

December 17, 2022

Attention: Jennifer Lau, Project Manager, by email: jennifer.lau@iaac-aeic.gc.ca Atlantic Regional Office Impact Assessment Agency of Canada Government of Canada 200-1801 Hollis Street Halifax, NS B3J 3N4

Re: Joyce Lake DS0 Iron Ore Project: Changes - December 13, 2022, Feasibility Study

Dear Jennifer,

On December 13, 2022, Joyce Direct Iron Inc. (JDI) under Century Global Commodities Corp. filed a Joyce Lake DSO Iron Ore Project (the Project) Feasibility Study (2022 Study) on SEDAR: https://www.sedar.com/DisplayProfile.do?lang=EN&issuerType=03&issuerNo=00026555.

The 2022 Study supersedes the 2015 Feasibility Study on which the draft EIS (Draft EIS) filed with the Impact Assessment Agency of Canada (IAAC) on October 1, 2022, was based. On November 12, 2022, the Draft EIS was also submitted to Newfoundland and Labrador Department of Environment and Climate Change (NL-ECC) for comment.

This letter is to inform IAAC of key changes (the Changes) between the Draft EIS and the 2022 Study. JDI believes the Changes are not material and do not require significant additional consultation, adjustment to IAAC's Draft EIS technical review or collection of additional baseline data.

JDI continues preparation of the "combined federal and provincial EIS" (Combined EIS) which will include responses to IAAC's Draft EIS technical review and NL-ECC's comments, results of ongoing Indigenous Groups consultation and the Changes because of the 2022 Study. JDI is targeting submission of the Combined EIS by mid-2023.

There are three key Changes highlighted below, none of which in JDI's opinion are material to the Draft EIS:

a. A lump product (+6.3mm to +31.5mm) drying circuit has been added to the mine site crushing plant. The crushing plant will operate 214 summer days with fines product (-6.3mm) transported to market and lump product (35% of 2.5M DMT/a) dried, stockpiled, and reclaimed and transported to market for 151 winter days. The net impact of this change to year round products transport includes:



- Annually, transported tonnage is reduced by 17,500 tonnes of water
- Haul truck/train frequency is reduced by a third (reducing emissions intensity)
- Product storage capacity for rail and port transfers are reduced
- Haul truck/rail loadout workers are full time, rather than seasonal
- The Project is more economically robust
- A 875,00 DMT (peak) dried lump stockpile is located at the mine site crushing pad
- Diesel fuel consumption increases by 1.1ML/a or 5.39% annually.
- b. The dedicated product haul road between the mine site and Astray rail loadout uses the same route, but road width is reduced to a single lane with passing pull-outs at 1Km intervals. Continuous truck haulage requires only 12-95 t haul trucks.
- c. At the planned Astray rail loadout improved design now requires installation of 2.4Km of new track compared to 6.9Km previously.

Additionally, the lower grade ROM stockpile, which will be reclaimed, and crushed and transported to market at the end of mine life, has been relocated from between the open pit and crushing pad, to the crushing pad at the mine site. The relocation reduces energy required during reclaim.

The Changes will facilitate haul truck, rail and ocean products transportation and the yearround activity reduces intensity of transportation diesel fuel use. The Changes facilitate rail haulage (not directly part of the EIS) from Astray rail loadout to the Pointe-Noire multi-user port at Sept-Îles, now requiring only four locomotives and 328 railcars compared to six locomotives and 500+ railcars previously.

JDI has identified modified EA activities related to the Changes for inclusion in the Combined EIS, including:

- a. Re-estimate atmospheric impacts from 1.1ML/a or 5.39% site wide increase of diesel use to dry lump products and reduced diesel use intensity in haul trucks/Astray frontend loaders.
- b. Confirm dryer stack emissions are within acceptable gas, combustion particulate and dust content standards and confirm same noise levels at Iron Arm cabins.
- c. Investigate lump drying using biodiesel or propane fuel.
- d. Include reduced train cycles in Lac Joseph Caribou Herd study (requested by NL-ECC).
- e. Adjust mine site water management design for sedimentation ponds capacities.
- f. Include all other miscellaneous Changes from the 2022 Study.



JDI also proposes that a video conference be held with IAAC and NL-ECC in early 2023, to discuss the Changes and JDI's modified EA work plan including the ongoing Indigenous Groups consultation plan.

In recent weeks, JDI has consulted at site with and made in-person Project update presentations to two Indigenous Groups. We are again requesting the three groups who have not yet received an update presentation to advise earliest dates for JDI to make a video or inperson presentation and to continue with the Project consultation process.

