# **ASX Announcement**



# 4 December 2025

# Manna Lithium Project takes another step towards production with robust DFS results

Global Lithium Resources Limited (**ASX: GL1**, "**Global Lithium**" or "**GLR**" or "the **Company**"), is pleased to release robust results of an optimised Definitive Feasibility Study (DFS) on its flagship Manna Lithium Project (Manna or MLP), 110 kilometres east of Kalgoorlie in the Eastern Goldfields region of Western Australia.

The DFS confirms Manna as a long-life and economically robust lithium asset, further enhancing Global Lithium's progress toward future development with strong exposure to a critical mineral in the electrification of global economies.

The DFS for Manna incorporates extensive work to enhance project economics, systematically de-risk future development and position Manna for a Final Investment Decision (FID) in a disciplined manner, leveraging what has been a year of significant milestones for the project development team which include the grant of Mining Lease<sup>1</sup> M28/414 and the signing of a Native Title Mining Agreement<sup>2</sup> with the Kakarra Part B Native Title Group.

# **DFS Highlights**

- Post-tax NPV8 of A\$472 million; at US\$1,400/t SC6.0 CIF price assumption and AUD:USD 0.67 exchange rate;
- Post-tax IRR of 25.7%;
- Payback period of 3.5 years;
- Breakeven price of US\$784/t SC6.0 (EBITDA=0) demonstrating significant project resilience;
- Competitive operating costs DFS projects a competitive LOM all-in sustaining cost (AISC) of US\$738/t (SC5.5) excluding sea freight and insurance;
- Capital efficiency total preproduction capital expenditure (CAPEX) estimated at A\$439.1 million;
- Significant resource confidence and long mine life Manna confirms its position as the third largest lithium deposit in the Eastern Goldfields;
- 51.6 million tonnes (Mt) at 1.00% Li<sub>2</sub>O<sup>3</sup> total Mineral Resource Estimate (MRE); and
- 19.4 Mt at 0.91% Li₂O Maiden Ore Reserve underpinning an initial LOM of 14.3 years, with more than 82% of the mining inventory supported by Ore Reserves.

<sup>&</sup>lt;sup>1</sup> GL1 ASX Announcement, 25 August 2025, "Mining Lease granted for Manna Lithium Project"

<sup>&</sup>lt;sup>2</sup> GL1 ASX Announcement, 13 August 2025, "Manna Lithium Project - Native Title Mining Agreement signed with Kakarra Part B Native Title Group"

<sup>&</sup>lt;sup>3</sup> GL1 ASX Announcement, 12 June 2024, "43% Increase in Manna Lithium Deposit Mineral Resource"

# Commenting on the DFS results, Global Lithium Managing Director, Dr Dianmin Chen said:

"We are incredibly proud to present the highly positive and comprehensive results of our DFS on the Manna Lithium Project, reflecting nine months of dedication from our project team to optimise every aspect of the project to best inform our Final Investment Decision."

"This DFS underscores the potential for Manna to both create shareholder value and contribute to the world's lithium supply chain through its robust economics, significant long-life potential and Company's commitment to invest in and develop projects in Western Australia."

"The DFS confirms Manna's place as the third largest lithium deposit in the Eastern Goldfields, poised to be a significant contributor of lithium to support countries around the world as they continue to pursue energy transition and decarbonisation goals."

"Our disciplined approach to de-risking the future development of Manna, evidenced by the grant of a Mining Lease and signing of a Native Title Mining Agreement, along with the project's compelling financial and technical metrics, sets a strong foundation for future funding and development options."

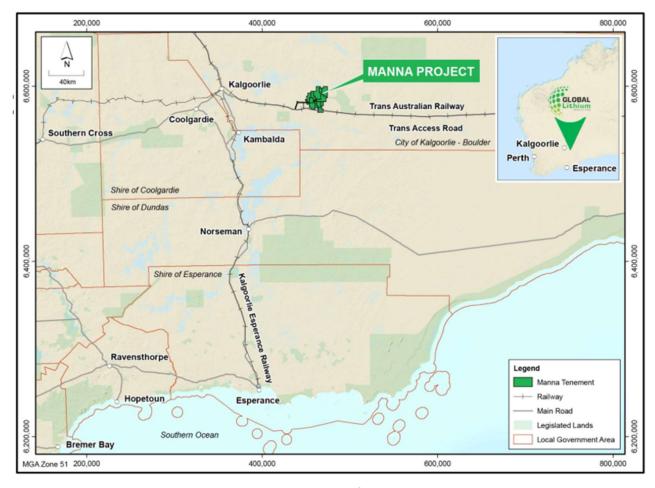
"We are particularly pleased with the Manna's resilience, demonstrated by its strong breakeven price in the current market environment. Global Lithium is now ideally positioned to capitalise on the anticipated recovery in global lithium demand, ensuring we are ready to execute and generate shareholder returns.

"The Board will now focus on advancing key project development activities, including off-take discussions, securing project financing and progressing remaining permitting requirements, as it targets a Final Investment Decision in 2026."

# **DFS Overview and Outcomes**

Global Lithium is developing the Manna Lithium Project (MLP) located in the Eastern Goldfields of Western Australia (WA). The MLP is 100% owned and operated by the Company and lies 110km by road east of regional City of Kalgoorlie-Boulder on Mining Lease M28/414 with associated Miscellaneous Lease applications covering critical infrastructures. The Company holds title (granted and under application) over 350km² of exploration ground (see Figure 1).





**Figure 1 Project Overview** 

The Company project development and exploration team consists of high calibre, experienced mining and mineral processing professionals. The project team was supported by a number of specialist consultant companies.

- Project Lead and Infrastructure Design (including power station): Mincore
- Processing Design: Mincore
- Preliminary Process Plant Design and Capital Cost Estimation: GR Engineering and Mincore
- Mining and Ore Reserve Estimation Atlantech and Resolve Mining Solutions
- Geology and Resources Snowden Optiro

The Manna DFS is focussed on a conventional open pit mining operation feeding a 1.8Mtpa processing facility to produce 5.5% spodumene concentrate. It is worth noting that the underground mining study was carried out at a Pre-Feasibility level, which forms part of the announcement.

