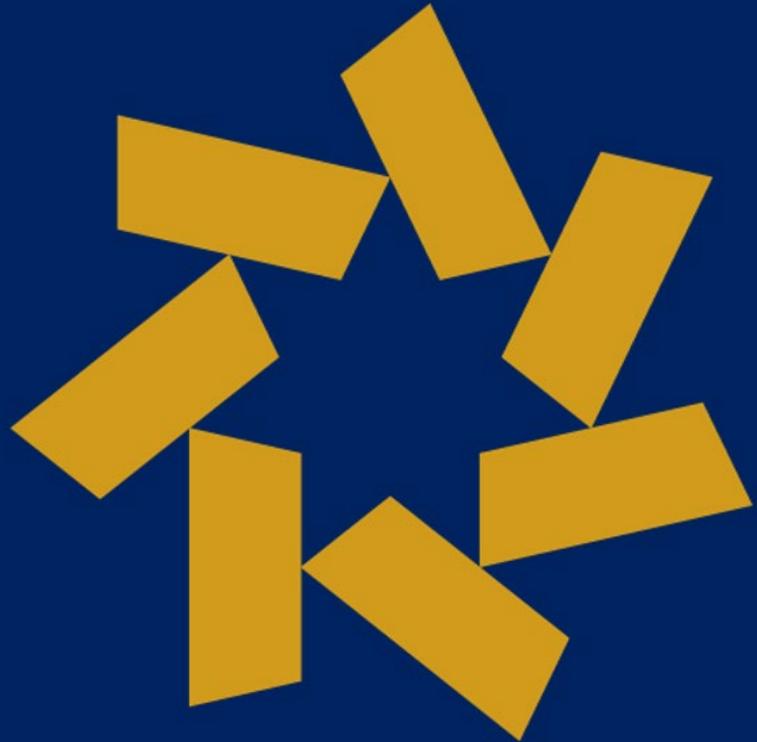




St Barbara



15-Mile Consolidated: Mitigation by Design

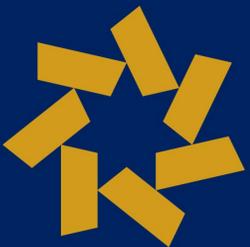
Craig Hudson, P. Eng
June 2025

Land Acknowledgment

LAND ACKNOWLEDGEMENT

We at St Barbara respectfully acknowledge that our operations are located on the traditional ancestral and unceded lands of the Mi'kmaq.

We are all Treaty People.



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This presentation includes certain historical financial information extracted from the Company’s audited consolidated financial statements and information released to ASX. The Company supplements its financial information reporting determined under International Financial Reporting Standards (“IFRS”) with certain non-IFRS financial measures, including cash operating costs.

Financial figures are in Australian dollars (A\$ or AUD) unless otherwise noted. The Company’s financial year is 1 July to 30 June. This presentation is not audited.



Disclaimer

Competent Person Statement

This presentation contains production targets and forecast financial information derived from those production targets (including in respect of all-in sustaining costs and capital costs). The Information relating to the 15-Mile Processing Hub contained in this presentation is extracted from the ASX announcement “Positive 15-Mile Processing Hub Concept Study” dated 29 May 2025.

The Information relating to Mineral Resources and Ore Reserves contained in this presentation is extracted from the “31 December 2024 Mineral Resources and Ore Reserves Statement” released to ASX 19 February 2025.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the production targets, the forecast financial information derived from production targets and estimates of St Barbara’s Mineral Resources and Ore Reserves (as applicable) in the relevant market announcement continue to apply and have not materially changed.

Any statement referring to the potential expansion of 15-Mile processing facility from 2.1Mtpa to 3.0Mtpa plant capacity is a reference to the proposed nameplate capacity of the plant that is currently being studied and could be installed at the 15 Mile Project. The plant capacity should not be misconstrued as a production target (as per the definition under the ASX Listing Rules) and the stated production capacity could be significantly lower than the proposed nameplate capacity.

Any statement referring to the plant expansion aiming to support annual gold production of 100koz per annum or more, is an aspirational statement. As the work on the plant expansion is not yet complete, there are not yet reasonable grounds to believe that the statement can be achieved and it should not be construed as a production target (as per the definition under the ASX Listing Rules).

JORC Code

It is a requirement of the ASX Listing Rules that the reporting of Ore Reserves and Mineral Resources in Australia complies with the Joint Ore Reserves Committee’s Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code). Recipients outside Australia should note that Ore Reserves and Mineral Resources estimates in this document comply with the JORC Code, and may not comply with the relevant guidelines in other countries and, in particular, do not comply with (i) National Instrument 43-101 (Standards of Disclosure for Mineral Projects) of the Canadian Securities Administrators; nor (ii) Item 1300 of Regulation S-K, which governs disclosures of mineral reserves in registration statements filed with the SEC.



Agenda

- **Introduction to 15-Mile Consolidated Project**
 - Overview
 - Production
 - Benefits to Nova Scotians
- **Mitigation By Design**
 - 15-Mile
 - Beaver Dam
 - Cochrane Hill
- **Next Steps in Project Development**
- **Community Involvement**
- **Touquoy Update**



Want more info?



May 29th, 2025 15-Mile Consolidated
Press Release



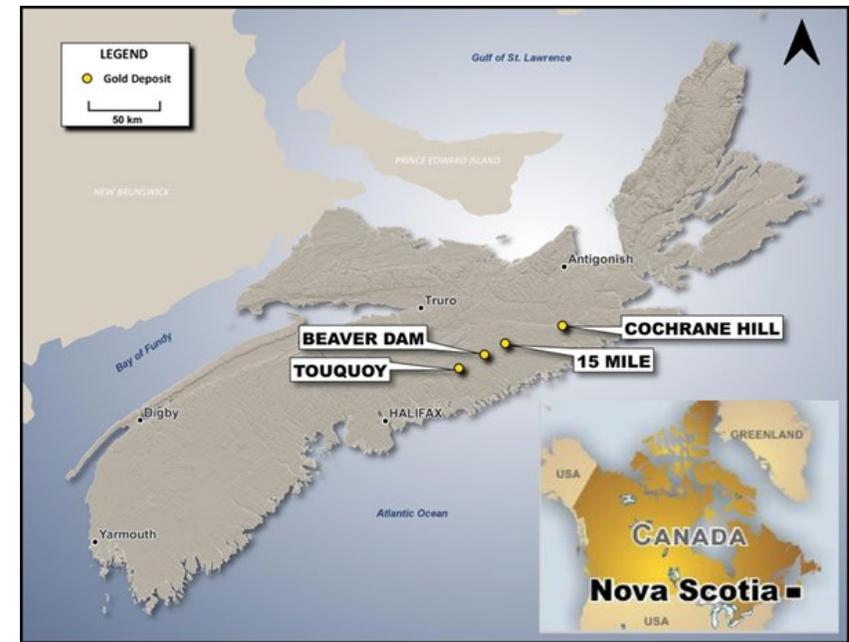
Project Overview

• Location

- 15-Mile Consolidated Project consists of 3 gold mining deposits:
 - i. 15-Mile
 - ii. Beaver Dam
 - iii. Cochrane Hill
- All located on the Eastern Shore on Nova Scotia
- Historically contaminated locations
 - i. +3,000,000 m³ of historic tailings.
 - ii. Commitment to clean up any tailings impacted by our project
 - iii. Successfully completed historic tailings clean up work at Touquoy.