Please accept my warmest wishes for a happy holiday and prosperous new year to you and your family.

Yours Truly

<Original signed by>

Sandy Chim President and CEO.

cc:

IAAC, Shauna O'Brien, Project Manager <u>shauna.obrien@canada.ca</u> NL-ECC, Joanne Sweeney, Director, Environmental Assessment <u>joannesweeney@gov.nl.ca</u> NL-ECC, John Reynolds, Environmental Scientist <u>johnreynolds@gov.nl.ca</u>

Attachment List:

Haul road routing and Astray rail loadout	(1 and 1A)
Mine site general arrangement plans	(2 and 2A)
X- section profiles of haul road	(3, 4 and 3A)
Astray rail loadout, general arrangement plans	(5 and 5A)



ATTACHMENTS

1. Site, Haul Road and Astray Loadout General Arrangement – 2022 Study

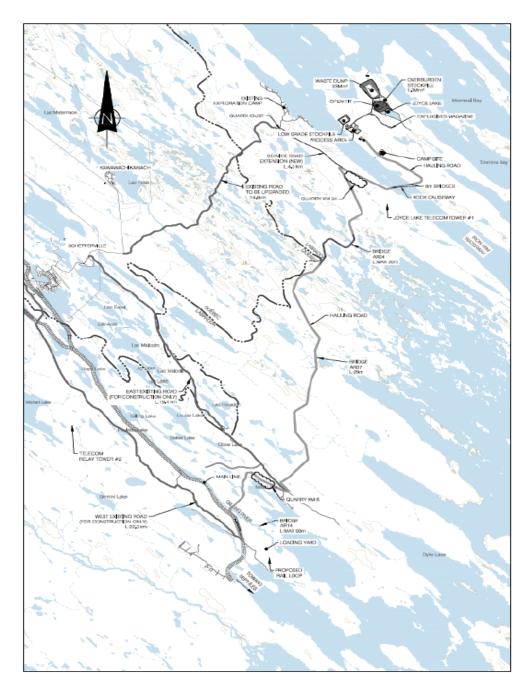
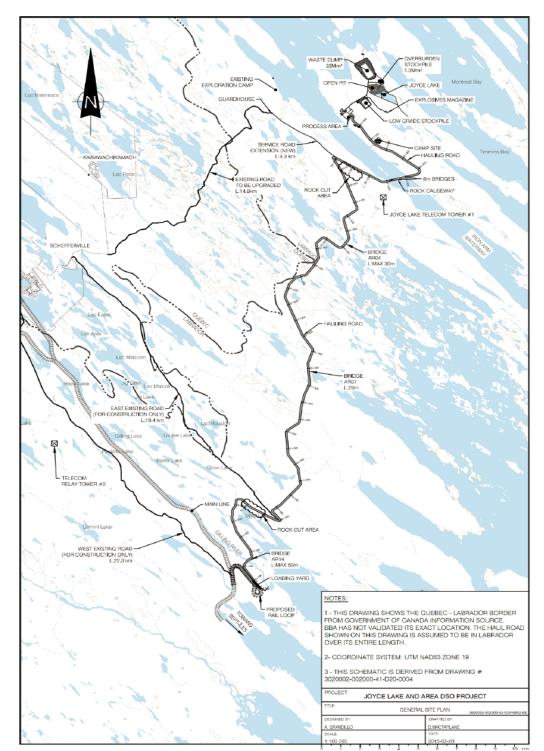


Figure 18-1: Project and surrounding area





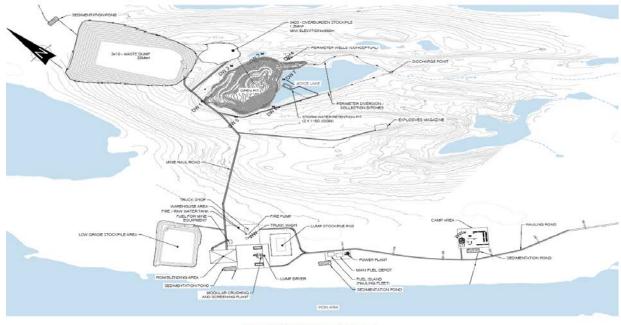
1 A Site, Haul Road and Astray Loadout General Arrangement – Draft EIS

Figure 18-1: Project and Surrounding Area



Joyce Direct Iron Inc. Toronto Office: 200 University Avenue, Suite1401, Toronto, Ontario,