# **Key Metrics of the Project**

Summary results of the Manna DFS are presented in Table 1.



**Table 1 Summary of DFS Results** 

Key Metrics	Unit	DFS	
Project Name	MLP		
Life-of-Mine (LOM)	Years	14.3	
Nameplate Mill Capacity	Mtpa	1.8	
ROM Feed Grade (Years 1-2)	% Li <sub>2</sub> O	0.93	
ROM Feed Grade (Years 1-10) Open Pit	% Li <sub>2</sub> O	0.91	
ROM Feed Grade (Years 6-18) Underground	% Li₂O	0.83	
LOM Average Strip Ratio Open Pit	Waste/Ore	14.9	
LOM Average Processing Recovery	%	72.8	
Annual SC5.5 Production – Nominal Dry Tonnes	tpa	236,470	
LOM Total Spodumene Concentrate Production of SC5.5	Mt	2.76	
Pre-Production Mining Costs (Site Mob, Establishment, Pre-Strip)	A\$M	81.9	
Process Plant & Infrastructure	A\$M	157.5	
Indirect Costs	A\$M	49.3	
Owners Costs	A\$M	110.4	
Contingency and Growth Cost	A\$M	40.0	
Total CAPEX	A\$M	439.1	
Exchange Rate	AUD:USD	0.67	
LOM Cash Operating Unit Cost (FOB)#	A\$/t SC5.5	965	
LOM AISC OPEX*	A\$/t SC5.5	1,101	
Spodumene Concentrate Price (SC6.0 CIF)	USD/t SC6.0	1,400	
Spodumene Concentrate Price (SC5.5 CIF)	USD/t SC5.5	1,253	
LOM Free Cashflow (post-tax)	A\$M	1,153	
Project NPV8 (inclusive of Royalties, post-tax)	A\$M	472	
Project IRR (inclusive of Royalties, post-tax)	%	25.7	
Payback from start of production	Years	3.5	

<sup>#</sup> Excluding all royalties



<sup>\*</sup> Excluding sea freight and insurance

# **Project Sensitivity Analysis**

The sensitivity analysis indicates that the MLP will be very sensitive to the spodumene concentrate price and exchanged rate as shown in Figure 2.

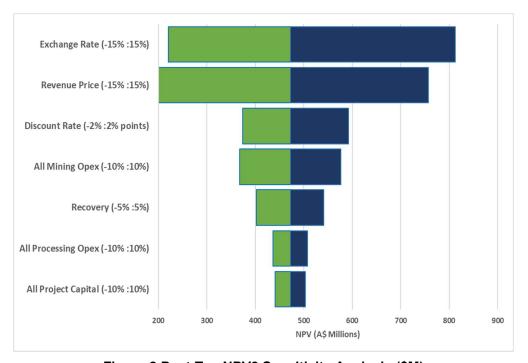


Figure 2 Post-Tax NPV8 Sensitivity Analysis (\$M)

## Mineral Resources and Ore Reserves

The DFS is underpinned by a robust Mineral Resource Estimate (MRE) for Manna, totalling 51.6Mt at 1.0% Li<sub>2</sub>O (June 2024), with 32.9Mt at 1.04% Li<sub>2</sub>O classified in the Indicated category (representing 66% of contained lithium) as shown in Table 2. The deposit remains open at depth and down-dip to the northeast, offering future growth potential.

Project Name	Category	Million Tonnes (Mt)	Li₂O, %	Ta₂O5 ppm
Manna	Indicated	32.9	1.04	52
	Inferred	18.7	0.92	50
	Total	51.6	1.00	52

**Table 2 Manna Mineral Resources** 



The DFS converts a significant portion of this Resource into a maiden Ore Reserve of 19.4Mt at 0.91% Li<sub>2</sub>O. This includes 14.4Mt at 0.93% Li<sub>2</sub>O within the open pit mining design (at 0.50% Li<sub>2</sub>O cut-off) and 5.0Mt at 0.84% Li<sub>2</sub>O within the underground mining design (at a 0.60% Li<sub>2</sub>O cut-off) as shown in Table 3.

This Ore Reserve forms the basis of the combined 14.3-year Life of Mine (LOM) from both the modelled satellite pits and the later stage underground developments.

Table 3 Manna Ore Reserve Estimation

Project Name	Category	Million Tonnes (Mt)	Li <sub>2</sub> O, %
Manna			
Open Cut	Proved	-	-
	Probable	14.4	0.93
	Subtotal	14.4	0.93
UG	Proved	-	-
	Probable	5.0	0.84
	Subtotal	5.0	0.84
Combined Total		19.4	0.907

# **Summary Of Ore Reserve Parameters**

As per ASX listing Rule 5.9.1 and the JORC Code (2012) a summary of the of the material information used to estimate the Ore Reserves are detailed below. Further details can be found in the Executive Summary contained within this ASX announcement.

Criteria used in the classification of Ore Reserves – only Indicated Resources have been converted into Ore Reserves.

Mining Methods and Assumptions - The mining operation will initially start using conventional open cut mining. The pit optimisation model was built using SC6.0 CIF price of US\$2000, US\$1750 and US\$1500. The pit shell of US\$1500 and a cut-off grade of 0.5% Li<sub>2</sub>O were selected in this DFS. Underground mining development will start during year 7 using sublevel open stoping method. Ore dilution and ore loss factors have been applied to the open stopes. A cut-off grade of 0.6% Li<sub>2</sub>O was used for underground mining.

Processing Method and Assumptions – Conventional three-stage crushing, ore sorting, single ball milling and flotation circuit was used together with de-sliming, mica floating and magnetic separation processes to improve lithia recovery. The LOM processing recovery of 72.8% was used in this DFS.

Estimation Methodology – the operation cost estimation is based on the first principle. The mining operation costs are based on evaluation of Request for Quotations from contractors.