• History

- Components of the 2019 Moose River Consolidated Project Study.
- Touquoy permitting obstacles halted development of the Moose River Consolidated Project
- Opportunity for redesign

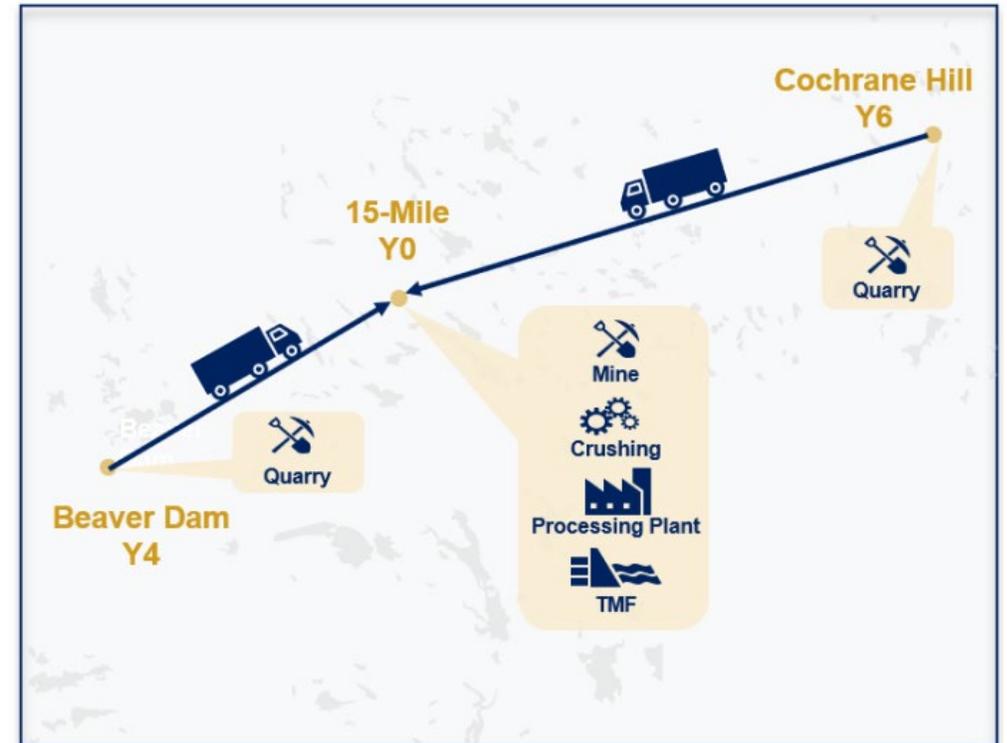


15-Mile Historic Tailings



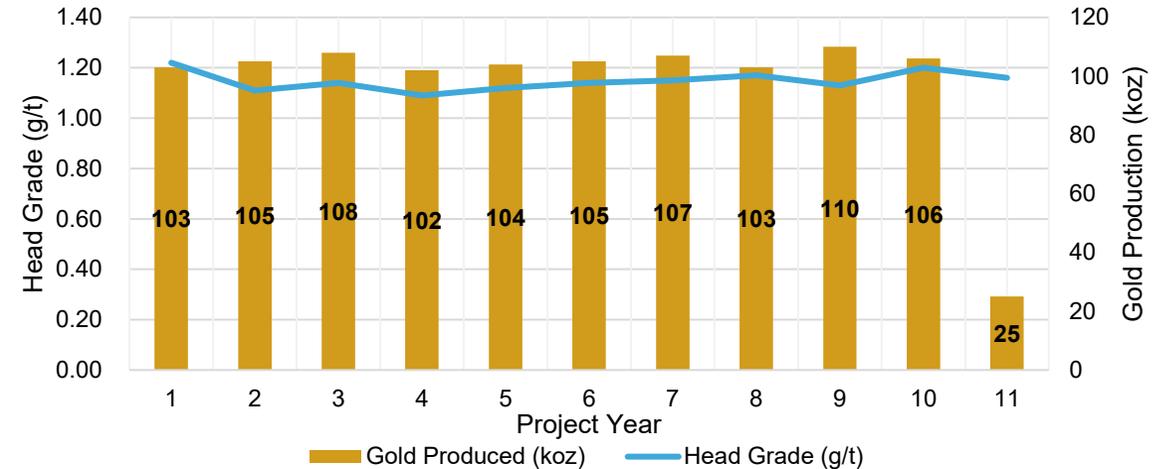
Project Overview

- **Re-design Approach**
 - Since 2023 all 3 projects have undergone a complete re-design.
 - Leveraged previous information requests from previous permitting efforts
 - i. +1,000 Information Requests from Regulators, Communities, First Nations & other organizations etc.
 - Applying lessons learned from Touquoy design, operation and closure
 - Well-defined scientifically sound resource
 - Prioritizing environmental and social constraints while balancing project economics.
- **Final Result**
 - 15-Mile central processing location with Beaver Dam (Y4) and Cochrane Hill (Y6) quarry-style satellite pits.
 - Strong viable gold project with significant reductions in environmental and social impacts
 - i. Jobs = 732
 - ii. Impact to Nova Scotia GDP = \$4,800,000,000
 - iii. Production = 106,000 oz gold per year.



