

FEASIBILITY STUDY UPDATE: Rail and port concept plan of operations advances

Macarthur Minerals Limited (ASX: MIO) (TSX-V: MMS) (OTCQB: MMSDF) (the Company or Macarthur) is pleased to provide an update on the solid progress being made on the Feasibility Study for its high-grade magnetite Lake Giles Iron Project. An extensive body of work has been undertaken on rail and port logistics which will result in the completion of a concept plan of operations that can ensure that Macarthur achieves the most efficient and lowest cost product transport solution possible.

Following on from the announcement on 1 October 2021 detailing the progress of the metallurgical and non-process infrastructure design (see announcement [here](#)), the summary below sets out details of current progress of both rail and port logistics and the evolving concept plan of operations for the Lake Giles Iron Project as the Feasibility Study moves closer to completion.

Rail and Port Logistics - Progress Highlights

- **Rail logistics:** Preparation of a concept plan of operations for rail and port transport logistics is advancing to ensure that Macarthur can achieve the most efficient and lowest cost transport solution possible. The necessary work to underpin this is being undertaken by Projectus and includes the following:
 - **Below rail pricing:** An updated Indicative Track Access Pricing (ITAP) proposal has been requested from Arc Infrastructure to adjust operational assumptions under the original ITAP issued in July 2020. The updated ITAP will enable Projectus to reconfirm below rail network capacity and access pricing for the Lake Giles Iron Project based upon the most up-to-date details of the required weekly train paths and the number of train consists necessary to support Macarthur's operations.
 - **Rail loop design:** The layout and design configuration of the Company's proposed rail loop near Jaurdi in Western Australia is being advanced based upon the preferred train consist configuration and length (See Figure 1 below).
 - **Rail wagon pricing:** Rail wagon pricing is being consolidated based on updated quotes received and additional costs when in Australia, including offloading and handling and wagon certification.
 - **Rail haulage services:** RFP's have been issued to above rail providers for pricing of rail haulage services from the rail loop to Esperance Port, and pricing is anticipated to be received in early to mid-October.
- **Port access and unloading:** Macarthur has participated in a process of engagement with other stakeholders for the current master plan at the Port of Esperance. The master plan is examining the planning and infrastructure requirements at Esperance up to 2050. The draft masterplan for the Port is anticipated to be released shortly, and the trade scenario analyses considered under the draft masterplan has informed Macarthur's design approach under the Feasibility Study for the development of new rail unloading and product storage solutions at the Port. The Port interface issues are being examined in conjunction with the concept plan of operations which Projectus is compiling, and the Company anticipates that a separate update will be provided to the market after the draft masterplan has been publicly released by Southern Ports Authority ("SPA").

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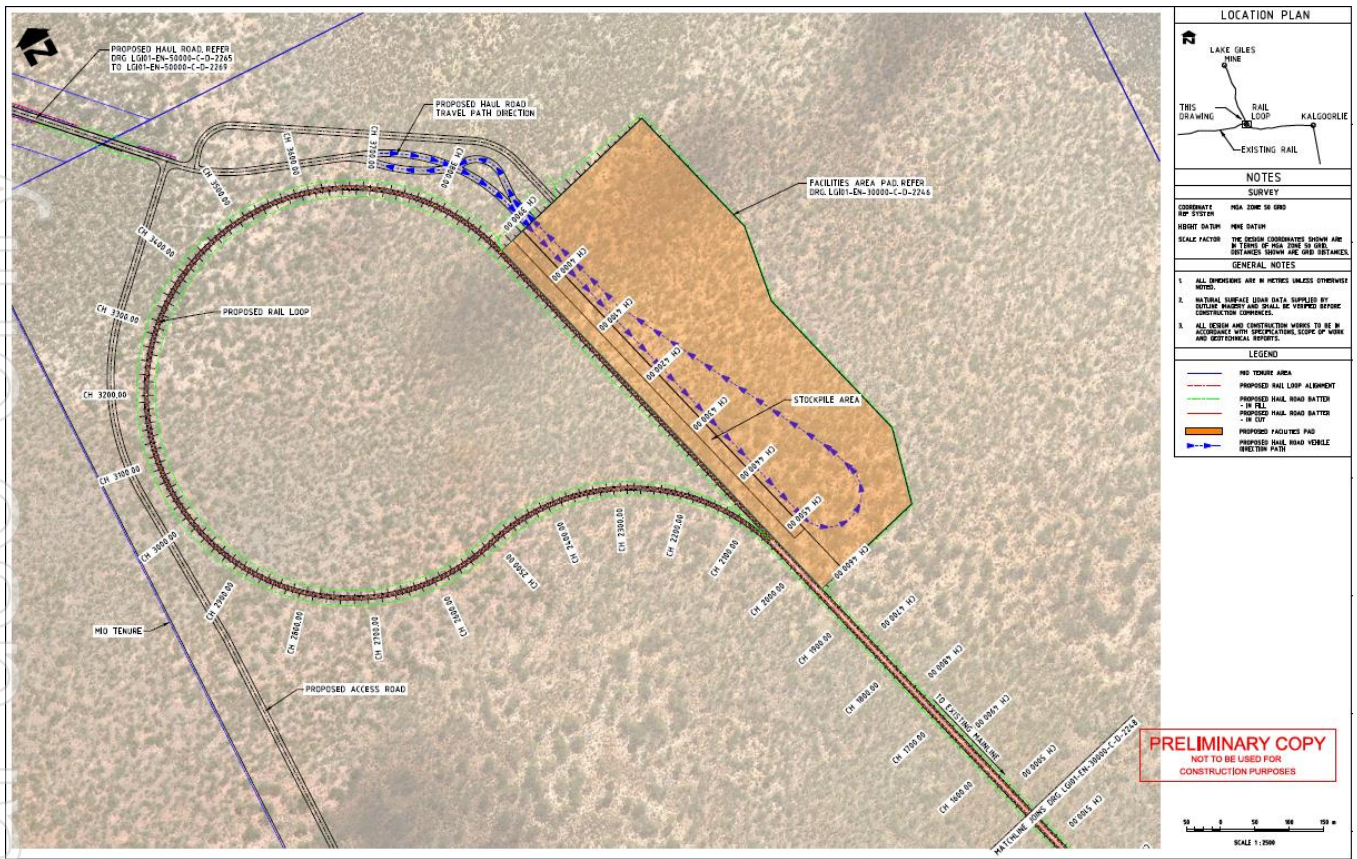