Material Modifying Factors – The mining inventory included a small portion of Inferred Resource (18% or 4.3Mt) which is located in the pit profile mined or stoping area planned. Dilution and ore loss factors have also been applied in calculating Ore Reserves.

# **Mining Operations and Schedule**

Pre-production activities, including site establishment and pre-stripping, are planned over a seven-month start-up period, with LOM average strip ratio for the open pit mining activity estimated at 14.9.

The overall Manna LOM production plan spans 15 years, encompassing a total mineral inventory of 23.7Mt at 0.88% Li₂O as shown in Table 4.

Mining activities will commence with a conventional open-pit operation providing mill feed for approximately 10 years, with the open pit portion running for ~8.3 years as the primary mill feed as shown in Figure 3.

An underground operation will supplement mill feed from Year 7 onwards, continuing for a further 7 years as the feed fully transitions to underground sources.

Table 4 Combined Open Pit and Underground Mineral Inventory

Source	Classification	Mill Feed (Mt)	Li <sub>2</sub> O (%)	Fe₂O₃ (%)
Open Pit	Indicated	14.4	0.93	5.64
	Inferred	1.1	0.64	6.53
	Sub-total	15.5	0.91	5.70
Underground	Indicated	5.0	0.84	5.26
	Inferred	3.2	0.80	5.10
	Sub-total	8.2	0.82	5.18
Totals	Indicated	19.4	0.907	5.55
	Inferred	4.3	0.77	5.33
	Total	23.7	0.88	5.49



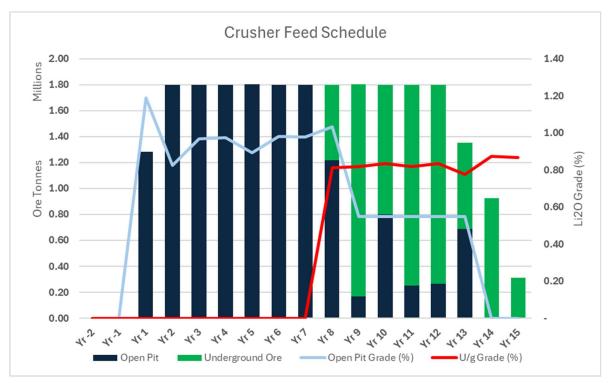


Figure 3 LOM ore feed for the Manna processing plant from the mining operations

# **Processing and Product Logistics**

The Manna processing flowsheet consists of conventional three-stage crushing, ore sorting, milling, magnetic separation, slimes removal, mica flotation, spodumene flotation and dry stack tailings disposing. The process plant is designed to produce a high-quality spodumene concentrate with a target grade of ≥5.5% Li<sub>2</sub>O.

The crusher feed rate is 1.8Mtpa (dry) of ore, with ore sorting rejecting 15-20% of the ROM feed, resulting in a mill feed rate of 1.5Mtpa to 1.6Mtpa higher grade ore. The metallurgical test work confirmed the primary grind size of P80 180µm and the ability to produce 5.5% spodumene concentrate with an overall recovery of 78.2%<sup>4</sup>. Considering the ore variation and mineralogy in the mine, the average processing recovery for lithia is projected at 72.8% in this DFS, which could offer some upside in the production stage.

Spodumene concentrate will be transported via road to the Port of Esperance, where it will be stockpiled and exported in 25,000 deadweight tonne (dwt) Handysize vessels for bulk sea transport. The Company is engaging with Southern Ports Authority for storage and ship loading activities in the inner port operations zone.

GL1 ASX Announcement, 30 August 2024, "Manna DFS Metallurgical testwork program completed"



# **Capital Cost Estimate**

The total capital cost for the Manna Lithium Project is estimated at A\$439.1 million\*, inclusive of a A\$40 million allowance for growth and contingency.

Key components of the capital cost estimate include:

Mining pre-production capital: A\$81.9 million;
 Process plant and infrastructure: A\$157.5 million;

• Engineering, procurement and construction indirect costs: A\$49.3 million;

Owners' costs:
 A\$110.4 million; and

Contingency and growth allowances:
 A\$40.0 million.

GRES and Mincore to meet the requirements of AusIMM Cost Estimating Guidelines for a Class 3 Estimate.

# **Operating Cost Estimate**

The total LOM C1 cost is A\$2,666 million to produce a total spodumene concentrate ( $5.5\% \text{ Li}_2\text{O}$ ) of 2,763,501t, which gives LOM average C1 cash operating cost estimated at A\$965/t SC5.5 (US\$646/t SC5.5) FOB Esperance, excluding royalties.

The LOM all-in sustaining cost (AISC), inclusive of mining, processing, product logistics, sustaining capital and royalties is estimated at A\$1,101/t SC5.5 (US\$738/t SC5.5) excluding sea freight and insurance.

A summary of operation costs is shown in Table 5.

**Table 5 Summary of Operation Unit Cost** 

	Unit	AUD	USD
Open Cut Mining Cost	cost/t ore processed	73	49
Underground Mining Cost	cost/t ore processed	84	57
Processing and Site G&A	cost/t ore processed	30	20
Road Haulage and Port Cost	cost/t SC5.5 (wet)	78	52
Sea Freight	cost/t SC5.5	45	30
LOM Average Cost FOB	cost/t SC5.5	965	647
LOM Average Cost AISC	cost/t SC5.5	1,101	738

This assumes a contract mining operation for both open pit and underground mining.



<sup>\*</sup>The processing and infrastructure capital cost estimate has been calculated in accordance with AusIMM Cost Estimation Handbook Table 1-1, Class 3 Estimate Type (AACE) Classification. The expected accuracy range of the capital cost is +/-15%.

The level of engineering definition and estimating methodologies including design growth and contingency allowances have been completed by

#### Infrastructure

The project will be supported by comprehensive infrastructure, including new access roads, an accommodation village (380 rooms), advanced communications and IT systems, and bulk fuel storage.

Power supply will be provided by LNG thermal engines, with an average electrical demand of 11MW initially, rising to 18MW with underground mining. The unit cost of power is estimated to be A\$0.188/kWh.