Project Overview

- **Long-term responsible production**
- **Operational Data**
 - 11.2 Year Life-of-Mine
 - i. Beaver Dam starts in year 4
 - ii. Cochrane Hill starts in year 6
 - 3Mtpa whole-ore leaching processing capacity
 - Initial capital \$251M
 - Low strip ratio of 3.4
 - Average gold production of 106koz per year (peak = 110k oz/ year)
 - AISC C\$1,710/oz
 - Gold Recovery: 96.2% at a P80 of 150um.
 - **Pre-tax NPV C\$1.4B***
 - **Pre-tax IRR of 96%***
- **Mitigation by Design**
 - Total reduction in surface disturbance of 293 ha
 - i. 15-Mile – 86ha (+17%)
 - ii. Beaver Dam – 86 ha (+40%)
 - iii. Cochrane Hill – 121 ha (+40%)
 - Closure and final landform incorporated into initial design.



Production Summary	Unit	Life of Mine (LOM) Total or Average
Mine Life	years	11.2
Total Waste Mined	Mt	115.0
Average Strip Ratio	w:o	3.4
Total Mill Feed Tonnes	Mt	33.4
Average Mill Feed Grade	g/t	1.1
Total Contained Gold	koz	1,232
Total Recovered Gold	koz	1,185
Average Gold Recovery	%	96.2%
Average Annual Gold Production	koz	106

* Gold Price of \$US2,500/oz and exchange rate of C\$1.00 = \$US0.70



Socio-Economic Benefits - Update

Economic Benefits for Nova Scotia

Provincial GDP Impact

\$236.5M

during construction

\$410.3M

per year during operations

\$4.83B

total over operating period

Household Income

\$163.4M

in wages during construction

\$70.8M

per year in wages during operations



Construction Phase

1,386

total full-time jobs created in Nova Scotia during construction

1,627

total full-time jobs across the country during construction



Operation Phase

723

total full-time jobs created in Nova Scotia during operations

931

total full-time jobs across the country during operations

15-Mile Consolidated Gold Project

Economic Benefits

ASX: SBM

The 15-Mile Consolidated Gold Project could be Nova Scotia's most advanced and sustainable gold mine, with new energy and remediation initiatives being implemented from day one. Nova Scotians would benefit from job creation, attractive wages, and community growth, especially in local counties. At St. Barbara, we have a proven track record of delivering on safe, environmentally sound, and community-minded projects.

Government Tax Revenue

Municipal

\$5.9M

from construction

\$4.5M

annually from operations

Federal

\$30.7M

from construction

\$15.3M

annually from operations

Provincial

\$29.5M

from construction

\$21.9M

annually from operations

Totals

\$66.1M

total tax revenue during construction

\$41.7M

total tax revenue per year during operations

Spend in Local (Study) Area

\$115.9M **\$740.3M**

during construction

during operations

Contact Us

Website: StBarbara.com.au
LinkedIn: St Barbara Limited



Project Details

Life of Mine

1 year → **11 years**

construction

operations

Total Project Spending

\$2.0B

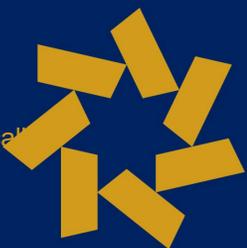
over life of mine

Operational Details

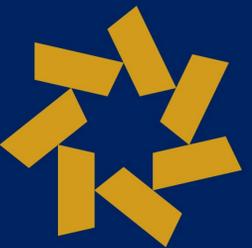
Processing plant to be **relocated from Touquoy** to 15-Mile

