REGISTRATION PURSUANT TO

PART 3 of the NEWFOUNDLAND AND LABRADOR

REGULATION 54/03

FOR THE PROPOSED

BLOOM LAKE RAILWAY

Presented by:

CONSOLIDATED THOMPSON IRON MINES LTD.

Prepared by:

BRETON BANVILLE & ASSOCIATES RAIL CANTECH INC.

And:

CONSOLIDATED THOMPSON IRON MINES LTD.

APRIL 23, 2008



NAME OF UNDERTAKING:

Bloom Lake Railway

PROPONENT:

(i) Name of Corporate Body:

Consolidated Thompson Iron Mines Ltd. (CLM)

(ii) Address:

1155, University Street, Suite 508, Montreal, QC, H3B 3A7

(iii) Chief Executive Officer:

Name:	Richard Quesnel	
Official Title:	President & CEO	
Address:	1155, University Street, Suite 508,	
	Montreal, QC, H3B 3A7	
Telephone No.:	(514) 396-6354 ext. 26	

(iv) Principal Contact Persons for purposes of environmental assessment:

Name:	René Scherrer
Official Title:	Project Manager - Mining
Address:	Consolidated Thompson Iron Mines Ltd,
	1155, University Street, Suite 508,
	Montreal, QC, H3B 3A7
Telephone No.:	(514) 396-6345 ext. 23





THE UNDERTAKING:

(i) Nature of the Undertaking:

CLM will mine and process iron ore mineral from the Bloom Lake iron ore deposit near Fermont in northern Quebec (see Appendix A for Site Location). A new 31.5 km long single-track railway line will connect the new load-out facilities within Labrador with the existing railway line between Wabush Mines installations and the Quebec North Shore & Labrador Railway (QNS&L). The optimized rail line remains within the same footprint corridor as originally proposed in 2006 (see Appendix B for Original Corridor).

The entire rail line and the load out facilities will now be located within the Province of Newfoundland and Labrador. There will be a turn-around loop constructed around the load out facilities and will follow the optimized path that will minimize environmental impact (see Appendix B, for Optimized Route). As well, an approximate 750 meter conveyor will be constructed to substitute rail from the mill on the Quebec side to the load-out area in Labrador. The conveyor is totally on the Quebec side of the border and is NOT part of this undertaking. The conveyor and the load-out facilities will be powered by a power line originating on the Quebec side and ending at the load-out area in Labrador.

As a result of the concerns raised by the Walsh River Cabin Owners Association, the rail line through the Walsh River area has been relocated to the north boundary of the corridor the farthest distance from the existing cabins (see Appendix C for Walsh River Footprint). The new routing will diminish noise concerns and address safety issues. Furthermore, identified cross-country/snowmobile trails will have underpass culverts installed at crossings to ensure total safety.





A marshalling yard near the junction with the existing railway and a section of double rail siding to hold 240 full and 240 empty cars will be built (see Appendix D for Rail Siding Footprint and Railroad Crossing on Route 500). For safety purposes, reflective plates will be mounted on the rail cars.

(ii) Purpose/Rationale/Need for the Undertaking:

The rail connection, conveyor and load out facilities are necessary to deliver iron ore concentrate to the port of Sept-Iles for trans-shipment by ship to domestic and overseas customers.





DESCRIPTION OF THE UNDERTAKING:

(i) Geographical Location:

The Bloom Lake mine site is situated at latitude 52° 50' 30" North, longitude 67° 17' West in the Province of Quebec. The municipalities of Wabush and Labrador City are located 30 km to the west of the property (See Appendix A).

The optimized routing and the original corridor of the railway are shown in Appendix B. Apart from a short section of the line near Labrador City, the railway is remote from any residential areas. The railway line on the south side of Harrie Lake bypasses Labrador City; the minimum distance separating the line from Labrador City residences will be more than 200 m with a tree barrier providing both a visual and sound barrier between the south shore of the lake and the rail line.

The rail project consists of four main components: the rail siding connecting to the QNS&L at Wabush, the interchange, the mainline and the loop near the Labrador/Quebec border (see Appendix A – Rail Components and Distances).

Rail Siding:

The rail siding consists of a section of line measuring approximately .780 km from the end of the Bloom Lake Interchange to the junction with the Northern Land Company Limited railway line (leading to Ross Bay Junction and the QNS&L Railway).

