment facility is required for the Project to treat suspended solids, pH, and other water quality issues. Based on the preliminary water balance, the water treatment facility is currently anticipated to treat a nominal flow rate of 997 m³/h and a peak flow rate of 1,396 m³/h. It will use proven treatment processes to handle the effluent water to meet the applicable requirements and regulations for environmental discharge water quality. Discharge from the plant will be directed to Victoria Lake.

## 3.1.12 Substations and Power Distribution

Site power will be provided from a HV line extending from the Star Lake area to the main substation at the Project site, constructed and connected by NL Hydro. A preliminary routing of the HV line is provided in Figure 3-3, as provided to Marathon by NL Hydro. Consultation with NL Hydro is in the early stages and the exact powerline route, connection details, and power purchase agreement will be determined through further consultation.

A peak demand of 23 MW is required for the facility. The semi-autogenous grinding (SAG) and ball mills at the flotation plant are the largest electrical loads. The SAG and ball mills have been specified with a variable frequency drives to reduce the load surge during start-up.

Primary power will be delivered to the site substation, from where it will be stepped down and distributed around to the various equipment and locations required around the site, primarily via overhead power lines.

# 3.1.12.1 Electrical Distribution

The plant electrical system is based on 13.8 kilovolt (kV), 2,000 A, 60 hertz (Hz) distribution. The 66 kV feed from local power authority will be stepped down to 13.8 kV at the plant main substation, and will supply the plant main 13.8 kV switchgear housed in the switchroom of the plant main substation. The SAG mill, ball mill, and cyclone feed pumps variable frequency drives (VFDs) will have 13.8 kV input, fed by plant main 13.8 kV switchgear, for their phase shifting input transformer and 4.16 kV output. Separate 13.8 kV/600 V distribution transformers at the plant various substations will be fed from the plant main 13.8 kV switchgear.

The following substations with switch rooms will be provided:

- Plant main substation
- Heap leach plant feed preparation substation
- Heap leach plant [CIC] substation
- Flotation plant main substation
- Floatation plant feed preparation substation
- Floatation plant services and buildings substation

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Switchrooms will house 13.8 kV switchgear (plant main substation only), medium voltage (MV) VFDs (flotation plant main substation only), 600 V motor control centres (MCCs), low voltage (LV) VFDs, plant control system cabinets, lighting transformers, various distribution boards, and uninterruptible power source (UPS) power distribution.

Overhead power lines of 13.8 kV will provide power to various remote facilities. Pole mounted transformers will step down the voltage at each location, and supply an outdoor 480 V switchboard local to each equipment area.

# 3.1.12.2 Electrical Buildings

Electrical buildings will be pre-fabricated 'flat pack' panel buildings to reduce installation time on site. Buildings will be installed on a structural framework over 2 m above ground level to allow for bottom entry of cables into electrical cabinets. The electrical buildings will be installed with high-voltage alternating current (HVAC) units and suitably sealed to prevent ingress of dust.

# 3.1.12.3 Transformers and Compounds

The plant main transformer 66 kV/13.8 kV will be oil natural air natural (ONAN), with provisions for future oil natural air forced (ONAF), cooling configuration and will have either on-line tap changer (OLTC) or external voltage regulators. SAG mill, ball mill and cyclones feed pumps VFD phase shifting input transformers (13.8/4.16 kV) will be dry type and part of concerned VFD panel line-up. All plant 13.8 kV/600 V distribution transformers will be of ONAN, with provisions for future ONAF, cooling configuration and will have de-energized tap changer.

Fire rated concrete walls will be constructed around the oil filled transformers.

## 3.1.13 Water Intake and Distribution

# 3.1.13.1 Raw Water Supply System

It is planned that raw water will be obtained from Victoria Lake. Fresh water will be supplied by the raw water pumps to an atmospheric vented fresh water tank. Raw water will be used for all purposes requiring clean water with low dissolved solids, primarily as follows:

- Fire water for use in the sprinkler and hydrant system
- Cooling water for mill motors and mill lubrication systems
- Gland water for pumps
- Reagent make-up
- Feed for the potable water plant
- Raw water will be treated and stored in the potable water storage tank for use in safety showers and other similar applications

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# 3.1.13.2 Fire Water Supply System

Fire water will be piped to the main facilities via buried underground fire water ring mains around each of the facilities. In addition, buildings will be equipped with hose cabinets and supplemented with hand held fire extinguishers of two types—general purpose extinguishers for inside plant areas, and dry type extinguishers for inside electrical and control rooms. Ancillary buildings will be provided with automatic wet sprinkler systems throughout the buildings.

## 3.1.13.3 Potable Water Supply

The potable water treatment plant will be designed to NL drinking water guidelines. The plant is expected to include multimedia filtration for reduction of turbidity, followed by ultraviolet disinfection for primary disinfection, and the addition of sodium hypochlorite for secondary disinfection. Treatment residuals from the potable water treatment plant (e.g., multimedia filtration backwash) will be sent to the tailings thickener for ultimate disposal within the TSF. Treated potable water from the potable water treatment plant will be stored in the plant potable water tank and the safety shower water tank. Treated potable water from the plant potable water tank will be distributed via the plant potable water pump in a piping ring main to serve potable water users in the facilities. Treated potable water from the safety shower water tank will be distributed via the safety shower water pumps to drinking fountains, eye wash stations, and safety showers.

Potable water piping in the plant area will either be buried below the frost line, routed through heated buildings, or heat traced and insulated. Manual drain points will be included to allow emptying of pipelines, should conditions dictate.

## 3.1.13.4 Process Water Supply

Process water recycled from the flotation concentrate and tailings thickeners overflow and TSF decant water will meet the main process water requirements. Raw water will provide additional make-up water requirements.

# 3.1.14 Other Plant Site Buildings

The following plant site buildings are shown in Figure 3-2.

## 3.1.14.1 Plant Administration, Workshop, and Warehouse

The plant administration, workshop, and warehouse building is located east of the processing plant. The building will be of poured concrete foundation and steel-clad construction, with the building sectioned for the different components required.

# 3.1.14.2 Laboratory

The laboratory will be of poured concrete foundation and steel-clad construction, and with added ventilation equipment as required by regulation for the types of test work conducted.

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#### 3.1.14.3 Administration and Lunchroom

General administration offices and the plant lunchroom will be located in a separate building near the entrance to the plant site. The building is expected to be of poured concrete foundation and steel-clad construction.

# 3.1.14.4 Mine Services and Workshop

The mines services and workshop will be located east of the process plant and general plant site buildings for ease of access and proximity of common services and infrastructure. Mine heavy equipment (e.g., trucks, loaders), will only be able to travel on the east side of the building, while personnel vehicles will be kept to the east and south, separated by fencing and barriers for safety. The building will consist of sufficient servicing and maintenance bays and equipped with overhead cranes to service the mine heavy equipment fleet. The building will be of poured concrete foundation and steel-clad construction, including in floor sumps for catchment of sediments and hydrocarbons from maintenance activities. Oil/water separation units will be incorporated into the design where required.

## 3.1.14.5 Security

A security building will be constructed adjacent to the plant site gate where employees and visitors will be required to check in and out. The security building will also serve as the primary health and safety emergency station where the site ambulance and other emergency response equipment will be stationed.

# 3.1.15 Accommodation Camp

A permanent 200-person accommodation camp with associated services will be located to the south of the process plant and will provide accommodation for construction and later for operating and maintenance staff. A 100-person temporary construction camp will be built for the peak load workforce levels during construction. This camp will use the common facilities in the permanent camp. The temporary construction camp will be decommissioned once construction activities are complete.

# 3.1.16 Plant Site Stormwater Pond and Sanitary Effluent

Sewage generated within the Project site will be collected via an underground sanitary sewer network to a common location, where it will be treated by an above grade mechanical sewage treatment plant (vendor package). Treated sewage effluent will be discharged to the environment, meeting local permit requirements. Sludge generated as a by-product of the treatment of sewage will be disposed off-site by a licensed contractor.

The plant site stormwater pond is located to the southeast side (and down-gradient) of the plant area. This pond will manage all plant site stormwater runoff prior to pumping to the water treatment plant prior to release.

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# 3.1.16.1 Fuel Storage and Fueling Stations

Diesel fuel will be stored on site near the mine services area for heavy and light vehicle refueling. Diesel fuel storage and supply will be provided by a fuel supplier and include three 90 m³ fuel storage tanks, offloading pumps, dispensing pumps, associated piping, and electronic fuel control/tracking system. The diesel fuel area will contain the following equipment:

- Diesel unloading pump
- Diesel storage tank
- Diesel supply pumps
- · Light vehicle bowsers
- Heavy vehicle bowsers

A vertical spindle sump pump will be provided to remove precipitation from the diesel fuel bund (bermed catchment) area.