Estimated total production of **1,185,000** ounces of gold

Tailings dam to **remediate** historical contaminated soil

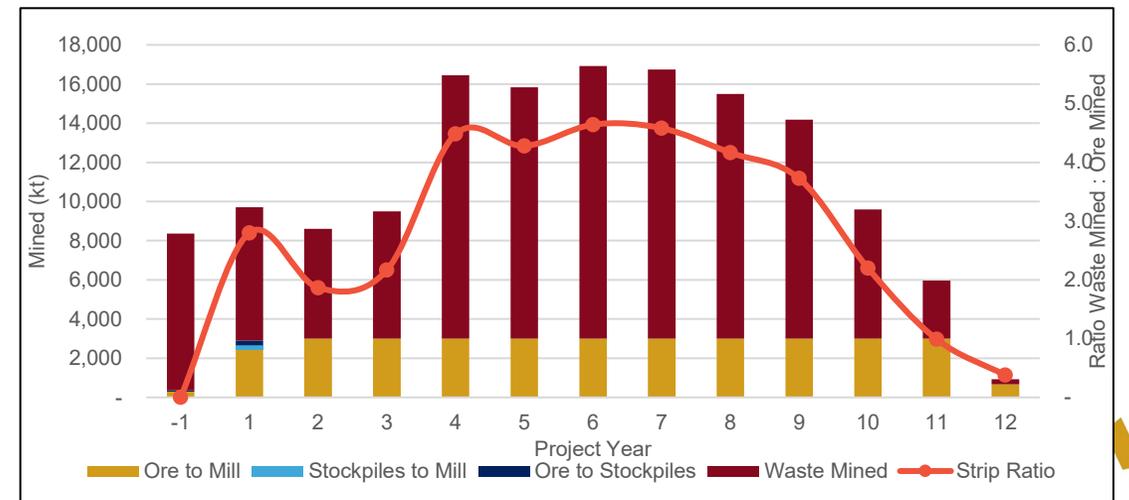


15-Mile Project



15-Mile

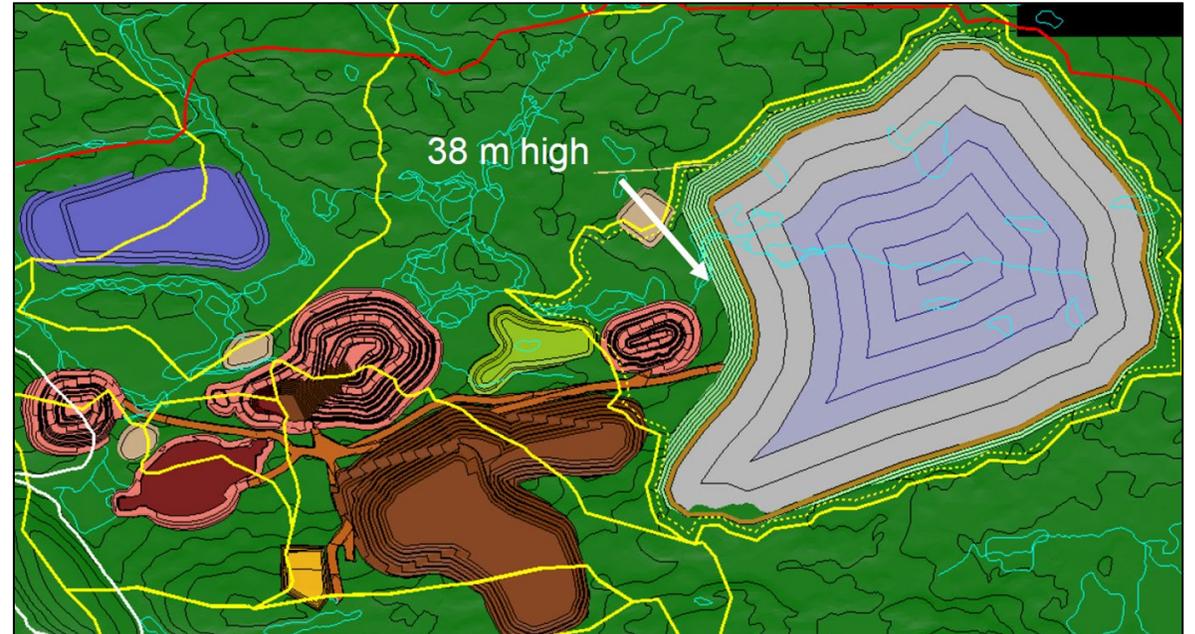
- Environmental constraints and planning for closure informed initial project design
- **Mine Planning**
 - Relaxed mine plan to reduce the need for surface stockpiles and balance strip ratio
 - Complete removal of medium & low-grade stockpiles
 - Leverage multiple pits for progressive backfilling with PAG and NAG material for reduced environmental impacts and source term control
 - i. Backfilling of pits will return final landform decades sooner
 - Initial PAG material will be submerged in the tailing's facility.
- **Processing**
 - 3Mtpa 3CB+Gravity+CIL
 - Includes cyanide and arsenic treatment prior to tailings deposition.
 - Re-uses the majority of the Touquoy Processing facility
 - i. Minimize lead times, cost inflations and reduced eCO2
 - ii. Quick ramp up



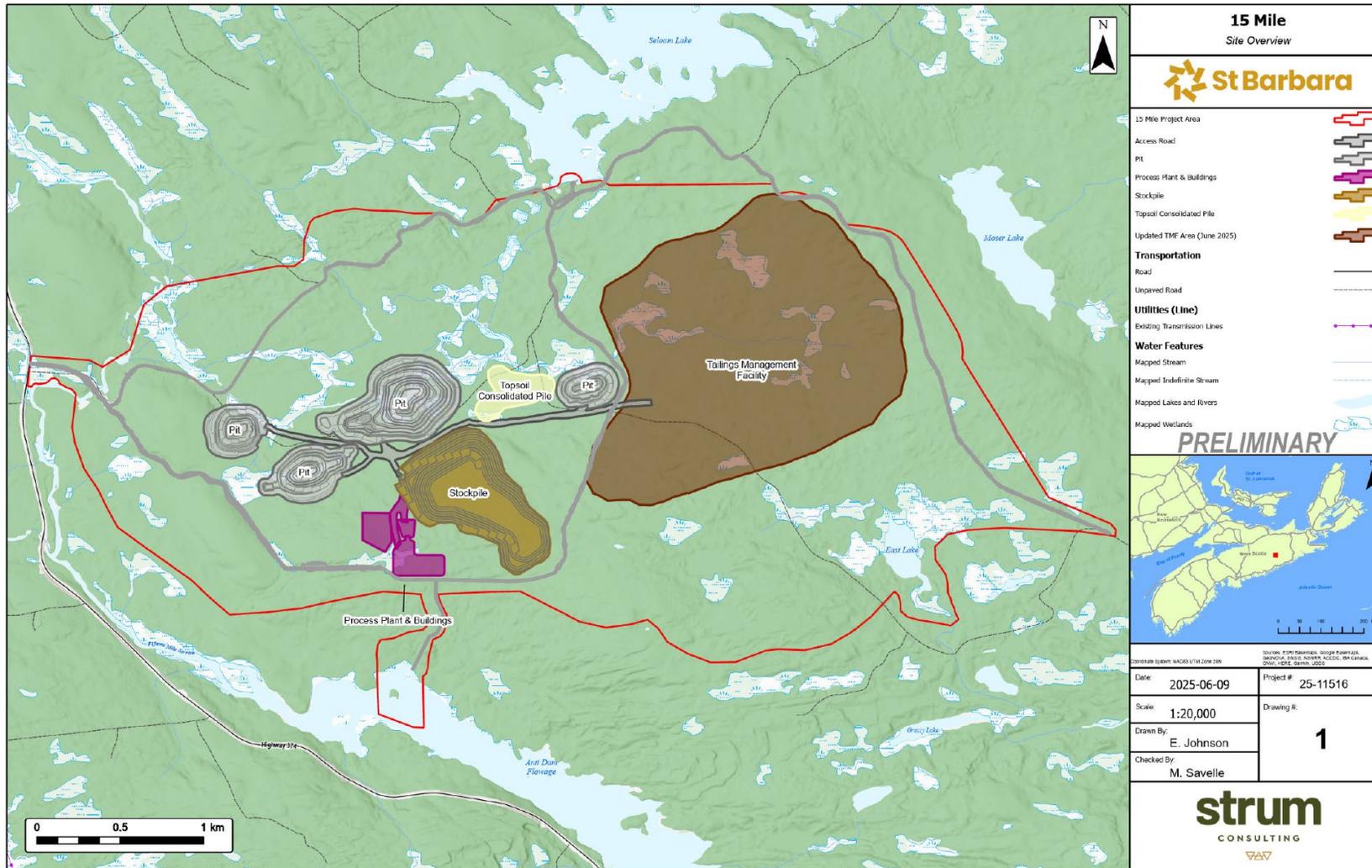
15-Mile

- **Tailings**
 - Recently completed a Multiple Accounts Analysis (part of MDMER) to evaluate deposition methodology, required disturbance areas and existing topographical information to minimize environmental impacts
 - Reduction in CDA risk rating
 - Water storage optimization for source term control of tailings.
 - Containment for historic tailings remediation.

- **Infrastructure & Water Management**
 - Multiple discharge locations balancing watersheds to reduce flow reductions.
 - Water management designed with 1:100 year event + climate change
 - Consolidated water management ponds with contingency
 - i. Lesson learned from Touquoy
 - Administrative, mining and processing infrastructure consolidated into one area.