- Connection point on QNS&L railroad = 0+000
- Beginning of interchange = 0+780





Interchange:

The physical length of the interchange is approximately 3.15 km where three parallel railway tracks will be laid to facilitate the connection of loaded and unloaded rolling stock to locomotives.

- Beginning of interchange = 0+780
- End of interchange = 3+930

Mainline :

The physical length of the mainline between the beginning of the loop and the beginning of the interchange is approximately 27.50 km.

- Beginning of mainline/end of interchange = 3+930

- End of mainline/beginning of loop = 31+430

Loop :

The physical length of the loop is approximately 3.00 km in diameter where the ore loading operations will be conducted

- Beginning of loop = 31+430
- End of loop = 34+430





(ii) Physical Features:

The terrain through which the proposed railway line will pass is low lying with boreal forest, muskeg and a number of lakes. From an elevation of 700 m at the load out facilities close to the Quebec-Labrador border the line descends to 540 m at the Wabush junction (see Appendix E for Typical Rail Bed Design). Clear span bridges (see below) will be built to cross the discharge of Virot Lake, the Walsh River, Ironstone River and the discharge of Long Lake (see Appendix F for Crossing Locations and Typical Design Structures). Smaller clear span bridges and open bottom culverts will be built across the narrower watercourses (see Appendix G for Small clear span bridges and open bottom culverts).

CLEAR SPAN BRIDGES

A clear-span bridge is a structure that completely crosses a watercourse **without altering the stream bed or bank**. The bridge structure (including bridge approaches, abutments and footings) are built outside of the channel and above the high water mark such that no infilling of the stream channel occurs and stream flows are not constricted. A clear-span bridge is more preferred than a culvert as no structures are placed in the stream bed or banks and therefore there is no alteration of natural channel processes.

Clear-span bridge construction has the potential to negatively affect fish habitat by the removal of riparian vegetation. Riparian vegetation occurs adjacent to the watercourse and directly contributes to fish habitat by providing shade, cover and food production areas. It is important to retain as much riparian vegetation as possible at the crossing site to prevent erosion and minimize disturbance to fish habitat. On that basis, only the vegetation required to accommodate the footprint of the crossing and access to the construction site will be removed.





Fisheries and Oceans Canada (DFO) is responsible for protecting fish and fish habitat across Canada. Under Section 35 of the *Fisheries Act* no one may carry out a work or undertaking that will cause the harmful alteration, disruption or destruction (HADD) of fish habitat unless it has been authorized by DFO. CLM will follow the conditions and measures set out below to ensure the project is in compliance with Subsection 35(1) of the *Fisheries Act*.

Measures to Protect Fish and Fish Habitat when Constructing Clear-Span Bridges.

CLM will:

- 1. Avoid building on meander bends, braided streams, alluvial fans, active floodplains or any other area that is inherently unstable and may result in the erosion and scouring of the bridge structure.
- 2. Ensure the bridge structure is placed entirely above the high water mark (HWM) of the watercourse and is not located in areas with eroding or unstable banks. (For freshwater lakes HWM is the highest water level that has been maintained for a sufficient period of time to leave evidence upon the landscape; for rivers and streams HWM is the elevation of the top of the bank of the channel, i.e., in many cases this is delineated by the presence of permanent vegetation)
- 3. Design the bridge so that storm water runoff from the bridge deck is directed into a retention pond or vegetated area to remove suspended solids, dissipate velocity and prevent sediment and other deleterious substances from entering the watercourse.
- 4. Generally there are no restrictions on timing for the construction of clear-span structures as they do not involve in-water work. However, if there are any activities with the potential to disrupt spawning fish and incubating eggs (e.g., crossing of watercourse by machinery), these should adhere to the following timing window: between June 15 and September 15 in Labrador.





- 5. Machinery crossing the watercourse (over and back) to bring equipment required for construction to the opposite side of the watercourse should be limited to a one-time event. If the stream bed and banks are highly erodible (e.g., dominated by organic materials and silts) and significant erosion and degradation is likely to occur as a result of equipment crossings, then a temporary crossing structure or other practices should be used to protect these areas. The crossing must also adhere to the timing window specified in Measure #4.
- 6. Install effective sediment and erosion control measures before starting work to prevent the entry of sediment into the watercourse. Inspect them regularly during the course of construction to ensure they are functioning properly. Make all necessary repairs if any damage is discovered.
- 7. Operate machinery on land (above the HWM) and in a manner that minimizes disturbance to the banks of the watercourse.