# 3.2 Construction and Development

Marathon will develop specific protocols as part of an overall Environmental Management System (EMS) to facilitate the execution of the site development in an environmentally responsible and safe manner. In addition, Marathon will develop an Environmental Protection Plan (EPP) specific to the construction phase that will outline best management practices for all construction activities. The EPP will be reviewed and approved by government regulators prior to the start of any site-specific construction activities.

General construction activities for the Project include:

- Site preparation includes cutting and clearing of vegetation and removal of organic materials and overburden over the areas to be developed. Site preparation also includes the development of construction stage water and erosion control (e.g., ditching, sedimentation ponds, etc.) and construction access roads
- Earthworks for infrastructure development areas, this includes excavation, preparation of excavation bases, placement of structural fill, and grading to facilitate infrastructure construction. For the open pits, earthworks include stripping and stockpiling of organic and overburden materials and development of in-pit quarries to supply site development rock for infrastructure such as structural fill and road gravels
- Construction of infrastructure placement of concrete foundations, and construction of buildings and infrastructure as required for the Project
- Major equipment installation
- Installation of utilities construction and connection of power, water, and fuel supply infrastructure
- Open pit pre-production (pre-stripping) and construction of the initial stages of the Heap Leach Pad and TSF

Further details on specific construction and development activities are provided below.

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# 3.2.1 Vegetation Removal

In preparation for earthworks, site development, and infrastructure construction, vegetation removal will be completed over development areas in accordance with the cutting permits issued. Vegetation removal will be planned as per the regulations pertaining to bird breeding seasons, and where/if the schedule requires vegetation clearing during bird breeding seasons, experienced environmental monitors will inspect clearing areas ahead of the work to avoid disturbance of nests.

# 3.2.2 Earthworks

The Project will require earthworks development throughout the PDA to support infrastructure, such as roads, buildings, camp, tailings dams, heap leach pad, and sedimentation ponds. Based on available mapping information, it is known that the surface elevations across the site vary and the soil conditions vary from boggy areas, thin to thick till layers, and bedrock outcrops.

It is assumed that building foundations will be constructed on dense, natural glacial tills, bedrock, and/or structural fill. In general, the foundations throughout the Project will require a soil cover of 1,800 mm or equivalent for frost protection. Surficial organic materials will be removed from the footprint of the Project structures before placing foundations or structural fills.

Organic and overburden soils will be stockpiled strategically around the site for future site rehabilitation as described in Section 3.1.4.

Building foundations and equipment pads and foundations will be prepared and placed on natural, dense glacial till, bedrock, or compacted, engineered structural fill. Structural fill is expected to be sourced from the mine waste rock excavated during open pit pre-stripping or through cut and fill civil earthworks at the site.

# 3.2.3 Concrete

Concrete will be required for building foundations and other site construction and development features and is expected to be primarily batched on site. Coarse aggregates are expected to be crushed from mine waste rock and/or site rock quarries. Fine aggregates (sand) are expected to be sourced from local quarries in the area. Some pre-cast of larger building footings may be poured off-site and transported to the site, if the schedule requires.

# 3.2.4 Fuel Supply

Fuel required for construction will be provided by the contractor(s). Temporary storage and fueling locations and procedures will conform to applicable regulatory criteria.

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# 3.2.5 Materials Shipping and Employee Transportation

Materials required for Project construction will be shipped to site by truck via the main access road. Given the approximately two-hour travel time from Millertown to the site, employees will be transported from nearby communities by bus and would stay in the on-site accommodations camp.

# 3.2.6 Open Pit Development

During the first year of mining operations, prior to the plant start-up, approximately 3,780,000 t of waste rock is required for construction of the mill area, TSF, and heap leach facilities. During this initial development, some mill feed and heap leach material will be mined and stockpiled as required. A total of 7,000,000 t of waste rock material, 1,580,000 t of millfeed material, and 1,159,000 t of heap leach material will be mined during the preproduction period. At the conclusion of the preproduction period, enough exposed mill feed and heap leach material, as well as stockpiled material, will be available to commence and sustain processing operations.

# 3.2.7 Heap Leach

The heap leach pad will be constructed in two phases. The first phase will be developed during the construction stage of the Project and will have capacity for 60% of the life of mine heap leach material. The second phase will be constructed during the fifth year of operation for the balance of capacity. The phases will be designed and constructed such that the required containment and leak detection system is fully operational for both phases.

Once the stripping of overburden is completed and sub-grade properly compacted, a layer of local borrow and sand cushion will be installed in preparation for the liner. An 80-mil high density polyethylene (HDPE) liner will be installed over the footprint of the heap facility. Due to the environmental conditions of the site, a double synthetic liner system will be used that will have a leak detection sand layer, a geotextile, and a low permeability soil between the two HDPE liners.

Above the liner system, there will be 0.9 m layer of low-grade crushed material covering the entire footprint of the heap leach pad. There will also be a network of collection pipes installed in a herringbone pattern throughout this layer. The main purpose of this layer is to collect the pregnant solution to the storage pond. It will also protect the liner system and the collection pipes in preparation for heap leach stacking.

# 3.2.8 Tailings Storage Facility

The TSF embankment will be constructed in five stages by implementing downstream dam raise methods. The TSF will be constructed using mine waste rock materials and local borrow materials as required. Each stage will be raised based on tailings storage requirements and the waste rock production schedule. The final crest elevation of the TSF will be 410.0 m.

The embankment design concept includes layering of rockfill, a coarse filter material, a fine filter material, a clay core, upstream clay blanket, and rip rap protection. A typical cross-section is shown in Figure 3-9.

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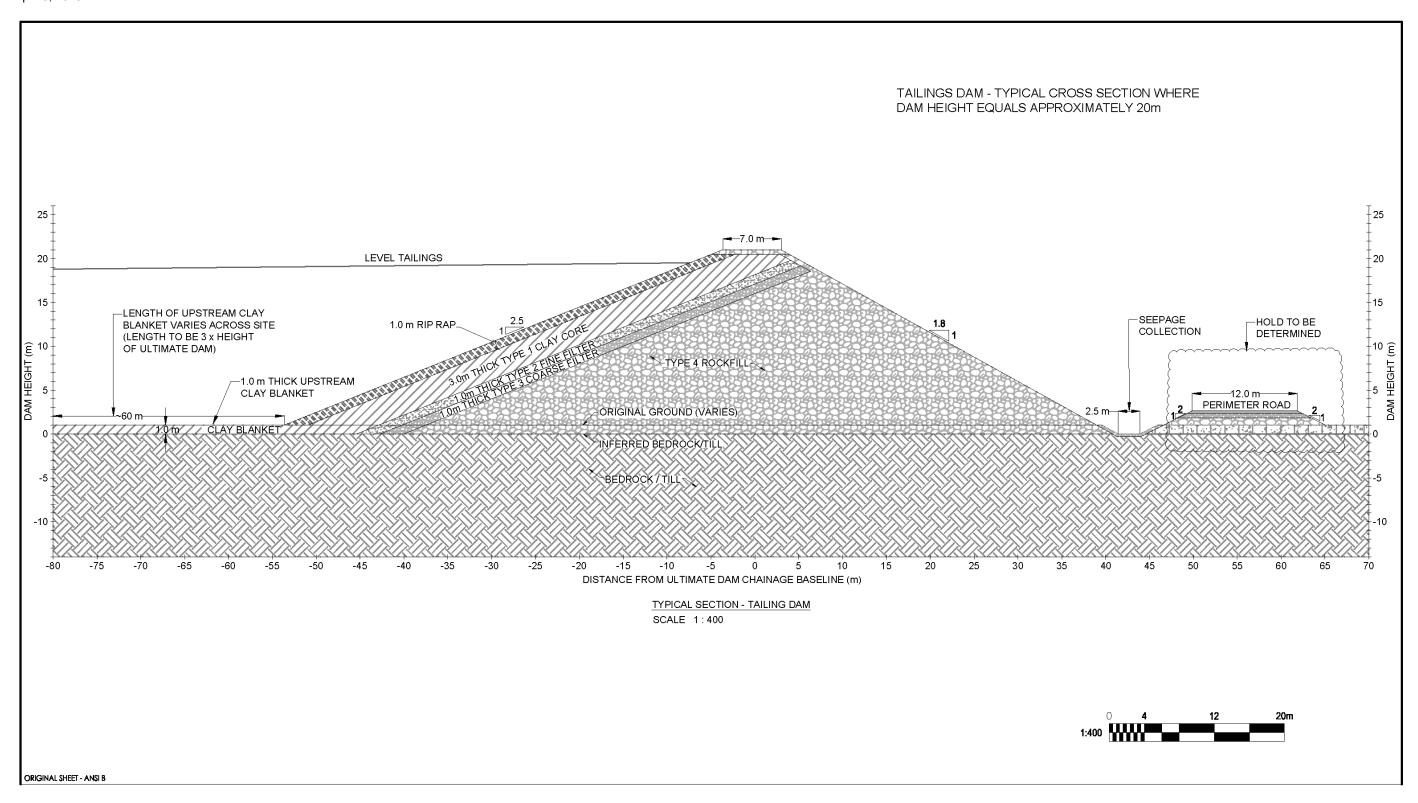


Figure 3-9 Tailings Dam – Typical Cross-Section

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A crest width of 7.0 m has been assumed to allow for vehicle and equipment movement around the TSF. The slopes for the embankment are assumed to be 2.5H:1V upstream and 1.8H:1V downstream for stability. It should be noted that the downstream slopes will require re-grading to achieve 2H:1V for long term stability for closure.