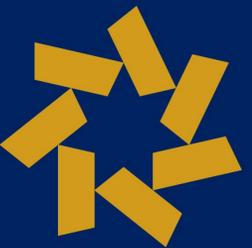
Layout 15-Mile



- Removal of med/low grade stockpiles
- Reduced NAG stockpile
- Progressive PAG backfilling and no exposed PAG material on surface
- Improved CDA risk rating
- Proposed by-pass trails for ATV + public use.
- Renewable Opportunity for long term post closure benefits
 - Closed-loop pumped hydro with NAG stockpile design = +80MW
 - Solar potential = 186MW
- **Reduction in disturbance: 86 ha (17%)**

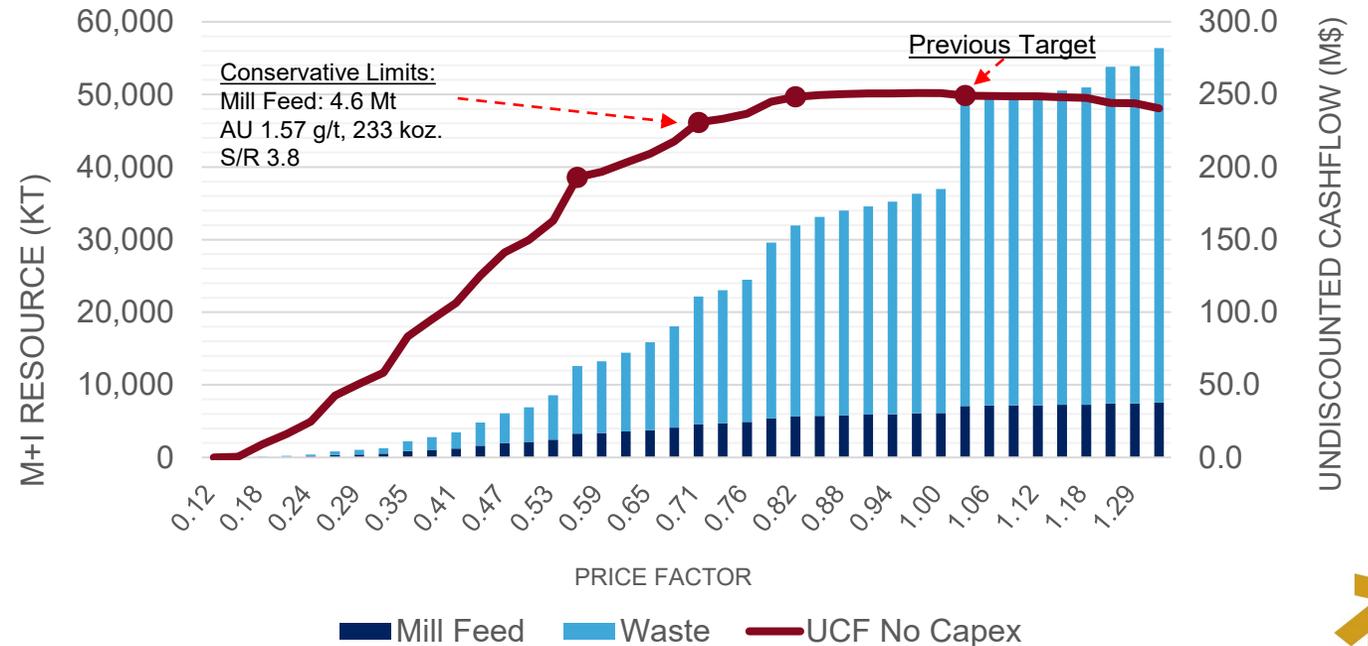
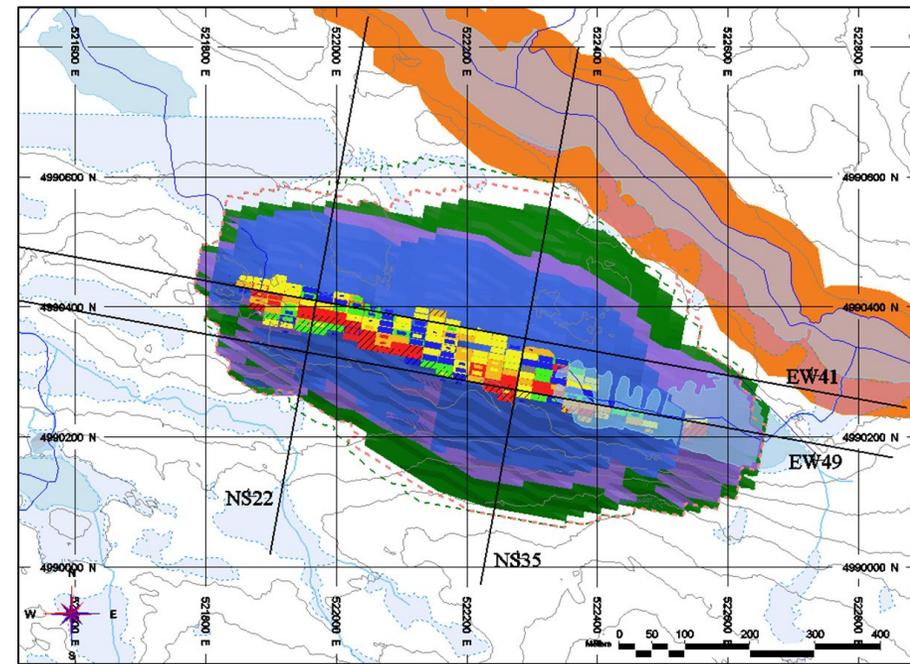