The Company will separately consider a stand-alone capital investment in solar generation to supplement future power demands and hybridise generation.

# **Project Implementation and Approvals**

The DFS anticipates a total project development timeframe of 72 weeks from FID to ore commissioning.

The Company has secured Mining Lease M28/414 for 21 years and a Native Title Mining Agreement (NTMA) with the Kakarra Part B Native Title Group.

Miscellaneous Licences for supporting infrastructure are expected to be granted in H1 2026. Remaining key approvals, including the Native Vegetation Clearing Permit, Mining Proposal, Mine Closure Plan, and various Works Approvals, are well advanced with assessment timeframes of 6-9 months.

A comprehensive Executive Summary of the DFS, designed to provide a more detailed overview of Manna's proposed development and economics has been provided as an attachment with this announcement.

## **Funding**

The Company has formed the view that there is a reasonable basis to believe that requisite future funding for development of the Manna Lithium Project (MLP) will be available when required. The grounds for which this reasonable basis is established are outlined below.

The Company has signed an off-take agreement with Canmax Technologies Co., Ltd for 30% of the total spodumene concentrate produced by the Company<sup>5</sup>. The Company is actively discussing with Canmax and other potential strategic off-take partners and other investors to seek the required project funding for MLP in line with the development milestones outlined in the DFS.

*Final Investment Decisions* - The Company is well funded with A\$20m cash which is sufficient to allow the Company to continue all working capitals toward achievement of the final investment decision for the MLP.

<sup>5</sup> GL1 ASX Announcement, 9 April 2025, "Offtake Agreement variation reinforces Canmax support for development of Manna project"



*Project Construction Capital Costs* - The Company is currently engaging with several potential financiers and strategic off-take partners to secure funding for full-scale development and construction. The outcome of the DFS announced today causes the Company to be confident that several sources of capital will be available to move Manna towards development.

Growth and Sustaining Capital Costs – These costs will be funded from free cash generated by operations.

The Company has a proven track record for timely delivering milestones and successfully raising capital. The current board and management team is well supported by its investors. In addition, the MLP is emerging as the likely new lithium producer in Australia and the DFS results demonstrate robust economics for the project in a tier one jurisdiction.

The Company also notes that the lithium market sentiment is improving with the evidence from Liontown's auction on 20 November 2025, which achieved US\$1254/t SC6.0 CIF China.

While the Company is reasonably confident that it can secure funding for the project to meet the MLP funding schedule, it is possible that such funding may only be available on terms that may be dilutive to existing shareholders or otherwise adversely affects the value of the Company's existing shares. There is, however, no certainty that the Company will be able to source funding as and when required (nor any certainty as to the form such capital raising may take, such as equity, debt, hybrid and/or other capital raising).

Approved for release by the Board of Global Lithium Resources Limited

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# **About Global Lithium**

Global Lithium Resources Limited (ASX:GL1, Global Lithium) is a diversified West Australian lithium exploration and development company with multiple assets in key lithium branded jurisdictions with a primary focus on the 100% owned Manna Lithium Project in the Goldfields and the Marble Bar Lithium Project (MBLP) in the Pilbara region, Western Australia.

Global Lithium has defined a total Indicated and Inferred Mineral Resource of 69.6Mt @ 1.0% Li<sub>2</sub>O at its Manna and MBLP Lithium projects, confirming Global Lithium as a significant global lithium player. The Manna Lithium Project has a Grant Total Ore Reserve of 19.4Mt @ 0.91% Li<sub>2</sub>O.

#### **Directors**

Richard O'Shannassy
Dr Dianmin Chen
Leon Zhu
Dr David Sun
Non-Executive Chair
Managing Director
Executive Director
Non-Executive Director



### Global Lithium - Mineral Resources

Project Name	Category	Million Tonnes (Mt)	Li₂O, %	Ta₂O₅ ppm
Marble Bar	Indicated	3.8	0.97	53
	Inferred	14.2	1.01	50
	Total	18.0	1.00	51
Manna	Indicated	32.9	1.04	52
	Inferred	18.7	0.92	50
	Total	51.6	1.00	52
Combined Total		69.6	1.00	52

## Global Lithium - Ore Reserve Estimation

Project Name	Category	Million Tonnes (Mt)	Li₂O, %
Manna			
Open Cut	Proved	-	-
	Probable	14.4	0.93
	Subtotal	14.4	0.93
UG	Proved	-	-
	Probable	5.0	0.84
	Subtotal	5.0	0.84
Combined Total		19.4	0.907

# **Disclaimer and Forward-Looking Statements**

This release and information, opinions or conclusions expressed in the course of this release contain forward-looking statements regarding Global Lithium and its subsidiaries (including its projects). Forward-looking statements include, but are not limited to, statements concerning Global Lithium's planned exploration and development program(s), the Production Target and financial forecast information in this release, other results and assumptions of the DFS, Mineral Resources and Ore Reserve estimates in this release and other statements that are not historical facts. When used in this release, the words such as "plan", "expect", "project", "estimate", "may", "schedule", "intend", "anticipate", "believe", "potential", "could", "should", "nominal", "conceptual" and similar expressions are forward-looking statements. Forward-looking statements, opinions and estimates included in this release are based on assumptions and contingencies which are subject to change without notice and involve known and unknown risks and uncertainties and other factors that are beyond the control of Global Lithium. Although Global Lithium believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. Such forecasts, projections and information are not a guarantee of future performance or future plans, and involve known and unknown risks and uncertainties. Actual results and developments will almost certainly differ materially from those expressed or implied in any forward-looking statement and deviations are both normal and to be expected. You are cautioned not to place undue reliance on those statements. There are a number of risks, both specific to Global Lithium, and of a general nature which may affect the future operating and financial performance of Global Lithium, and the value of an investment in Global Lithium including but not limited to title risk, renewal risk, economic and general market conditions, stock market fluctuations, price movements, regulatory risks, operational risks, reliance on key personnel, uncertainties relating to interpretation of exploration results, geology and resource estimations,



native title risks, foreign currency fluctuations, uncertainties relating to the availability of/access to additional capital, infrastructure or environmental approvals, and mining development, construction and commissioning risk. Global Lithium expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events, or otherwise, unless required to do so by law. Investors should note that there is no certainty that the Manna Lithium Project will be feasible and there can be no assurance of whether it will be permitted, developed, constructed and commence operations, whether the DFS results will be accurate or whether DFS will be able to raise funding when it is required (nor any certainty as to the form such capital raising may take, such as equity, debt, hybrid and/or other capital raising). It is also possible that such funding may only be available on terms that dilute or otherwise affect the value of Global Lithium's shares. It is also possible that Global Lithium could pursue other 'value realisation' strategies such as sale, partial sale of the Manna Project.