Diversion ditches would be placed along the toe of the embankment, as well as a perimeter access road.

# 3.3 Mine Operations

The following summarizes the operations activities for the Project:

- Open pit mining blasting, excavation, and haulage of rock from the open pits using conventional mining equipment in sizes and numbers optimized for the operation.
- Rock excavated from the open pits that will not be processed for gold will be used as engineered backfill
  for site development, maintenance, and rehabilitation, or will be deposited in waste rock disposal piles.
- Ore extracted from the open pits will be hauled to the processing area where it will either be: 1) crushed
  and stacked for gold extraction via heap leach; or 2) be crushed, ground, and the gold extracted via
  gravity, floatation, CIL and CIC processes.
- Process waste (tailings) will be pumped to an engineered TSF that will be designed and operated in accordance with applicable regulations and guidelines.
- Site contact water and process effluent will be managed on site and treated to remove sediments and
  any chemistry prior to discharge to the environment. Where possible, water will be diverted around the
  site, and recycling of site contact and process water for use on site will be maximized.
- Reagents, hazardous materials, and fuels will be transported, stored, and used in accordance with applicable regulations and guidelines.
- The current planning and design for the Project is based on 'conventional' and proven mining and milling techniques and processes. However, Marathon will employ new and modern technologies and equipment and industry best practices to reduce impact on the environment. Where available, Marathon will investigate and consider new and emerging technologies to further improve the environmental footprint of the Project.
- Marathon will update the protocols and plans (developed for construction) under the EMS to address
  potential environmental impacts associated with mine and mill operations and sustaining development
  activities (e.g., TSF phased construction). Further, there are numerous environmental plans and
  monitoring programs required under the operations Certificate of Approval and other permits that
  Marathon will incorporate into the EMS for the operational phase of the Project.

# **3.3.1** Mining

## 3.3.1.1 Open Pit Development

Whittle pit optimization was used to develop ultimate pit and intermediate mining (phase) limits with the exception of Sprite pit, as was previously noted. This software uses the Lerchs-Grossmann algorithm, an industry standard method to determine an optimal pit shape using various economic, geotechnical, and

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metallurgical parameters. A number of scenarios were considered and completed in order to determine the conceptual intermediate and final pit shells for each gold deposit.

Geotechnical mine design parameters are shown below in Table 3-3.

Table 3-3 Valentine Gold Project Geotechnical Parameters for Leprechaun,
Marathon and Victory Pits

Item	Leprechaun a	Leprechaun and Marathon				
Geology Domain	Sediments	All Others	All			
Inter-Ramp Slope (degrees)	47.5	54.3	54.3			
Bench Height (m)	6.0	6.0	6.0			
Catch Bench Width (m)	8.1	8.1	8.1			
Benches Between Catch Benches	3.0	3.0	3.0			
Vertical Distance Between Catch Benches (m)	18.0	18.0	18.0			
Face Angle (degrees)	65.0	75.0	75.0			

Different mining phases were designed in accordance with the recommended bench configurations as shown in Table 3-3, above. Triple benching of 6 m high production benches was determined to be suitable for all geologic units. Catch or safety benches with a width of 8.1 m were used in all designed phases. These safety benches are applied on every third bench (18 m vertically).

Two-way haul roads, 25 m wide at a 10% grade, were used in most cases where higher traffic may require extra width for safe and efficient passing of trucks. To maximize material recovery at depth, the final benches of each pit floor were designed with single-lane access (17 m width).

# 3.3.1.2 Mine Production

A life-of-mine production schedule is presented in Table 3-4, below. The production schedule assumes a short pre-production period as well as a reduced mill feed requirement during the first full year of production. Lower-grade mill feed and heap leach material is stockpiled to improve processing feed grades during the early years of the project.

The current production schedule will be modified as further infill drilling, and mine planning progresses. Currently, Leprechaun and Marathon pits will be mined simultaneously, however the sequencing of pit development will be further reviewed, taking into account mine planning, materials movement, and environmental considerations.

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Table 3-4 Life of Mine Production Schedule

Period	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	Totals
Millfeed										<u>-</u>					
Tonnes	0	2,250,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	508,000	35,758,000
Gold Grade (g/t)	0	4.554	2.709	2.124	2.256	2.132	1.329	1.213	2.276	2.328	1.929	2.036	2.037	1.042	2.178
Recovery	0.00%	95.40%	94.88%	94.53%	94.37%	94.85%	94.75%	94.72%	95.04%	95.05%	94.61%	94.07%	94.19%	94.66%	94.69%
Recovered Au (t.ozs)	0	314,800	248,200	194,000	205,600	195,500	121,700	111,000	209,700	213,900	176,400	184,800	185,100	16,100	2,376,800
Heap Leach															
Tonnes	0	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	820,000	36,820,000
Gold Grade (g/t)	0	0.52	0.542	0.543	0.553	0.468	0.43	0.431	0.462	0.471	0.498	0.565	0.5	0.411	0.497
Recovery	0.00%	55.72%	59.16%	61.17%	61.52%	56.38%	55.91%	55.94%	55.09%	56.26%	60.20%	65.09%	62.09%	58.85%	58.71%
Recovered Au (t.ozs)	0	27,900	30,900	32,000	32,800	25,500	23,200	23,300	24,600	25,600	28,900	35,500	29,900	6,400	346,500
Total Processed															
Tonnes	0	5,250,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	1,328,000	72,578,000
Gold Grade (g/t)	0	2.249	1.625	1.333	1.404	1.3	0.88	0.822	1.369	1.4	1.213	1.301	1.269	0.653	1.325
Recovered Au (t.ozs)	0	342,700	279,100	226,000	238,400	221,000	144,900	134,300	234,300	239,500	205,300	220,300	215,000	22,500	2,723,300
Total Waste Tonnes	7,000,000	50,000,000	45,159,000	49,265,000	40,000,000	40,808,000	36,793,000	31,893,000	25,137,000	35,934,000	37,672,000	23,810,000	4,582,000	0	428,053,000
Total Material Tonnes	9,739,000	59,677,000	54,615,000	56,466,000	46,757,000	46,808,000	42,793,000	37,893,000	31,216,000	43,435,000	43,672,000	30,344,000	10,582,000	1,328,000	515,325,000
Stripping Ratio (Mined Waste/Mined Mill + Mined Heap)	2.56	5.59	5.07	6.84	5.92	7.47	12.5	10.84	4.14	4.85	7.19	4.67	1.6	-	5.9

Notes:

Period -1 is the preproduction period

Mining ceases in year 12 with production continuing into year 13.

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The open pit mine operation will operate 24 hrs a day, seven days a week on a 12-hr shift basis. Material and waste will be extracted on all shifts. Blasting operations will be conducted on day shifts only. Productivity estimates are based on an assumed mechanical availability of 85 to 90% (90% for haul trucks, 85% for everything else), and a 90% utilization (for trucks and loaders) of available hours varied to reflect seasonal usage of equipment where appropriate.

A standard day-shift blasting crew will be required while four rotating labour crews will be scheduled to operate production equipment.

# Mine Equipment

The Project will be developed using standard open-pit technology, scaled appropriately for the size of the operation. Mobile mining equipment is assumed to be owner-operated under a maintenance and repair contract (MARC). The required mining equipment is shown below in Table 3-5.

**Table 3-5** Required Mining Equipment

Description	Anticipated Manufacturer and Model	Units Required
Haul Truck	Cat 777G	37
Wheel Loader	Cat 993K	6
Production Drill	Epiroc Smartroc D65	11
Wheel Dozer	Cat 834K	2
Tracked Dozer	Cat D10T2	3
Tracked Dozer	Cat D8T	2
Motor Grader	Cat 16M	4
Water Truck	Cat 777G	4
Support Excavator	Cat 336D2	1
Skidsteer Loader	Cat 242B	2
Hydraulic Rock Breaker	-	1
Fuel/Lube Truck	-	3
Mechanics Truck	-	2
Welding Truck	-	1
Crane (25 t)	-	1
Pick Up Trucks	-	8
Crew Vans	-	4
Tractor/Trailer with 50 t Lowboy	-	1
Portable Light Towers	-	12
Mine Planning/Surveying Equipment	-	1

Description of the Undertaking April 5, 2019

# **Drilling and Blasting**

Drilling demands will be met with up to 11 production drills. Explosive quantities are based on a 152 mm blasthole diameter and bench height of 6 m. Drill spacing is dependent on the assumed material properties. Burden and spacing is assumed to be 3.6 m x 4.2 m. Productivity estimations are based on a mechanical availability of 85% and a utilization rate of 85%.