Beaver Dam Project

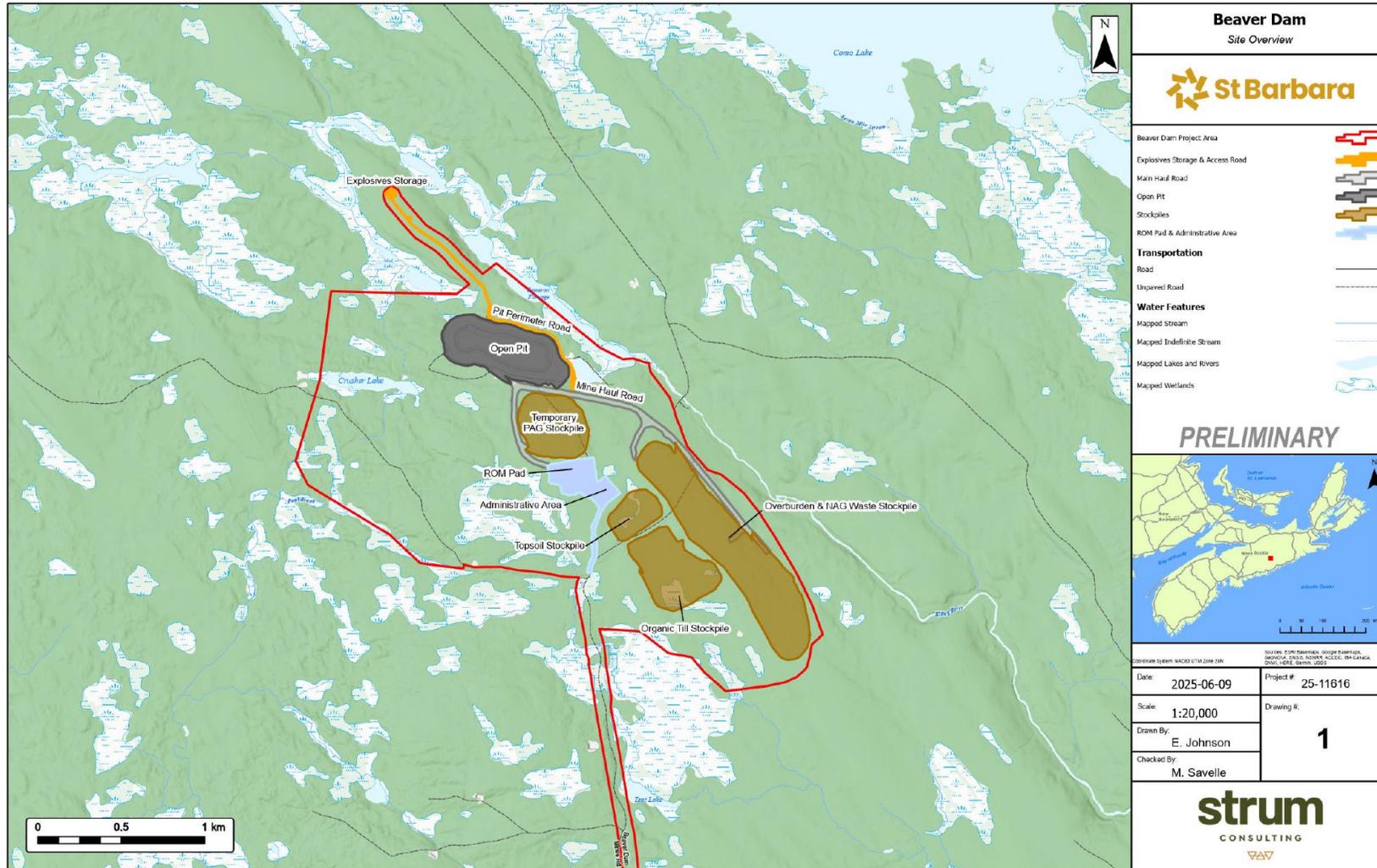


Beaver Dam

- Redesign begins with the fundamentals
- Impacted historical tailings will be remediated and stored at 15-Mile.
- **Pit Optimization**
 - Optimization opportunity in open pit size to reduce impacts, waste rock while balancing environmental constraints.
 - i. Reduction of 24 Mt of waste material and surface stockpiles
 - ii. Increased buffer between Killag River (60m to 110m)
- **Reduced Community Impacts**
 - No need for new haul roads, leverage existing roads to 15-Mile.
 - Removed infrastructure from “Copebrook” watershed and reduced the watersheds by 50%.
- **Water Management**
 - PAG material re-handled back into pit to avoid oxidation and support final landform
 - Smaller infrastructure allows for balancing watersheds to minimize flow losses.
 - No requirement for industrial water withdrawals.



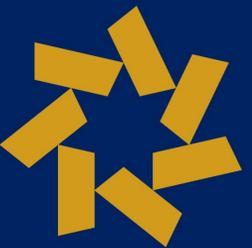
Layout Beaver Dam



- Significantly reduced open pit design
- Reduced stockpiles
- Temporary PAG pile which gets rehandled back into open pit.
- No industrial water withdrawals
- Stockpiles located to reduce impacts on watersheds.
- Reduced project area :159 ha
- **Reduction in disturbance: 86 ha (42.4%)**

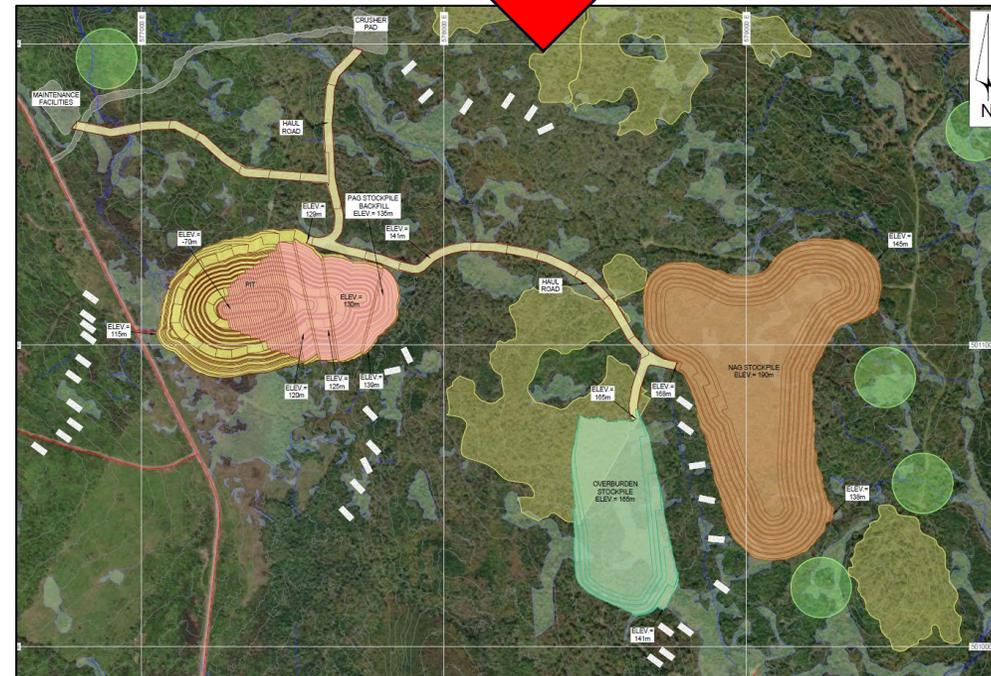
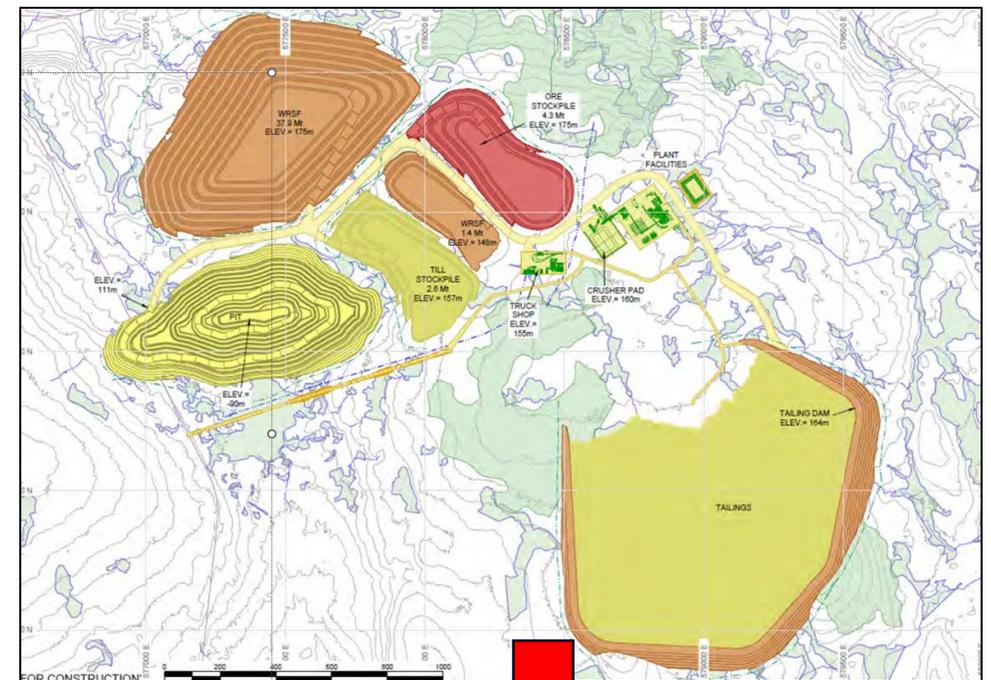