Investors are advised that the assumptions and inputs to the financial model may require review as project development progresses. While Global Lithium considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the production target or estimated outcomes indicated by the DFS (such as the financial forecasts) will be achieved. Given the various uncertainties involved, investors should not make any investment decisions based solely on the results of the DFS or the other content of this announcement. Mineral Resource and Ore Reserve estimates are necessarily imprecise and depend on interpretations and geological assumptions, minerals prices, cost assumptions and statistical inferences (and assumptions concerning other factors, including mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors) which may ultimately prove to be incorrect or unreliable. Mineral Resource and Ore Reserve estimates are regularly revised based on actual exploration or production experience or new information and could therefore be subject to change. In addition, there are risks associated with such estimates, including (among other risks) that minerals mined may be of a different grade or tonnage from those in the estimates and the ability to economically extract and process the minerals may become compromised or not eventuate. Global Lithium's plans, including its mine and infrastructure plans for the Manna Lithium Project, are also subject to change. Accordingly, these are further reasons why no assurances can be given of whether the production target, financial forecasts or other forecasts or other forward-looking statements or information in this announcement will be achieved.

Past performance is not a guide to future performance. You should not act or refrain from acting in reliance on this release, or any information, opinions or conclusions expressed in the course of this release. This release does not purport to be all inclusive or to contain all information which its recipients may require in order to make an informed assessment of the prospects of Global Lithium. You should conduct your own investigation and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this release before making any investment decision. Recipients of this release must undertake their own due diligence and make their own assumptions in respect of the information contained in this release and should obtain independent professional advice before making any decision based on the information. Accordingly, to the maximum extent permitted by law, neither Global Lithium nor any of its shareholders, directors, officers, agents, employees, consultants or advisers, take any responsibility for, or will accept any liability whether direct or indirect, express or implied, contractual, tortious, statutory or otherwise, in respect of the accuracy or completeness of the information, or for any of the opinions, contained herein or for any errors, omissions or misstatements or for any loss, howsoever arising or out of or in connection with the use of this announcement. Each party to whom this announcement is made available must make its own independent assessment of Global Lithium and the announcement after making such investigations and taking such advice as may be deemed necessary. Any reliance placed on the announcement is strictly at the risk of such person relying on such announcement. An investment in the shares of Global Lithium is to be considered highly speculative.

#### Cautionary Statement - Production Target and Forecast Financial Information

The DFS has been undertaken to determine the viability of Global Lithium's Manna Lithium Project. The DFS is a technical, economic and geopolitical assessment to a level that Global Lithium believes is sufficient to support estimation of Ore Reserves. The DFS is based on existing Mineral Resources and the presently reported Probable Ore Reserves defined within the Manna Lithium Project. The Mineral Resources and Ore Reserves underpinning the estimated life of mine production under the DFS (**Production Target**) have been prepared by a competent person or persons and reported in accordance with the 2012 edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (**JORC Code (2012)**). The Production Target and forecast financial information derived from the Production Target referred to in this announcement are underpinned solely (as to 81%) by the Probable Ore Reserve estimate detailed in this announcement and 18% by Inferred Mineral



Resources. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources (or Ore Reserves) in relation to that mineralisation.

Global Lithium has concluded that it has a reasonable basis for providing the forward-looking statements (such as the Production Target and forecast financial information) included in this announcement. The detailed reasons for that conclusion are outlined throughout this announcement and all material risk factors, sensitivities and assumptions, including concerning the JORC modifying factors, upon which the Production Target and forecast financial information are based are disclosed in this announcement. This announcement has been prepared in accordance with the JORC Code (2012) and the ASX Listing Rules. The actual results could differ materially from a conclusion, forecast or projection in the forward-looking information. There is no certainty that the assumptions on which the Production Target and forecast financial information in this announcement are based will prove to be correct or that the Production Target or estimated outcomes indicated by the DFS (such as the financial forecasts) will be achieved. The Production Target and estimated outcomes indicated by the DFS (such as the financial forecasts) are also subject to various risk factors, such as those (non-exhaustively) outlined in the Disclaimer and Forward-Looking Statements section of this announcement (above) and elsewhere in this announcement. Given the uncertainties involved and detailed in this announcement, investors should not make any investment decision based solely on the results of the DFS.

#### Non-IFRS and Other Financial Measures

This announcement contains certain financial measures and ratios relating to the DFS outcomes (such as All-In Sustaining Costs (AISC), NPV, IRR and other measures) that are not recognised under International Financial Reporting Standards ("IFRS"). Although the Company believes these measures provide useful information about the financial forecasts derived from the DFS, they should not be considered in isolation or as a substitute for measures of performance or cash flow prepared in accordance with IFRS. As these measures are not based on IFRS, they do not have standardised definitions and the way the Company calculates these measures may not be comparable to similarly titled measures used by other companies. You should therefore not place undue reliance on these measures.

Furthermore, these measures should not be compared with similarly titled measures provided or used by other issuers. The non-IFRS financial measures and non-IFRS financial ratios used in this document are relatively common to the mining industry.