Bulk explosives will be managed by an explosives contractor including the explosive storage facilities, and required explosives delivery and loading trucks. Actual loading and firing of the blasts will be handled by Marathon employees.

## Loading and Hauling

A fleet of up to six wheel loaders and up to 37 haul trucks will be required. Millfeed, heap leach, and waste materials are assumed to be mined around the clock. Loading and hauling requirements include rehandle in addition to normal millfeed, heap leach, and waste operations. Using performance data provided by the manufacturer, mechanical availability of 90% and utilization of 90% were used to calculate the loading and hauling equipment requirements.

## Support Equipment

An auxiliary fleet of dozers, graders, water trucks, and other support equipment will be required for mine operations, including track dozers for the waste disposal areas, wheel and track dozers to support loading operations, and motor graders to maintain haul roads in and out of the pit.

# 3.3.2 Processing

The process plant design is based on a metallurgical flowsheet developed for optimum recovery while managing initial capital expenditure and operating costs. The flowsheet is based on unit operations well proven in the industry.

The Project consists of two gold process circuits, i.e., heap leach and process plant operations. Both circuit designs are based on a 13-year mine life.

The process plant (mill) will process 3.0 Mtpa of high-grade ore material from open pit mines. The mill will consist of crushing, milling, gravity recovery, flotation of gravity tails, flotation concentrate regrind, cyanidation of both flotation concentrate and flotation tailings via a CIL circuit, carbon elution and gold recovery circuit. CIL tails will be treated for cyanide destruction and disposed of as tails in the TSF.

The heap leach process will process 3.0 Mtpa of low-grade material from open pit mines and will consist of crushing, heap leaching and CIC gold adsorption. The loaded carbon from this heap leach facility will be sent in carbon transport vessels to the milling facility for further processing in the elution circuit.

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The key project design criteria for the process components are:

- Nominal throughput of 9,000 t of material per day for milling facility and 9,000 t of material per day for heap leach facility, equivalent to 6.0 Mtpa
- Crushing plant availability of 75% for both flotation and heap leach plants
- Plant availability of 91.3% for heap leach solution circulation, CIC area, grinding, gravity concentration, flotation, and leach plant and gold recovery operations

An overall process flow diagram depicting the unit operations incorporated in the selected process flowsheet is presented in Figure 3-10. The process plant general arrangement is presented in Figure 3-2. Descriptions of each component or circuit associated with the heap leach and process plant circuits are provided in Section 3.1.7 and 3.1.8.

Description of the Undertaking April 5, 2019

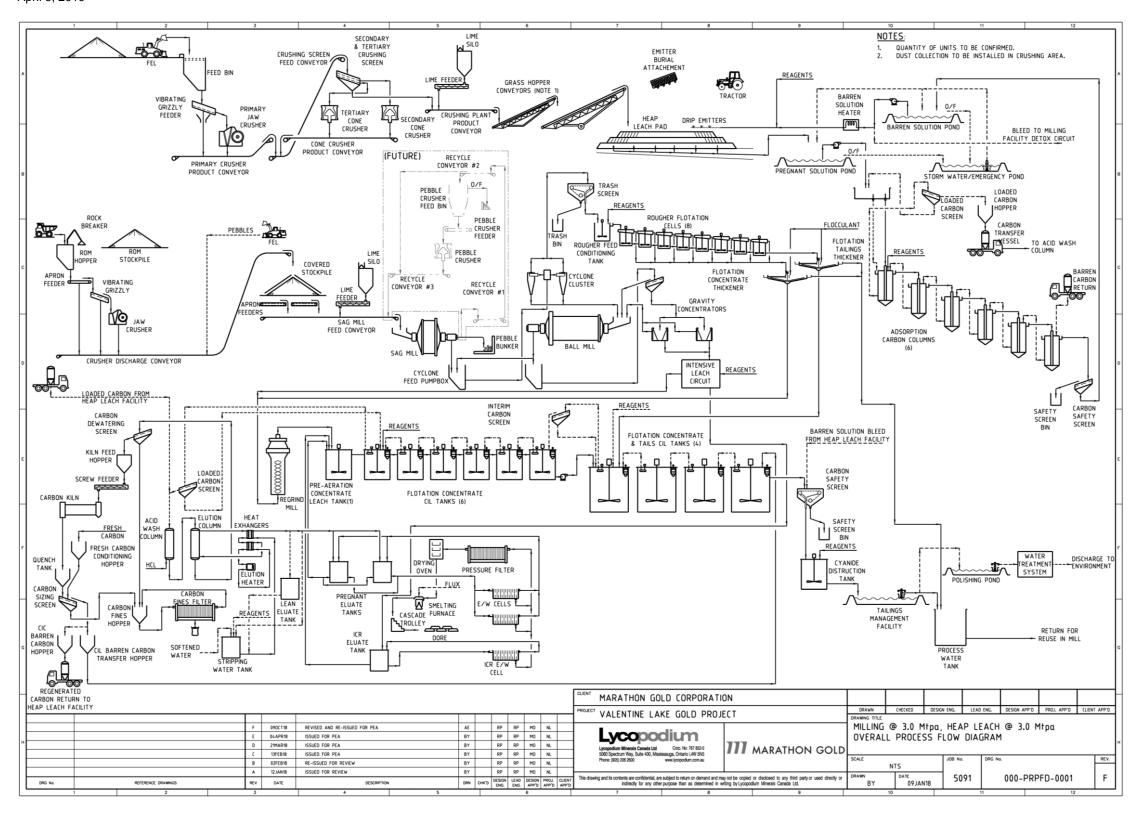


Figure 3-10 Overall Process Flow Diagram

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## 3.3.2.1 Reagent Use

The following reagent systems are required for the process: quicklime, sodium cyanide, frother, promoter, PAX, hydrochloric acid, copper sulphate pentahydrate, sodium metabisulphite, sodium hydroxide, flocculant, activated carbon, and smelting fluxes. These are further described in Table 3-6.

Table 3-6 Reagents Systems Required During Project Operation

Reagents	Planned Use, Transport and Handling
Quicklime	There will be one lime silo system at the heap leach facility and another at the milling facility. Quicklime will be delivered to each facility in a tanker and will be pneumatically conveyed from the tanker to the lime silo. Quicklime will be extracted from the lime silo and fed onto the crushing plant product conveyor in the heap leach facility and to the SAG mill feed conveyor in the milling facility. Quicklime will be distributed as solid form.
Sodium Cyanide (NaCN)	Sodium cyanide (dry) will be delivered in a portable International Standards Organization (ISO) container that can contain 18 Mt of solid briquettes. ISO containers are designed with an internal jet mixing system. Raw water will be added to the cyanide mixing tank to the level required for achieving the stock solution concentration. A recirculating pump will be used to transfer cyanide from the ISO container to the mixing tank. The unloading process will require approximately four to six hours to complete to ensure the briquettes are completely dissolved. Plant air will then be used to flush or press out residual cyanide from the ISO container to the mixing tank. Caustic (sodium hydroxide) will also be added to the mixing tank to provide protective alkalinity to avoid generation of hydrogen cyanide gas. After the mixing period is complete, cyanide solution will be transferred to the cyanide storage tank using the same pump as the recirculating pump used in the mixing cycle. Two ISO container mixing systems will be installed, one for the heap leach and one for milling facility.  Sodium cyanide will be delivered to the heap leach area, CIL circuit, intensive leach circuit and elution circuit. Automatic control valves will provide the required cyanide flowrates at a number of locations around the two plants.
Frother (MIBC)	MIBC will be delivered as a liquid in drums and stored in the reagent shed until required. A permanent bulk box will be installed to provide storage capacity local to the flotation area. MIBC will be used as-received and without dilution. Diaphragm style dosing pumps will deliver the reagent to the required locations within the flotation circuit. Top-up of the permanent bulk boxes will be carried out manually as required.
Promotor (AERO 208)	Aero 208 will be delivered as a liquid in drums and stored in the reagent shed. Aero will be used as-received and without dilution. Diaphragm style dosing pumps will deliver the reagent to the required locations within the flotation circuit. Top-up of the permanent bulk boxes will be carried out manually as required.
Collector (PAX)	PAX will be delivered in granular powder form in bags and stored in the reagent shed. Raw water will be added to the agitated PAX mixing tank. Bags will be lifted into the PAX bag breaker, located on top of the tank, using a lifting frame and hoist. The solid reagent will fall into the tank and be dissolved in water to achieve the required dosing concentration. PAX solution will be transferred to the PAX storage tank using the PAX transfer pump. Both the mixing and storage tanks will be ventilated using the PAX tank fan to remove carbon disulphide gas.  PAX will be delivered to the flotation circuit using the PAX circulating pump and a ring main system. Actuated control valves will provide the required PAX flowrates at a number of locations around the flotation circuit.