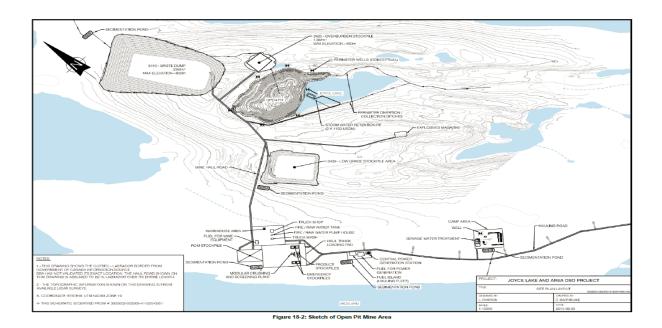
Canada M5H 3C6 **Tel:** 1-416-977-3188



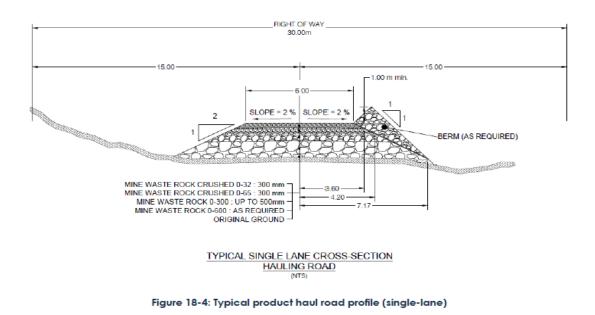
2. Mine Site General Arrangement – 2022 Study

Figure 18-2: Sketch of open pit mine area

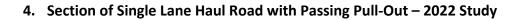
2A Mine Site General Arrangement – Draft EIS

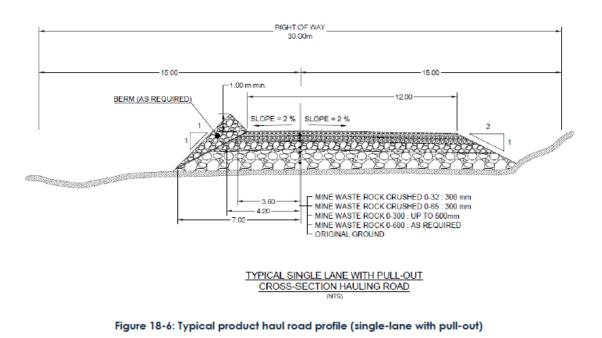




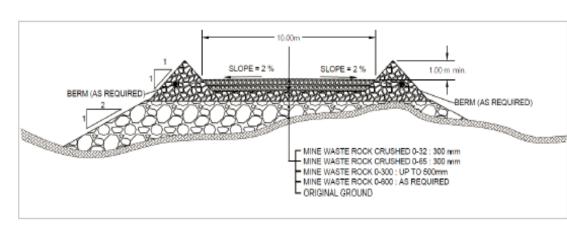


3. Section of Single Lane Haul Road – 2022 Study





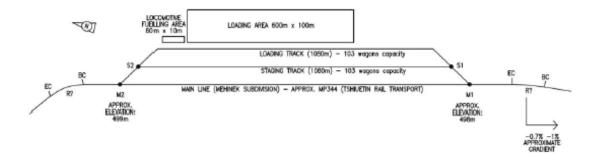




3A Section of Double Lane Haul Road – Draft EIS

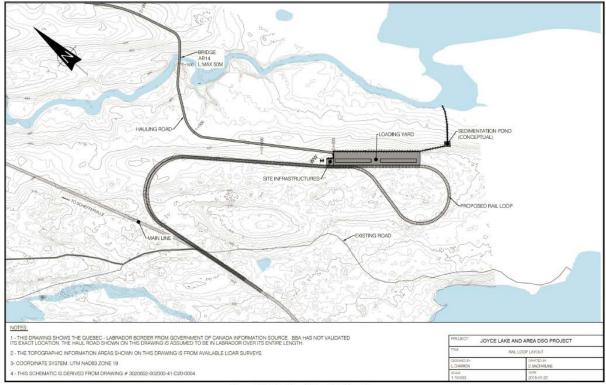
Figure 18-4: Typical Product Haul Road Profile (not to scale)

5. Astray Rail Loadout General Arrangement – 2022 Study









5A Astray Rail Loadout General Arrangement – Draft EIS

Figure 18-3: Project Load Out and Rail Loop Area