## Competent Persons Statements:

#### Ore Reserves

The information that relates to open pit and underground Ore Reserves in this announcement is based on, and fairly represents, information compiled by Mr Guy Simpson, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Simpson has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Simpson was employed by Atlantech Pty Ltd on a fulltime basis when this work was carried out. Mr Simpson consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

#### **Exploration Results**

The information in this announcement that relates to Exploration Results for the Manna Lithium Project is based on, and fairly represents, information compiled by Mr Logan Barber (General Manager of Geology at Global Lithium), a Competent Person who is a Member of the Australian Institute of Geoscientists (AIG). Mr Barber is a full-time employee and shareholder of Global Lithium Resources Limited. Mr Barber has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Barber consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.



#### Mineral Resources

The information in this announcement that relates to Mineral Resources for the Manna deposit has been extracted from Global Lithium's previous ASX announcement entitled "43% Increase in Manna Lithium Deposit Mineral Resource" released to the ASX on 12 June 2024, and for which the consent of the Competent Persons Mrs Susan Havelin and Mr Logan Barber were obtained. A copy of that announcement is available at www.asx.com.au. Information on historical exploration results and Mineral Resources for the Manna Lithium Project presented in this announcement are contained in ASX announcements released on 20 March 2024 and 26 July 2023. Global Lithium confirms that it is not aware of any new information or data that materially affects the information in the relevant market announcements, that all material assumptions and technical parameters underpinning the Mineral Resource estimate in the original market announcements continue to apply and have not materially changed and that the form and context in which the Competent persons findings are presented have not been materially modified from the original announcements.

Information on historical exploration results and Mineral Resources for the Marble Bar Lithium Project presented in this announcement is contained in an ASX announcement released on 15 December 2022. Global Lithium confirms that it is not aware of any new information or data that materially affects the information in the relevant market announcements, that all material assumptions and technical parameters underpinning the Marble Bar Mineral Resource estimate in the original market announcements continue to apply and have not materially changed and that the form and context in which the Competent persons findings are presented have not been materially modified from the original announcements.

#### Metallurgy

The information in this announcement that relates to the Manna Lithium metallurgical testwork program is based on, and fairly represents, information and supporting documentation reviewed by Mr Scott Barry. Mr Barry is an independent metallurgical consultant and a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). He has sufficient experience with the style of processing, the type of deposit under consideration, and the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Barry consents to the inclusion in this report of the technical information in the form and context in which it appears.



# **Appendix A**JORC (2012 Edition), Table 1

The table below summarises the assessment and reporting criteria used for the Exploration Results, Manna deposit Mineral Resource and Ore Reserve estimates, and reflects the guidelines in Table 1 of the "Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code, 2012).

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.  Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.  Aspects of the determination of mineralisation that are Material to the Public Report.  In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.	RC and diamond drillholes were drilled under supervision of a geologist.  RC samples were cone split in 1 m intervals to produce a ~2 to 3 kg sample.  Half core (NQ) or quarter core (HQ) samples were taken, generally on 1m intervals or on geological boundaries where appropriate.  Diamond drilling was undertaken to produce core for geological logging, assaying and metallurgical test work.  Selected core was logged, cut and sampled on site before being submitted to laboratories in Perth where it was crushed and assayed.  Select intervals of cut ½ or ¼ core samples were crushed and riffle split to 2 to 2.5 kg for pulverising to 80% passing 75 microns. Prepared samples are fused with sodium peroxide and digested in dilute hydrochloric acid. The resultant solution is analysed by ICP by Jinning Testing and Inspection Laboratory in Perth.  The assay technique is robust as the method used offers total dissolution of the sample and is useful for mineral matrices that may resist acid digestions.
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	RC drilling used 4.5-inch (140 mm) rods using a 5.5-inch (150 mm) diameter face sampling hammer.  Diamond drilling used PQ3, HQ2, HQ3 or NQ2 bits dependent upon ground conditions.  Most of the RC and diamond drill holes were angled at approximately -60 degrees to the northwest. Some of the diamond drilling was angled approximately -60 degrees to the southeast for metallurgical sampling purposes.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples	RC drilling recoveries were visually estimated as a semi-qualitative range and recorded on the drill log along with moisture content.



Criteria	JORC Code explanation	Commentary
		The diamond drill core recovered is physically measured by tape measure and the length recovered is recorded for every run. Core recovery is calculated as a percentage recovery. This is confirmed by Company geologists during core orientation activities on site.  RC drillholes were collared with a well-fitting stuff box to ensure material to the outside return was minimised. Drilling was undertaken using auxiliary compressors and boosters to keep the hole dry and lift the sample to the sampling equipment. Drill cyclone and cone splitter were cleaned regularly between rod-changes if required and after each hole to minimise down hole or cross-hole contamination.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	There is no observable relationship between recovery and grade, or preferential bias in the drilling at this stage.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Drillholes were logged for lithology, alteration, mineralisation, structure, weathering, wetness and obvious contamination by a geologist. Data was then captured in a database.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Geological logging is both qualitative and quantitative in nature and captures downhole depth, colour, lithology, texture, mineralogy, mineralisation, alteration and other features of the samples.
	The total length and percentage of the relevant intersections logged.	All drillholes were logged in full and all sample sites were described.
Subsampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	Half core (NQ) or quarter core (HQ) samples were taken, generally on 1m intervals or on geological boundaries where appropriate.
preparation		(minimum 0.4m to maximum of 1.4m).
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples were split 87.5%/12.5% by a standalone multi-tiered riffle splitter.
		The majority of the samples were recorded as dry and minimal wet samples were encountered. Sample duplicates were obtained from the cone splitter on the drill rig. Whole samples were crushed and pulverised.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The samples were sent to accredited laboratories for sample preparation and analysis.
	Quality control procedures adopted for all subsampling stages to maximise representativity of samples.	All samples were sorted, dried pulverised to -75 µm to produce a homogenous representative subsample for analysis. A grind quality target of 85% passing -75 µm has been established.
	Measures taken to ensure that the sampling is	Measures taken include:
	representative of the in-situ material collected, including for instance results for field	Regular cleaning of cyclones and sampling equipment to prevent contamination.
	duplicate/second-half sampling.	Industry standard inclusion of standards, blanks and duplicate samples.
		Analysis of results from duplicates (field and laboratory) was completed and no issues identified with sampling representativity.