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 Table 3-6
 Reagents Systems Required During Project Operation

Reagents	Planned Use, Transport and Handling
Copper Sulphate	Copper sulphate will be delivered in solid crystal form in bulk bags and stored in the reagent shed. Raw water will be added to the agitated copper sulphate mixing tank. Bags will be lifted into the copper sulphate bag breaker, located on top of the tank, using the lifting frame and hoist. The solid reagent will fall into the tank and be dissolved in water to achieve the required dosing concentration. Copper sulphate solution will be transferred to the copper sulphate storage tank using the copper sulphate transfer pump.  Copper sulphate will be delivered to cyanide destruction circuits using the copper
Sodium Metabisulphite (SMBS)	sulphate circulation pump and ring main.  SMBS will be delivered in the form of solid flakes in bulk bags and stored in the reagent shed. Raw water will be added to the agitated SMBS mixing tank. Bags will be lifted into the SMBS bag breaker, located on top of the tank, using a lifting frame and hoist. The solid reagent will fall into the tank and be dissolved in water to achieve the required concentration. After mixing for a pre-set time, SMBS solution will be transferred to the
	SMBS storage tank using the SMBS transfer pump.  SMBS will be delivered to the cyanide destruction circuit using the SMBS circulation pump and ring main. An extraction fan will be provided over the SMBS mixing tank to remove SO <sub>2</sub> gas that may be generated during mixing. The SMBS mixing area will be ventilated using the SMBS area roof fan.
Sodium Hydroxide (NaOH)	Sodium hydroxide (caustic soda) will be delivered as solid pearls/beads in bulk bags and stored in the reagent shed. Raw water will be added to the agitated sodium hydroxide mixing tank. Bags will be lifted into the sodium hydroxide bag breaker, located on top of the tank, using a lifting frame and hoist. The solid reagent will dissolve in water to achieve the required concentration. After mixing for a pre-set time, sodium hydroxide solution will be ready to transfer using the sodium hydroxide transfer pump. Sodium hydroxide will be delivered to gravity concentrate leach circuit, elution circuit, electrowinning, cyanide mixing, acid neutralization, and cyanide destruction circuit using the sodium hydroxide circulation pump and ring main.
Hydrochloric Acid (HCI)	Hydrochloric acid will be delivered in intermediate bulk containers (IBCs) as a solution and stored in a dedicated section of the reagent shed until required. Hydrochloric acid will be mixed with raw water (inline) to achieve the required 3% concentration.
	Hydrochloric acid will be delivered to the acid wash circuit using the hydrochloric acid dosing pump.
Flocculant	Powdered flocculant will be delivered to site in 50 kg bulk bags and stored in the reagent shed. A vendor supplied mixing and dosing system will be installed, which will include flocculant storage hopper, flocculant blower, flocculant wetting head, flocculant mixing tank, and flocculant transfer pump. Powder flocculant will be loaded into the flocculant storage hopper using the flocculant hoist. Dry flocculant will be pneumatically transferred into the wetting head, where it will be contacted with water. Flocculant solution, at 0.50% w/v will be agitated in the flocculant mixing tank for a pre-set period. After a pre-set time, the flocculant will be transferred to the flocculant storage tank using the flocculant transfer pump.  Flocculant will be dosed to the flotation concentrate thickener and flotation tails using
	variable speed helical rotor style pumps. Flocculant will be further diluted just prior to the addition point.

Description of the Undertaking April 5, 2019

Table 3-6 Reagents Systems Required During Project Operation

Reagents	Planned Use, Transport and Handling
Activated Carbon	Activated carbon will be delivered as solid granular form in bulk bags. The carbon is introduced into the carbon conditioning tank in the flotation/CIL plant, where it is slurried and agitated to remove the friable edges of the carbon particles and the adhering carbon dust generated in transport. The slurry is pumped over the sizing screen where the carbon fines discharge to the fine carbon hopper, and the coarse carbon particles can be transferred to the CIL circuit in milling or trucked to the heap leach carbon columns.
Anti-scalant	Anti-scalant will be delivered as solution form in bulk boxes and stored in the reagent shed until required. Permanent bulk boxes will be installed to provide storage capacity local to each dosing point. Anti-scalant will be dosed neat, without dilution. Positive displacement style dosing pumps will deliver the anti-scalant to the required locations around the heap and milling plants. Top up of the permanent bulk boxes will be carried out manually as required.
Goldroom Smelting Fluxes	Borax, silica sand, sodium nitrate and soda ash will be delivered as solid crystals / pellets in bags or plastic containers and stored in the reagent shed until required.

#### 3.3.2.2 TSF Operation

The preliminary operational plan for the TSF is to deposit slurry from the embankment, along the perimeter of the storage area. This will optimize tailings storage capacity while reducing other risks, such as stability and seepage. It is anticipated that the TSF will be able to store up to three months' worth of process water, the rest of the water will be reclaimed for re-use in the mill.

The TSF construction and operation should align with the rest of the Project site development and operation. This includes factors such as the storage capacity, accessibility for equipment, distance and elevation from the mill for tailings pumping, and availability of construction materials.

# 3.3.3 Materials Shipping and Employee Transportation

Materials required for Project operation will be shipped to site via truck on the main access road. Employees would continue to be transported to the site from nearby communities. The volume of truck traffic during operation is anticipated to be much lower than during construction. While supplies may need to be shipped into the site on a weekly basis, the product to be exported would be limited to armored trucks, owned and operated by a third party and used to transport the doré bars to market via the site access road from Millertown, then via provincial highways.

# 3.4 Rehabilitation and Closure

Rehabilitation is defined as measures taken to restore a property as close to its former use or condition as practicable, or to an alternate use or condition that is deemed appropriate and acceptable by NLDNR. For mining projects, a Rehabilitation and Closure Plan is a requirement under the Newfoundland and Labrador *Mining Act* (Chapter M-15.1 Sections 8, 9 and 10). There are three key stages of rehabilitation activities that occur over the life span of a mine, which include:

- Progressive rehabilitation
- Closure rehabilitation
- Post-closure monitoring and treatment

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Progressive rehabilitation involves rehabilitation that is completed throughout the mine operation prior to closure wherever possible or practicable to do so. This includes activities that contribute to the overall rehabilitation effort and would otherwise be carried out as part of the closure rehabilitation at the end of mining life.

Closure rehabilitation involves activities that are completed after mining operations cease, to restore and/or reclaim the Project to as close to its pre-mining condition as practicable. Such activities include demolition and removal of site infrastructure, re-vegetation of disturbed areas, and other activities to achieve the requirements and goals as detailed in the Project's Rehabilitation and Closure Plan.

Once closure rehabilitation activities have been completed, a period of post-closure monitoring is required to show that the rehabilitation has been successful. The post closure monitoring will continue until it has been demonstrated that the rehabilitation of the site has been successful. The site can then be closed out or released by NLDNR and an application to relinquish the property back to the Crown.

A complete Rehabilitation and Closure Plan has not yet been developed for the Project, but the following sections describe the general rehabilitation and closure philosophies that will be used in the development of the Project's Rehabilitation and Closure Plan. This plan will be drafted and finalized in consultation with NLDNR upon release from the EA process. Sections 3.4.1 through 3.4.4 provide a high-level approach to rehabilitation and closure as originally presented in the PEA (Lycopodium 2018).