Figure 1: Preliminary rail loop layout near Jaurdi – Lake Giles Iron Project



Figure 2: Port of Esperance.
(Current site footprint. Feasibility Study design approach to future potential rail unloading infrastructure, and ancillary infrastructure, to be provided in a separate market update following release of draft master plan by SPA)



The Company intends to continue providing updates on Feasibility Study progress (at least fortnightly) in the lead-up to the completion of the study and the delivery of the final study outputs to the market. Upcoming news releases will provide an update on the material progress that has been made on numerous aspects of the study including the tailings storage facilities, development of the 640 person mine camp and associated facilities, power and microgrid facilities and mine planning.

Andrew Bruton, CEO of Macarthur Minerals commented:

“An extensive body of work has been undertaken on rail and port logistics planning by the Company in conjunction with its consultants Projectus and Stantec (Engenium). The quality of the outputs being delivered under the Feasibility Study to date is pleasing.

Transport will form a key part of the operating costs for the Project, and the advancement of a full transport concept plan of operations from the mine gate to the Port of Esperance is essential to best position the Company and the Lake Giles Iron Project for success.

The recent iron ore price correction is not unexpected, and the Company does not believe that it ought to detract from the fundamental underlying value proposition that Macarthur’s magnetite project offers. Macarthur’s objective is to develop a high-grade magnetite mining operation that can remain profitable long into the future.

Management is continuing its laser-like focus on delivering the Lake Giles Iron Project and we look forward to continuing to release further details of material progress on the Feasibility Study over the coming weeks.”

On behalf of the Board of Directors

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Company profile

Macarthur is an iron ore development, gold and lithium exploration company that is focused on bringing to production its Western Australia iron ore projects. The Lake Giles Iron Project mineral resources include the Ularring hematite resource (approved for development) comprising Indicated resources of 54.5 million tonnes at 47.2% Fe and Inferred resources of 26 million tonnes at 45.4% Fe; and the Lake Giles magnetite resource of 53.9 million tonnes (Measured), 218.7 million tonnes (Indicated) and 997 million tonnes (Inferred). The JORC reporting tables and Competent Person statement for the magnetite and hematite mineral resources have previously been disclosed in ASX market announcements dated 12 August 2020 and 5 December 2019. Macarthur has prominent (~721 square kilometre tenement area) gold, lithium and copper exploration interests in Pilbara region of Western Australia. In addition, Macarthur has lithium brine Claims in the emerging Railroad Valley region in Nevada, USA.



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Certain of the statements made and information contained in this press release may constitute forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws. All statements herein, other than statements of historical fact, that address activities, events or developments that the Company believes, expects or anticipates will or may occur in the future, including but not limited to statements regarding expected completion of the Feasibility Study; conversion of Mineral Resources to Mineral Reserves or the eventual mining of the Project, are forward-looking statements. The forward-looking statements in this press release reflect the current expectations, assumptions or beliefs of the Company based upon information currently available to the Company. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and no assurance can be given that these expectations will prove to be correct as actual results or developments may differ materially from those projected in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include but are not limited to: unforeseen technology changes that results in a reduction in iron or magnetite demand or substitution by other metals or materials; the discovery of new large low cost deposits of iron magnetite; the general level of global economic activity; failure to complete the FS; inability to demonstrate economic viability of Mineral Resources; and failure to obtain mining approvals. Readers are cautioned not to place undue reliance on forward-looking statements due to the inherent uncertainty thereof. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. The forward-looking statements contained in this press release are made as of the date of this press release and except as may otherwise be required pursuant to applicable laws, the Company does not assume any obligation to update or revise these forward-looking statements, whether as a result of new information, future events or otherwise.