Cochrane Hill Project

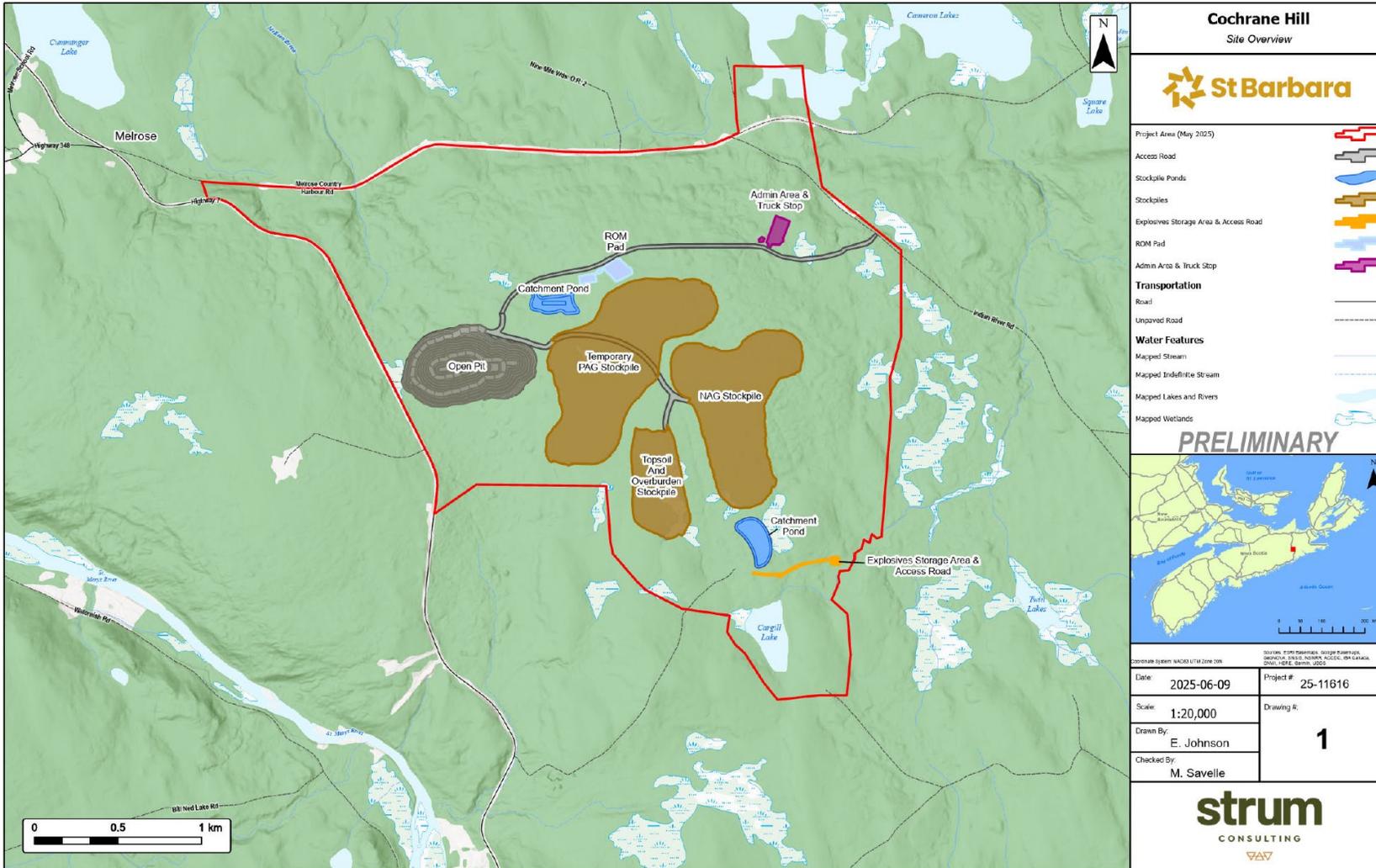


Cochrane Hill

- Assess Alternatives and Optimize
- **Pit Optimization**
 - Reduced open pit size
 - Avoids highway 7 realignment
 - Reduce waste material.
- **Project Trade-off Studies**
 - Previous project designs included a process plant and tailings facility with gravity + float concentrate being transported to Touquoy.
 - Evaluated various mining and processing options at different throughputs. (1.8mtpa, 2.1mtpa and 3mtpa)
 - Concentrate
 - Stand along Whole-Ore leach
 - Quarry-style deposit
 - Selected option was quarry-style deposit with haulage to 15-Mile.
 - Minimal infrastructure and stockpiles
 - No need for industrial water withdrawals.
- **Water Management**
 - Project has moved out of direct watershed to St Mary's River.
 - Infrastructure placed strategically to mitigation downstream water flow impacts.
 - Re-handling PAG back into vacant pit to manage source terms and accelerate reclamation landforms