# 3.4.1 Approach to Rehabilitation and Closure

As the planning and design stages of the Project continue, consideration for the future closure issues and requirements will be incorporated into final plans. In efforts to be proactive with rehabilitation activities, the following steps will be implemented:

- Disturbances of terrain, soil, and vegetation will be limited to the areas necessary to complete the required work as defined by the Project
- Organic soils, mineral soils, glacial till, and excavated rock will be stockpiled separately where possible, and protected for future use
- Stabilization of disturbances will be completed to reduce erosion and promote natural re-vegetation
- Natural re-vegetation will be encouraged throughout the Project

#### 3.4.2 Progressive Rehabilitation

As the mine advances from development to operational stages, opportunities for progressive rehabilitation are possible. Some such opportunities include but are not limited to the following:

- Demolishing and rehabilitation of construction or exploration related infrastructure (e.g., buildings, roads, and laydown areas)
- Grading and revegetation of completed tailings areas, if possible
- Erosion stabilization and re-vegetation of completed overburden and/or waste rock dump area
- Infilling or flooding of exhausted mining areas
- Completing re-vegetation studies and trials

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#### 3.4.3 Closure Rehabilitation

Closure rehabilitation activities will be carried out, as previously described, at the mine site once it is no longer economical to mine, or resources have been exhausted. In general, the closure activities that will be completed for the site include, but are not limited to the following, and will be conducted in accordance with regulations at the time of closure:

- Removal of hazardous chemicals, reagents, and similar materials for re-sale or disposal at an approved facility as per provincial regulations
- Equipment will be disconnected, drained and cleaned, disassembled, and where possible, sold for reuse to a licensed scrap dealer. If this is not achievable, equipment will be removed from site for disposal or recycled at an approved facility
- Dismantling and removal of site buildings and surface infrastructure, for disposal or recycled at approved facilities
- Demolishing concrete foundations to a minimum of 0.3 m below the surface grade and covering with natural materials to promote re-vegetation. The demolished concrete will be removed from site for disposal in an appropriate facility
- Removal and rehabilitation of fuel and explosive storage and dispensing facilities. This may include Environmental Site Assessments, if required
- Breaching of sedimentation, stormwater, and emergency event ponds, to allow drainage to the surrounding areas for natural filtration. Prior to release to the environment, water quality testing will be completed on the pond waters
- Decommissioning of wells on site; includes dewatering wells, groundwater monitoring wells, potable drinking water wells and/or industrial water wells. The decommissioning will be in compliance with the Guidelines for Sealing Groundwater Wells (Gov NL 1997)
- Re-establishment of pre-mining site drainage patterns
- Grading and/or scarification of disturbed areas to promote natural re-vegetation. This may include
  placement and grading of overburden materials in areas where natural re-vegetation is not rapid
  enough to control site erosion and sedimentation

#### 3.4.3.1 Open Pits

Upon closure, dewatering infrastructure will be removed and the open pit(s) will be allowed to naturally infill with surface water run-off, precipitation and groundwater seepage ultimately flooding the pit(s) and creating ponds. Berms will be constructed along the crest of the open pit(s), as well as across access roads or ramps, barricading access to the open pit(s). Warning signage will be erected at regular intervals along the berm notifying the public of the open pit. The berms will be constructed to promote natural re-vegetation.

#### 3.4.3.2 Waste Rock Piles

Two waste rock piles will be created throughout the operational life of the Project. They will be terraced and constructed to a slope of three horizontal to one vertical (3H:1V) to promote stability upon closure. Where required, the waste rock piles will be graded, and overburden placed to promote natural re-vegetation.

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#### 3.4.3.3 Tailings Storage Facility

Upon closure, the TSF will be capped with material to fill in the freeboard on the tailings embankment and a layer of overburden will be placed over the surface and seeded to stabilize the ground surface and to promote re-vegetation. The slopes will be re-graded to achieve the required 2H:1V closure slopes. This may require the placement of additional rockfill material.

#### 3.4.3.4 Heap Leach Pad

Low grade material mined at the Project will be placed on a heap leach pad. Preliminary designs for the heap has slopes of 2H:1V and will be terraced with each terrace being a maximum height of 40 m

Once economic leaching has been completed, the heap leach pad will be rinsed with fresh water to remove residual cyanide and meet the required water quality requirements. The water can be recirculated through the heap leach pad, and it may be necessary for the water to go through the water treatment facility prior to final discharge. It is assumed that the rinsing of the heap leach pad will take a maximum of a year to complete, however further analysis will be required to determine the actual rinsing requirements. Once the rinsing is completed, and where necessary, the slopes will be re-graded to form uniform slopes. Overburden will be placed on the heap leach pad, graded, and seeded to stabilize the ground surface and to promote natural re-vegetation.

# 3.4.4 Post-Closure and Long-Term Monitoring

The post-closure monitoring program will continue after final closure activities are completed for an estimated ten years. However, the monitoring period could be shortened based on the satisfaction of the regulatory bodies that physical and chemical characteristics are acceptable and stable. When the Project is deemed physically and chemically stable, the site will be relinquished to the Crown.

The post-closure and long-term monitoring plans are yet to be developed. These programs will be developed once the Project is designed and operations have been sufficiently advanced. It is anticipated that the closure monitoring plans will mirror the operational monitoring program to provide continuity of data and a historic baseline. It is also anticipated that as post closure time increases the monitoring requirements will decrease until ultimately, they will no longer be required.

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# 3.5 Project Schedule

Construction of the Project is expected to take place over a period of 18 to 24 months as generally shown in Table 3-7, below.

Marathon's ongoing and future scheduling and planning activities will consider the various environmental guidelines and constraints (e.g., bird breeding seasons) in order to minimize the potential environmental effects of construction.

Project construction would be followed by an estimated mine operation life of 13 years. The Project will operate 24 hours (hrs) a day, seven days a week on a 12-hr shift basis. The Project production schedule is shown in Table 3-4. A preliminary life of mine schedule is shown in Table 3-8.

# 3.6 Wastes, Discharges and Emissions

#### 3.6.1 Construction

Wastes, discharges, and emissions during construction would be typical of those associated with site clearing and construction operations. They are anticipated to include:

- Noise from generators, vehicles and other construction equipment
- Release of contaminants and greenhouse gasses (GHGs) generators, vehicles and other construction equipment
- Stormwater / run-off from construction areas
- Grey water and domestic solid waste associated with the accommodations camp
- Petroleum, oil, and lubricant (POL) POL waste from maintenance of vehicles and construction equipment on site and potential runoff from refueling and fuel storage areas

These emissions, effluents and discharges will be managed and mitigated through industry standard measures including proper maintenance of equipment, dust suppression measures where appropriate, sediment and erosion control measures and proper handling, storage and disposal of wastes, including hazardous wastes that may results from Project construction activities. A discussion of stormwater and sewage treatment is found in Section 3.1.16. Further discussion on GHG emissions is found in Section 3.6.3.

#### 3.6.2 Operation

During operation, noise sources would include blasting, as well as operation of equipment and generators. Dust and emissions from vehicles, equipment and generators would continue to be the main source of air contaminants. The milling and processing plant will be enclosed, limiting potential for dust and other emissions. Further discussion on GHG emissions is found in Section 3.6.3.

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 Table 3-7
 Preliminary Project Development Schedule

Activity		2019			2020			2021				2022				2023				
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Public & Regulator Consultation																				
EA Process																				
Engineering and Supporting Studies																				
Early Permits & Approvals																				
Federal, Provincial Permits & Approvals																				
Operational, Environmental Management & Monitoring Plans																				
Clearing, Site Access and Site Roads, Pre- Stripping																				
Civil Earthworks																				
Foundations and Subsurface Utilities																				
Heap Leach Pad and TSF Earthworks (Stage 1)																				
Mill and Infrastructure Construction																				
Commissioning and Start-Up																				
Mine and Mill Operations																				

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Table 3-8 Preliminary Life of Mine Schedule

Activity	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Public & Regulator Consultation																							
EA Process																							
Engineering and Supporting Studies																							
Federal, Provincial Permits & Approvals																							
Project Construction																							
Commissioning and Start-Up																							
Mine and Mill Operations																							
Closure and Rehabilitation																					·	·	
Post Closure Monitoring																							

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The major sources of waste and discharges during Project operations have been discussed in the preceding sections. They include: site water management (Section 3.1.5), mine waste management including the potential or ARD/ML (Section 3.1.3), TSF effluent (Section 3.1.10 and 3.2.8), and heap leach pad containment (Section 3.1.7 and 3.2.7).

Grey water and domestic solid waste would continue to be produced and appropriately managed and/or treated during operation. Refer to Section 3.1.16. POL waste from maintenance of equipment and vehicles will also continue through operation.

#### 3.6.3 GHG Emissions

During the construction and operation of the proposed Project, GHGs will be emitted from the combustion of diesel fuel in various equipment including temporary and back-up generators, heavy machinery and other on-site vehicles. As currently designed, the Project will not require on-site electricity generation as power will be supplied through the provincial grid. An estimated 270 million liters of diesel could be consumed on site throughout the life of the Project (construction and operation). A preliminary estimate of GHGs from the construction and operation of the Project, based on the anticipated amount of fuel to be consumed, averages 48,750 tonnes of CO2e annually over the life of the Project (i.e., over 15years). This is a high-level estimate that will be further refined during the development of the environmental assessment. GHG emissions will be mitigated throughout the life of the Project through the use of power from the provincial grid, reducing idling to reduce amounts of fuel consumed, managing haul routes to reduce amount of fuel consumed, and maintaining engines in proper working order.