7.1. Machinery is to arrive on site in a clean condition and is to be maintained free of fluid leaks.

7.2. Wash, refuel and service machinery and store fuel and other materials for the machinery away from the water to prevent any deleterious substance from entering the water.

- 7.3. Keep emergency spill kit on site in case of fluid leaks or spills from machinery.
- 7.4. Restore banks to original condition if any disturbance occurs.
- 8. The removal of select plants within the road rights-of-way (ROW) may be required to meet operational and/or safety concerns for the crossing structure and the approaches. This removal within the road ROW should be kept to a minimum and when practicable, prune or top the vegetation instead of uprooting.





8.1. Only the vegetation required to accommodate the footprint of the crossing and access to the construction site should be removed.

8.2. Taper the clearing width of rights-of-way at water crossings and fell vegetation away from the water.

- 9. Use measures to prevent deleterious substances such as new concrete (i.e., it is precast, cured and dried before use near the watercourse), grout, paint, ditch sediment and preservatives from entering the watercourse.
- 10. Stabilize any waste materials removed from the work site to prevent them from entering the watercourse. This could include covering stockpiles with biodegradable mats or tarps or planting stockpiles with grass or shrubs.
- 11. Vegetate any disturbed areas by planting and seeding preferably with native trees, shrubs or grasses and cover such areas with mulch to prevent soil erosion and to help seeds germinate. If there is insufficient time in the growing season remaining for the seeds to germinate, stabilize the site (e.g., cover exposed areas with erosion control blankets to keep the soil in place and prevent erosion) and then vegetate the following spring.

Route 500 Crossing

A detailed safety assessment will be conducted where the railway line crosses Highway 500 as per RTD 10* (see Appendix D for Rail Siding Footprint and Railroad Crossing on Route 500). Appropriate safety measures will be taken, including the installation of a grade crossing warning system, to ensure a safe rail crossing on Route 500 (See Appendix H for Grade Crossings with a Grade Crossing Warning System).



^{*}RTD-10 Road/Railway grade crossings – Technical standards and inspection, testing and maintenance requirements as per Transport Canada. The requirements of this document are incorporated by reference in the *Railway-Highway Crossing at Grade Regulations* made pursuant to the latest version of the *Railway Safety Act*.



(iii) Construction:

Construction activities will involve the following main items of work:

- Surveying
- Land clearing along the right of way
- Blasting, excavation and filling
- Construction of clear span bridges and installation of culverts
- Installation of a grade crossing warning system at existing Highway 500 level crossing
- Ballasting and track laying
- Installation of signal lights and communication systems
- Conveyor and rail installation
- Load out site and facilities

Existing roads will be upgraded/expanded (minimal new construction) and used as a temporary access roads during the construction period only. Some examples include the Golf Course road, the Walsh River road and the quarry road leading to Bloom Lake. The rail bed itself will be used for primary access during construction.

Potential sources of pollutants during the construction period will include: noise, dust generated during blasting and by vehicular traffic, heavy equipment exhaust gases and potentially small spillages of fuel and lubricants from fuel storage facilities and construction equipment. Contingency plans will be employed should small spillages occur to minimize any effect on the environment.

Mitigation measures will also be employed on a full-time basis to reduce potential disturbance of water bodies and wetlands. In particular, we intend to use an independent environmental consultant firm who will be required to have personnel on site at all times to be a key liaison between CLM, contractors and the government on all environmental issues that may arise. This person will have a primary responsibility to monitor mitigation measures and to ensure these measures are appropriate and efficient.





(iv) Operation:

The railway, owned and operated by CLM or owned, built and operated by a third party and leased to CLM, will be in operation year-round. The expected life of the mine is in excess of thirty four (34) years.

The mine production rate of 7 million tonnes per year of iron ore concentrate, train frequency will average three per day in each direction (80 cars per train, 90 tonnes of concentrate per car basis towards Wabush and EMPTY on return to Bloom Lake). As production is expanded the train frequency may increase proportionally.

Other traffic will be limited to track maintenance and repair rolling stock.

Potential sources of pollutants during the operation period include: noise, diesel engine exhaust gases and potential spillage or leakage of fuels and lubricants.

CLM will have a detailed contingency plan to address emergency events related to weather (ie. Track damaged due to flooding and erosion) or operations (ie. Train derailment or fuel spillage). Measures outlined in the contingency plan will be at industry standards and will be employed with safety first followed by minimizing impact on environment as a key focus.