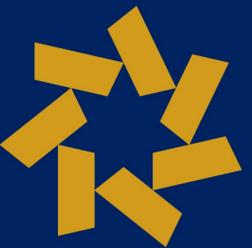
Layout Cochrane Hill



- Significantly reduced open pit design
- No need to realign highway 7
- Reduced surface stockpiles
- Temporary PAG pile which gets rehandled back into open pit.
- No industrial water withdrawals
- Stockpiles located to reduce impacts on watersheds.
- **Reduction in disturbance: 121 ha (41.8%)**

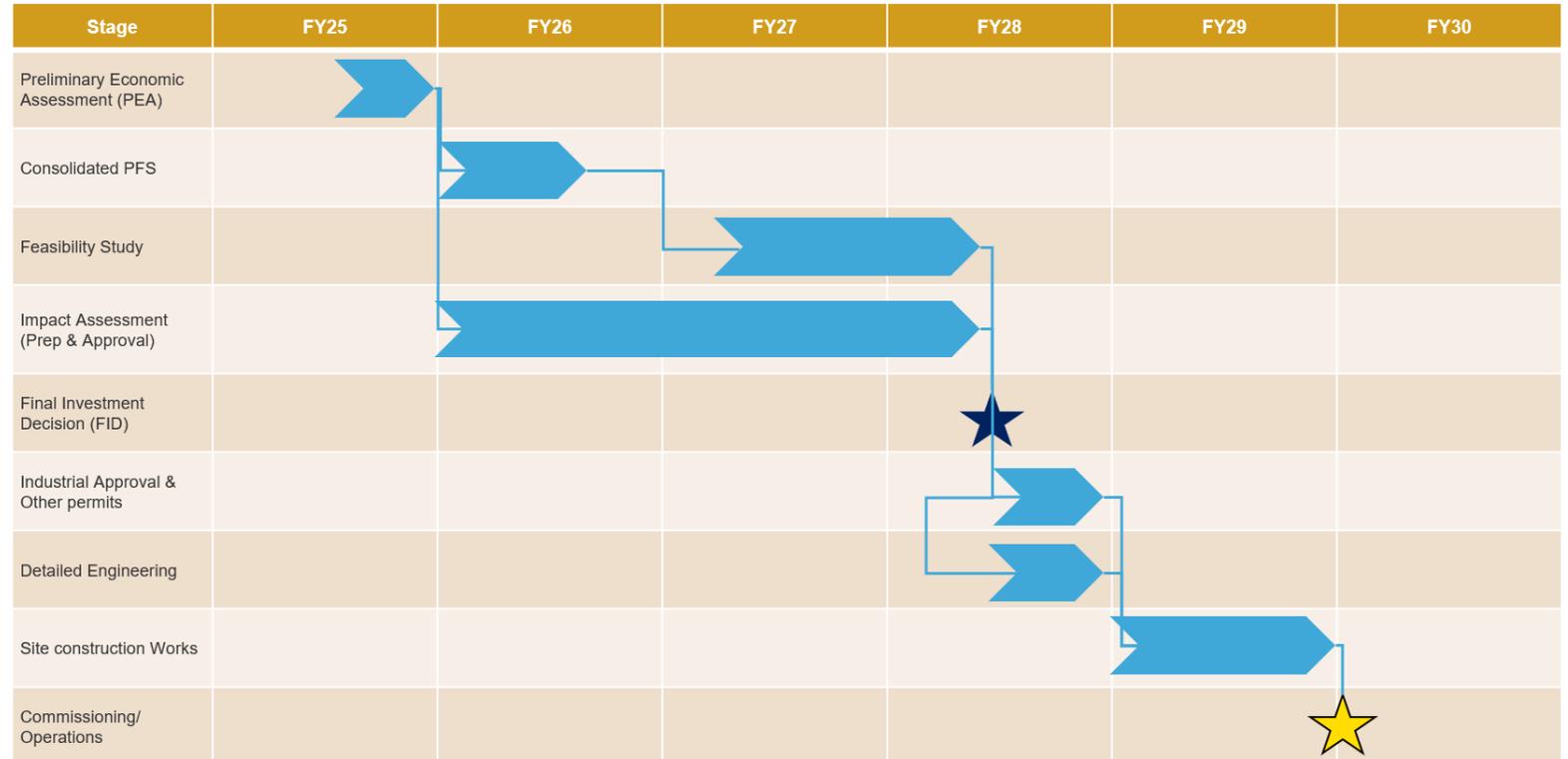


Next Steps



Next Steps

- **Rapid Gap Analysis and Trade off Studies**
 - Refined layout analysis
 - Metallurgical test work
 - Ongoing baseline and site characteristics
 - Early indicative GW and SW modelling
- **Engagement Ramp Up**
- **Pre-Feasibility Study Fall 2025**
- **Preparation of Environmental Impact Assessment**
- **Renewable Energy Study**
- **Permitting driving timelines**



Community Involvement

- St Barbara is committed to building Stronger Communities
- Between 2017-2025 St Barbara contributed over \$1,100,000 to local community organizations
- +20 Community Partnership Agreements have been signed with local community groups
- Fed 1,000 families through food bank at during the Holidays.
- Bursary Program- continued support of graduating students from:
 1. North Nova Education Centre
 2. Northumberland Regional High School
 3. Musquodoboit Rural High School
 4. Marine Drive Academy
 5. St. Mary's Education Centre/Academy
 6. Chedabucto Education Centre/Guysborough Academy.
 7. Wasoqopa'q First Nation



Community Offices:

Guysborough, Tuesday and Friday, 10am-2pm

Sheet Harbour, Tuesday-Thursday, 10am-2pm

Stellarton, Tuesday-Thursday, 10am-2pm



Touquoy Update

Reclamation Ongoing

- Actively reclaiming the site
 - Spent +\$9M in FY25 on reclamation activities
 - Forecasted to spend \$7M in FY26 in this coming year
- Pumped Hydro Potential of 80MW

The Touquoy Story

- Employed up to 355 people over a 7-year period
- Average annual property taxes: \$370,000
- Royalties Paid: \$8,800,000

Conservation Land

- Successfully procured and protected 228ha of land
- Exceeded the proposed land costs to be offset.





Questions?

Want more info?



May 29th, 2025 15-Mile Consolidated
Press Release