# 3.7 Employment and Expenditures

As discussed in Section 2.2, development of this Project will generate employment, expenditures and associated benefits to the province. More details on the anticipated employment and expenditures anticipated for the Project are provided in the following sections.

# 3.7.1 Construction Employment

Construction will last between 18 and 24 months and will require a peak labour force of 466 people. As most of the work will be contracted, specific breakdowns of employees is not possible at this time. Table 3-9 provides the categories of employment that will be generated during the construction phase of the Project and the related National Occupation Codes (NOC) for Canadian labor classifications.

Table 3-9 Construction-Related Employment

Category	NOC Code
Contractors	
Equipment Operators	9411
Labourers	9611
Trades	9611
Supervisors	9211

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Table 3-9 Construction-Related Employment

Category	NOC Code					
Management and Administration	0811/1221/1411					
EPCM Contractor						
Engineers and Technicians	2143/2212					
Management and Procurement	0811/0113/1225/1524					
Administration	1221/1411					
Marathon						
Management and Administration	0811/1221/1411					
Environmental	2113/2131					

# 3.7.2 Operational Employment

During operations, employment will average 442 people and peak at 466. The following Table 3-10 indicates the category of employees, estimated numbers of employees required during Project operation and their corresponding NOC codes.

Table 3-10 Average Annual Employment by Category

Category	Number of Employees	NOC Codes
Management	9	0811
Supervisors	18	9211
Engineers and Technicians	33	2143/2212
Trades	32	9611
Operators	338	9411
Labourers	7	9611
Administrative	5	1221/1411
Total Labour	442	

## 3.7.3 Capital Costs

The capital estimate for the Project is summarized in Table 3-11. Overall costs are expressed in United States Dollars (\$) unless otherwise stated, and are based on Q3 2018 pricing and deemed to have an accuracy of ±35%. The capital cost estimate conforms to Association for the Advancement of Cost Engineering International (AACEI) Class 5 estimate standards as prescribed in recommended practice 47R11. The capital cost estimate was based on an engineering, procurement, and construction management (EPCM) implementation approach and typical construction contract packaging. Equipment pricing was based on quotations and actual equipment costs from recent similar Lycopodium projects considered representative of the Project.

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Table 3-11 Capital Estimate Summary by Area (Q3 2018, ±35%)

Area	\$ Including Contingency/Excluding Duties and Taxes (CAD*)
000 Construction In-directs	\$21,257,000 (\$28,271,810 CAD)
100 Treatment Plant Costs - Heap Leach Circuit	\$47,626,000 (\$6,3342,580 CAD)
100 Treatment Plant Costs - Milling Circuit	\$92,739,000 (\$123,342,870 CAD)
200 Reagents & Plant Services - Heap Leach Circuit	\$4,030,000 (\$5,359,900 CAD)
200 Reagents & Plant Services - Milling Circuit	\$21,355,000 (\$28,402,150 CAD)
300 Infrastructure	\$73,192,000 (\$97,345,360 CAD)
400 Mining**	\$56,231,000 (\$74,787,230 CAD)
500 Management Costs	\$22,434,000 (\$29,837,220 CAD)
600 Owners Project Costs	\$16,440,000 (\$21,865,200 CAD)
Subtotal Directs	\$355,304,000 (\$472,554,320 CAD)

<sup>\*</sup>Canadian estimates are based on a conversion rate of \$0.77

The infrastructure included in the capital cost includes: camp and catering (for permanent 200 person camp to be used during construction, and a temporary construction camp that will accommodate an additional 100 persons), potable water and wastewater, communications, recreation facilities and mess hall, reagents storage shed, office buildings and control rooms, crushed material stockpile dome (55.4 m diameter), main warehouse and office, medical centre, administration building, wet and dry laboratory, gatehouse, substation buildings, plant ablutions, overhead power line, and access road upgrade. The main access road upgrade consists of an initial upgrade intended to be constructed in pre-production phase. Subsequent road upgrades or maintenance will be assessed within the first two to three years of commercial production.

#### 3.7.4 Diversity and Inclusion Policy

Marathon recognizes that diversity and inclusion must be embedded in all aspects of its business. Marathon has a formal Diversity Policy (<a href="https://marathon-gold.com/site/assets/files/4269/diversity-policy.pdf">https://marathon-gold.com/site/assets/files/4269/diversity-policy.pdf</a>), which was developed to guide the selection of its Board of Directors. As the company has remained small in size, the fundamentals of this existing policy have been extended to the hiring of company personnel to date. As Marathon moves forward with the Project, it will develop a Diversity, Gender and Inclusion policy that encompasses all aspects of its business, including but not limited to, the Board of Directors, employees, contractors, and suppliers. This will provide the foundation for a future Diversity, Gender and Inclusion Plan that will be implemented for the development and operation of the Project.

<sup>\*\*</sup>Mining capital costs are based on leased mining equipment and the initial capital is a 30% down payment of the mine fleet. This cost includes mine services and pre-production stripping.

# **APPENDIX A**

Site Photos



Photo 1 View North, Existing, Permitted Marathon Exploration Camp



Photo 2 View North East, Leprechaun Deposit



Photo 3 View South West, Sprite to Leprechaun Deposit Area



Photo 4 View West, Marathon Deposit



Photo 5 View West, Victory Deposit Area



Photo 6 View Northeast from Southwest of Leprechaun Area, Valentine Lake in background



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January 23, 2020

Miawpukek Mi'kamawey Mawi'omi 50 Miawpukek Drive P.O. Box 10 Conne River, NL A0H 1J0

Attention: Chief Joe

Re: Follow-up to December 5, 2019 Project Review Meeting
Marathon Gold's Valentine Gold Project, Central Newfoundland, NL

Marathon Gold would like to once again thank you and your representatives for participating in the project review meeting in Grand Falls-Windsor on December 5<sup>th</sup>, 2019. We feel this meeting presented an excellent opportunity to exchange information regarding the proposed Valentine Gold Project (the "Project"), and for Marathon to better understand the perspectives of both the Qalipu and Miawpukek First Nations regarding the Project.

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Marathon has confirmed the removal of the previously proposed heap leach process and all related infrastructure. This includes the removal of the heap leach pad, heap leach crusher and pad, heap leach solution ponds, and the Carbon In Circuit process infrastructure.

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Marathon has confirmed the removal of the Victory open pit and waste rock pile from the project description/plan. This decision is primarily driven by Marathon's increased understanding of caribou migration in this general area and the need to mitigate potential impacts of the proposed project, in part by minimizing project activities in the northeast area of the project development area.

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Sincerely,

# <Original signed by>

James Powell, M.Eng., P.Eng.
Director of Environment and Stakeholder Engagement
Marathon Gold Corp

cc: Mary Hatherly, Manager of Stakeholder Engagement, Marathon Gold Corp Ross Hinks, Director, Natural Resources

Attachments: Site Plans



P.O. Box 4006, Pearlgate PO Mt. Pearl, NL A1N 0A1

Tel (709) 730 5046 Fax (416) 861 1925

January 23, 2020

Qalipu Mi'kmaq First Nation Band 3 Church Street Corner Brook, NL A2H 2Z4

Attention: Chief Mitchell

Re: Follow-up to December 5, 2019 Project Review Meeting
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We have advised both Chief Mitchell and Chief Joe of our intention to meet with representatives of both Qalipu and Miawpukek First Nations to discuss the rationale supporting the latest site development plan. If this suggestion is acceptable to the Chiefs, we will work with you to determine a mutually convenient meeting date in either late March or early April. We also note that the revised plan provided in this communication remains in the early stages of planning and engineering relative to our overall project development process. Marathon is committed to continuing engagement with both Nations throughout the EA and engineering processes as planning and design progress.



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# **APPENDIX 3C**

Community Survey Report



# Overview

Marathon Gold held community information sessions respecting the Valentine Gold Project in Buchans Junction, Millertown, Buchans, Grand Falls-Windsor, Badger and Bishop's Falls between February 5th and February 7th, 2020. The information sessions were intended to provide community residents with an overview of the Valentine Gold Project and ongoing regulatory processes, and to elicit preliminary information respecting community views respecting the Project. As part of the information session, meeting participants were asked to complete a brief community survey. Surveys were administered on a voluntary, anonymous basis and respondents were asked to indicate the following:

#### a. General Information

- Age
- Community of Residence
- Gender

## b. Preferred means of communication about the Project

#### • c. Issues/Concerns

- Environmental (Biophysical)
- Community (Socio-Economic)

#### • d. Collection of Future Information

The survey was intended to serve three principal purposes: to provide preliminary baseline information re: issues and concerns which could be incorporated into the EIS; to assist in the implementation of Marathon's engagement strategy; and to focus the content and emphasis of future communications with communities and residents.