Criteria	JORC Code explanation	Commentary
		Analysis of results from blanks and standards (field and laboratory) was completed and no issues identified with contamination and a high level of accuracy attained.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	2–3 kg sample size is considered fit for purpose.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Industry standard procedures considered appropriate with a sodium peroxide fusion (total dissolution) as standard four-acid digest is not considered strong enough to break down the highly resistive elements.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Not relevant; no geophysical tool used.
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	Jinning Testing and Inspection Laboratory in Perth used Certified Reference Materials (CRMs) and/or in house controls, blanks, splits and replicates which are analysed with each batch of samples. These quality control results are reported along with the sample values in the final report.
		CRMs and sample duplicates for RC drilling were inserted by Global Lithium. The insertion rate for the field duplicates and CRMs is industry standard.
		The field duplicate results for lithium and tantalum are good.
		The CRM results for lithium and tantalum are good. At this stage $Ta_2O_5$ does not contribute significantly to the economics of the Manna deposit and the results from the QAQC are considered acceptable for resource estimation resource.
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Results were verified by alternative personnel at Global Lithium.
assaying	The use of twinned holes.	Twin holes have been drilled at Manna lithium project in both RC and DD to allow correlation of the assay results between drilling styles and to provide more confidence in the resource model.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary geological and sampling data were recorded digitally and on hard copy respectively and were subsequently transferred to a digital database where it is validated by experienced database personnel assisted by the geological staff. Assay results are merged with the primary data using established database protocols.
	Discuss any adjustment to assay data.	Global Lithium has not adjusted any assay data, other than to convert Li (ppm) to Li <sub>2</sub> O (%). Snowden Optiro converted Ta (ppm) to Ta <sub>2</sub> O <sub>5</sub> following grade estimation.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	A handheld global positioning system (GPS) was used to initially record drillhole locations (±5 m accuracy), followed by a differential GPS surveyor pickup.
		All RC drillholes and diamond drillholes have been surveyed by a north seeking multi-shot gyro provided by the drilling contractor.
	Specification of the grid system used.	GDA94 (MGA) Zone 50 Southern Hemisphere.



Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	Drillhole collars are surveyed post drilling with DGPS (see above)
		Further topographic data (25cm contours) has been provided for the Project by a LIDAR survey flown by Aerometrex.
Data spacing and	Data spacing for reporting of Exploration Results.	The Manna deposit has been drilled at a spacing of between 40-80 m along strike by 40 m across strike.
distribution	sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	Drillhole spacing has been designed to test down-dip potential of mineralised outcrops and subcrops.
		The drill section spacing ranges from 40 m to 80m, with drillholes spaced approximately at 40m on section.
		Drill spacing is appropriate for the Mineral Resource estimation and classification applied.
	Whether sample compositing has been applied.	Samples were not composited except for metallurgical test work.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material	Drilling was dominantly orientated at -60degrees dip to the northwest while the pegmatite sheets generally dipped at ~70 to the southeast. Drill hole intercepts were generally close to true width. A few drill holes were drilled down dip to gain enough material for metallurgical testwork.
		Due to the thin nature of the pegmatites and RC drilling sampling across contacts many samples may be considered mixed lithology meters which will return lower grades but make mineralised intervals appear slightly thicker.
Sample security	The measures taken to ensure sample security.	Samples submitted were systematically numbered and recorded, bagged in labelled polyweave sacks and dispatched in batches to the laboratory by Global Lithium personnel. The laboratory confirms receipt of all samples on the submission form on arrival.
		All assay pulps are retained and stored in a Global Lithium facility for future reference if required.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No formal audits/reviews have been conducted on sampling technique or data to date.

# Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Manna Lithium Project is located within M28/414.  Global Lithium Limited acquired an 100% of the Manna Lithium Project from Breaker Resources on 25 October 2022.  Precious metal rights are held by Ramelius Resources Ltd.  There are no other material interests or issues associated with the tenement.
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The tenements are in good standing and no known impediments exist.



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Prior to the discovery of the Manna pegmatite outcrops and initial drill program by Breaker Resources there was no exploration for, or identification of, lithium mineralisation in the area.
Geology	Deposit type, geological setting and style of mineralisation.	The pegmatites are lithium-caesium-tantalum (LCT) type lithium bearing-pegmatites.
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:  • easting and northing of the drillhole collar	Diagrams in the DFS executive summary show the location of and distribution of drillholes in relation to the Mineral Resource.  All drilling results have been previously announced.
	elevation or RL (elevation above sea level in metres) of the drillhole collar	
	dip and azimuth of the hole	
	downhole length and interception depth	
_	hole length.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Not relevant – exploration results are not being reported.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.  If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	Not relevant – exploration results are not being reported.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	Cross sections and plan views have been included in the included DFS executive summary.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	Not relevant – exploration results are not being reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Where relevant, this information has been included or referred to elsewhere in this table.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work pre-FID related to the Manna Project includes obtaining final approvals and water exploration drilling with the aim of derisking water supply to the project.



Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	Drillhole data was extracted directly from the Company's drillhole Microsoft Access database, which includes internal data validation protocols.  Data was further validated by Snowden Optiro upon
	Data validation procedures used.	receipt, and prior to use in the estimation.  Validation of the data was confirmed using mining software (Datamine) validation protocols, and
Site visits	Comment on any site visits undertaken by the Competent Persons and the outcome of those visits.	visually in plan and section views.  Mrs Susan Havlin (Snowden Optiro, acted as Competent Person for the Mineral Resource estimation and classification released in June 2024) has visited the site.
		Mr Logan Barber (Global Lithium, acted as Competent Person for the geological interpretation and data quality) has visited site on multiple occasions.
Geological interpretation	Confidence in (or conversely, the uncertainty of the geological interpretation of the mineral deposit.	The confidence in the geological interpretation is reflected by the assigned resource classification.
	Nature of the data used and of any assumptions made.	Both assay and geological data were used for the mineralisation interpretation.
		The pegmatite wireframes were constructed where pegmatite was logged in either LITH1 or LITH2 and less than 8% Fe. Local variations are made to these criteria to maintain geological continuity.
		Outcrop mapping of the pegmatite veins was used to guide the along-strike interpretation.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	No alternative interpretations were considered.  Any alternative interpretations are unlikely to significantly affect the Mineral Resource estimate.
	The use of geology in guiding and controlling Mineral Resource estimation.	Geological logging and outcrop mapping has been used for interpretation of the pegmatites.
	The factors affecting continuity both of grade and geology.	The mineralisation is contained within pegmatite veins that are readily distinguished from the surrounding rocks.
		Sectional interpretation and wireframing indicates reasonable continuity of the interpreted pegmatite veins both on section and between sections.
		The confidence in the grade and geological continuity is reflected by the assigned resource classification.