(v) Occupations:

Preparation Crew

- 1 Superintendent
- 1 Project Manager
- 1 Cost & Planning Engineer
- 1 Foreman (Drilling & Blasting)
- 1 Foreman (Clearing & Filling)
- 1 Office Manager
- 1 Buyer
- 1 Quantity Technician
- 1 Parts Clerk
- 1 Janitor
- 3 Instrument Man
- 2 Blaster
- 10 Truck Driver (class AA, >35t)
- 2 Truck Driver (class A)
- 1 Electrician
- 3 Driller
- 1 Fuel Man
- 4 Specialised Labourer
- 1 Carpenter
- 6 Heavy Equipment Operator (class
- A)
- 4 Shovel Operator (class A)
- (vi) Project-Related Documents:

These documents have been produced for the Proponent:

Scoping Study for the Bloom Lake Iron Ore Project

October 21, 2005

Feasibility Study for the Bloom Lake Project @ 5Mtpy of Iron Ore Concentrate April 4, 2006

Feasibility Study for the Bloom Lake Project @ 7Mtpy of Iron Ore Concentrate April 11, 2007

Surveying, Construction Crew

- 1 Superintendent
- 2 Engineer
- 2 Foreman
- 2 Surveyor
- 4 Rod and Chainman
- 8 Track Laying &
- Maintenance Equipment Operator
- 12 Railway Labourer
- 2 Heavy Equipment Operator
- 2 Electrician
- 2 Welder



APPROVAL OF THE UNDERTAKING:

Following is a list of the principal permits, licenses and approvals required for the project:

Permit/Licence/Approval	Issuing body
Environmental Registration	Department of Environment & Conservation Environmental Assessment Division
Certificate of Environmental Approval	Department of Environment & Conservation Environment Management Division
Authorization for Works or Undertakings Affecting Fish Habitat	Fisheries and Oceans Canada
Permit to Occupy Crown Land	Department of Environment & Conservation Crown Lands Division
Water Course Alterations Certificate	Department of Environment & Conservation Water Resources Division
Permit to Cut Timber	Department of Forest Resources & Agrifoods
Blasters Certification	Department of Government Services Occupational Health & Safety Division
Quarry Development Permit	Department of Mines & Energy Mineral Lands Division
Flag Persons Certification	Department of Government Services Occupational Health & Safety Division
Bridges – Certificate of Approval	Department of Environment & Conservation Water Resources Division
Culvert Installation	Department of Environment & Conservation Water Resources Division
Magazine Licence	Mines & Energy Canada
Waste Disposal Approval	Department of Government Services
Fuel Storage & Handling (GAP Regulations)	Department of Government Services
Fuel Storage & Handling	Department of Government Services







SCHEDULE:

The project is scheduled to begin in June, 2009 or immediately following receipt of Ministerial approval. The provisional date for start of construction is June 16, 2008 with completion set for mid 2009.

FUNDING:

The total cost of the project will be approximately C\$80 million (including conveyor on Quebec side). Sources of funding are covered by private debt and public equity placements.

SUBMISSION:

Date Submitted April 23, 2008

Name:Richard QuesnelTitle:President & CEO





APPENDIX A

Site Location









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Rail Components and Distances





APPENDIX B

Original Footprint Corridor – 2006



Optimized Route 2008





APPENDIX C

Walsh River Footprint







APPENDIX D

Rail Siding Footprint and railroad crossing on route 500





APPENDIX E

Typical Rail Bed Design



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APPENDIX F

Crossing Locations and Typical Design Structures





Railway bridge – Through Truss





Railway Bridge – Deck Truss



Railway Bridge – Deck Truss with precast concrete deck slabs













APPENDIX G

Small clear span bridges^{*} and open bottom culverts



Open Bottom Culvert

Maintains natural bottom substrate. Water velocities do not significally change.





APPENDIX H

Grade Crossings with a Grade Crossing Warning System

Figure 8-2: Minimum Sightlines - Grade Crossings with a Grade Crossing Warning System



NOTES:

- 1. SSD and DStopped are obtained in accordance with section 8.5.
- For a grade crossing with a grade crossing warning system, subject to the conditions included in subsection 8.4(b), sightlines of an approaching train within the distance DStopped must not be obstructed by:
 - 1. trees, brush, other vegetation, or materials stored on the railway right of way; and
 - 2. the installation of additional equipment housings, tool sheds or any other building or structure.

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