Survey results are summarized below. Information has been aggregated rather than analyzed by community since many individuals attended meetings in other than their home community.

# a. General Information

A total of 348 individuals attended the community meetings: Buchans Junction (21); Millertown (21); Buchans (46); Badger (65); Bishop's Falls (48); Grand Falls Windsor (151). While the majority of participants were from the Central Region (although respondents did not necessarily attend an information session in his/her home community), a number of respondents were resident in other communities: Roberts Arm (4); Botwood (13); Norris Arm (12); Witless Bay (1); Paradise (1); Harbour Main (1); Point Leamington (9); Clarenville (1); South Brook (3); Summerford (1); Lewisporte (2), Northern Arm (1); St. Philips (1); and Springdale (1).

A total of 293 surveys were completed: Buchans Junction (18); Millertown (21); Buchans (46); Badger (54); Bishop's Falls (35); Grand Falls-Windsor (119).

227 males (77.4%) and 66 females (22.5%) completed the survey.

The median age of survey respondents was 41 years old. The specific breakdown by age group is as follows:

- Under 18: 13 respondents
- 18 24: 24 respondents
- 25 34: 34 respondents
- 35 44: 44 respondents
- 45 54: 80 respondents
- 55 64: 75 respondents
- 65+: 22 respondents

One survey respondent did not indicate an age group.





# b. Preferred Method of Engagement

Survey respondents were asked to select one or more preferred means of receiving information about the Project from among the following options: community meetings; website; social media, newspaper, radio, other. The answers provided will be useful in determining where resources should be concentrated in order to ensure the widest dissemination of information.

The most popular method of receiving information was the community meeting (184 responses) followed closely by social media (172 responses, mainly Facebook) and website (164 responses). Newspaper (33 responses) and radio (36 responses) were far less popular. Age was not a significant factor in selection of preferred communication options.

Other methods of communication identified by respondents were:

- Direct e-mail 22 responses
- Council meetings 2 responses
- Word of mouth 1 response
- Telephone contact 1 response
- Flyers 1 response

## c. Issues and Concerns

#### 1. Biophysical Concerns

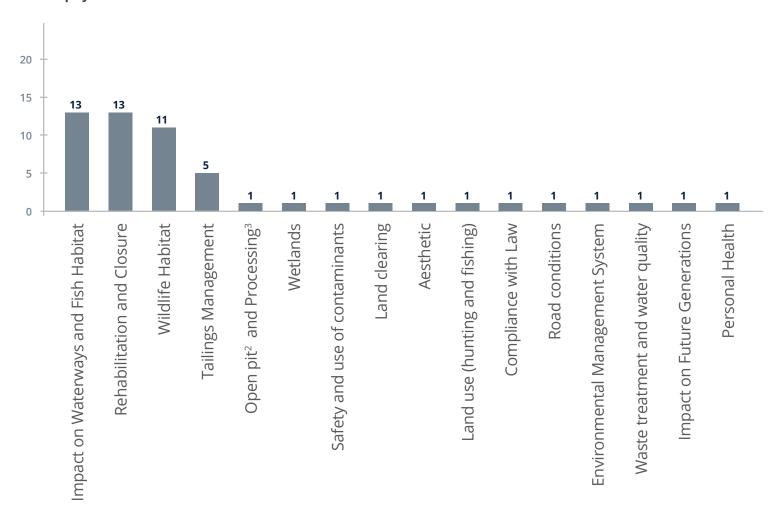
Respondents were asked to identify any concerns about the effects of the Project upon the physical environment. 214 of 293 respondents (73%) indicated no concerns. 79 respondents (27%) identified concerns, however, not all respondents specified the nature of the concern. Specified concerns were:

- Impact on Waterways and fish habitat: 13 responses
- Rehabilitation and Closure 13 responses
- Open pit<sup>2</sup> and processing<sup>3</sup> 1 response
- Tailings Management 5 responses
- Wildlife Habitat 11 responses
- Wetlands 1 response
- Safety and use of contaminants 1 response
- Land clearing 1 response
- Aesthetic 1 response
- Land use (hunting and fishing) 1 response
- Compliance with Law 1 response
- Road conditions 1 response
- Environmental Management System 1 response
- Waste treatment and water quality 1 response
- Impact on Future Generations 1 response
- Personal Health 1 response
- 1 Respondents identified multiple issues
- 2 The concern was not specified but may be related to aesthetic concerns about the landscape
- 3 Concern not specified but may be related to use of cyanide





## **Biophysical Concerns - chart**







However, it should be noted that while a minority of respondents expressed environmental concerns, several indicated that these concerns would be alleviated by compliance with law, stating: "As long as the projects meets current environmental legislation, all is good" and "I am a firm believer that no project puts the environment on the back burner". Respondents were also reassured by Marathon's values with one respondent stating: "Obviously any negative repercussions re the environment are a concern but I am confident that given your values and priorities, my concerns would be more than adequately addressed", "...the Company will be undertaking this Project with environment a top priority" and "I have confidence the government regulations and company will do the best for the environment". The contents of the presentation were also seen as addressing concerns: "My questions were answered during the presentation" and "From the presentation the environment is a high priority". Finally, two respondents expressed confidence that adherence to law would be adequate to minimize environmental risk.

#### 2. Community Concerns

While a minority of respondents identified biophysical concerns, the situation with respect to community (socio-economic) issues was significantly different. Of the 278 individuals who responded to this question<sup>4</sup>, 167 (60%) indicated no community concerns while 111 (40%) answered 'yes' to this question. However, in contrast to perceived adverse environmental effects, when community concerns were identified, many were viewed as positive or as both positive and negative. For example, while jobs were the major concern, the increase in employment rates in the region was viewed as positive, subject only to the concern that the local population would not benefit from hiring opportunities. The major issues identified by respondents in order of importance were:

**Employment:** 37 responses. Positive – local hires; negative – jobs would not be given to local population

**Economic Benefits:** 24 responses. Positive – would boost a depressed economy and have spin-off effects; negative – communities would be pitted against each other for access to economic benefits

**Population Increase:** 7 responses. Positive – work would bring residents back to the community and expand tax base; negative – would adversely affect housing and local service demand

**Infrastructure:** 6 responses. Positive – would result in infrastructure improvements; negative – further deterioration of infrastructure

**Inflation:** 4 responses. Viewed as a negative

**Family Life:** 4 responses. Positive – would bring residents back to community; negative – shift work could adversely affect family structure

**Community Investment:** 3 responses. Positive – Marathon investment could stimulate community capacity; negative – communities would not be treated equally or there would be no lasting improvements.

**Training:** 2 responses. Positive – opportunities for training of youth; negative – if no training offered, local population might not be able to access employment opportunities

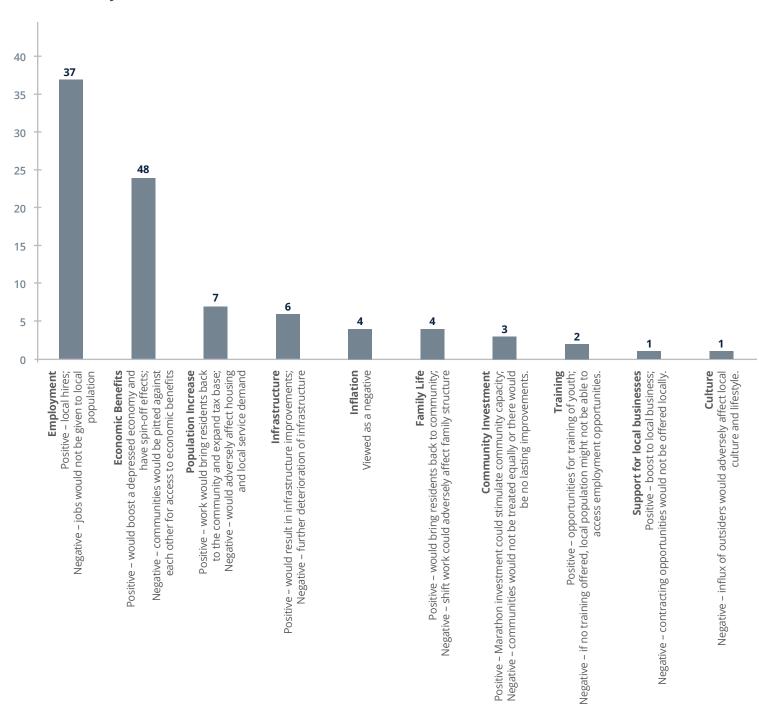
**Support for local businesses:** 1 response. Positive – boost to local business; negative – contracting opportunities would not be offered locally.

**Culture:** 1 response. Negative – influx of outsiders would adversely affect local culture and lifestyle.





#### **Community Concerns - chart**







# d. Collection of Future Information

278 individuals responded to this question. 277 favoured administration of the survey on an annual basis.