Criteria	JORC Code explanation	Commentary
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and	Forty-two anastomosing pegmatites have been identified at the Manna deposit which extend from surface to a depth of 500 m.
	lower limits of the Mineral Resource.	The pegmatites strike northeast-southwest and dip to the southeast at 60–70°.
		The main area has 14 mineralised pegmatites and has been drilled over an area of 1,800 m x 400 m and to a depth of 480 m. In the East zone, four mineralised pegmatite veins are delineated to the southeast of the main set, and have been drilled over an area of 1,400 m x 400 m and to a depth of 400 m. The West zone, to the northwest of main, includes 14 mineralised pegmatites and has been drilled over an area of 1,900 m x 400 m and to a depth of 800 m. A new zone has been identified to the west which has 10 mineralised pegmatites and has been drilled over an area of 800 m x 400 m and to a depth of 400m. The individual mineralised pegmatites are 1–14 m thick and have an average true thickness of 3.6 m.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of	Data analysis and estimation was undertaken using Snowden Supervisor and Datamine Studio RM Pro software. Wireframing was undertaken using Leapfrog Geo 3D software.
	extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	Lithium oxide (Li <sub>2</sub> O) %, tantalum (Ta) ppm, Caesium (Cs) ppm, iron (Fe) %, potassium (K) %, niobium (Nb) ppm, rubidium (Rb) ppm, sulphur (S) %, magnesium (Mg) %, sodium (Na) %and calcium (Ca) % block grades were estimated using ordinary kriging (OK). The Ta was then converted to tantalum pentoxide (Ta <sub>2</sub> O <sub>5</sub> ) by multiplying Ta by 1.2211 after estimation. Snowden Optiro considers OK to be an appropriate estimation technique for this type of mineralisation.
		Drilling is generally on a 40m x 40m or 80m x 40m spacing.
		A maximum extrapolation distance of 40 m was applied along strike and 50 m down dip.
		Over 93% of the assay data within the mineralised pegmatites is from samples of 1 m intervals, 6% is from intervals of less than 1 m and 1% is from intervals of over 1 m (to a maximum of 3.67 m).



Criteria	JORC Code explanation	Commentary
		Variogram analysis was undertaken to determine the kriging parameters used for OK estimation of Li <sub>2</sub> O, Ta, Cs, Fe, K and S. Variograms for Nb, Mg, Ca, Mg, Rb and Na were borrowed from other analytes due to their high correlation depending on the area. For the new area to the west the variograms from the main area were borrowed due to low numbers of composites. The composites were combined by area as well as whether they occupied areas of higher grade or lower grade. For each analyte up to six sets of variography were completed. Dynamic anisotropy was utilised to account for the undulating nature of the pegmatite veins. Hard boundaries were utilised in the well drilled areas being the main, the west and the east zones the remaining two areas soft boundaries were utilised between the mineralised pegmatites.
		Kriging neighbourhood analysis was performed to determine the block size, sample numbers and discretisation levels.
		Three estimation passes were used for all analytes in the mineralised pegmatites; the first search was based upon the variogram ranges; the second search was double the range of the variograms and the third search was up to ten times the range of the variograms; the second and third searches had reduced sample numbers required for estimation. For the waste only one search was applied and only Fe, K, S, Mg and Ca were estimated. The logged percentage for spodumene and lepidolite were estimated based on the Li <sub>2</sub> O search parameters and variography using only one search pass.
		The majority of Li <sub>2</sub> O block grades (almost 95%) were estimated in the first two passes, 5% in the third pass and for the remaining 0.02%, an average was assigned using a nearest neighbour approach. All the analyte estimated block model grades were visually validated against the input drillhole data and comparisons were carried out against the declustered drillhole data by domain and by northing, easting and elevation slices.
	Description of how the geological interpretation was used to control the resource estimates.	Geological interpretations of the pegmatite were completed in 3D using Leapfrog Geo software. The interpretation of mineralisation was based on geological logging and Fe content.
		Categorical indicator kriging (CIK) was used to define the higher-grade lithium (>0.4% Li <sub>2</sub> O) blocks within the interpreted pegmatite veins.



Criteria	JORC Code explanation	Commentary
		The mineralised domain is considered geologically robust in the context of the resource classification applied to the estimate.
	Discussion of basis for using or not using grade cutting or capping.	Within each of the estimation domains Li <sub>2</sub> O block grades have relatively low coefficients of variation of 0.05 to 1.44. Top cuts (cap grades) were not deemed necessary for any analytes.
	The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes	In December 2022, a JORC 2012 Indicated and Inferred Mineral Resource of 32.7 Mt at 1.00% Li <sub>2</sub> O was reported.
	appropriate account of such data.	In July 2023, a JORC 2012 Indicated and Inferred Mineral Resource of 36Mt at 1.13% Li <sub>2</sub> O was reported.
		Production has not occurred from this deposit.
	The assumptions made regarding recovery of by- products.	No assumptions have been applied for the recovery of by-products.
	Estimation of deleterious elements or other non- grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	Sulphur and iron were included in the Mineral Resource estimate.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	Grade estimation was into parent blocks of 5 m(E) x 20 m(N) x 4 m(RL) which were rotated at a bearing of 045.
		Block dimensions were selected from kriging neighbourhood analysis and reflect the variability of the deposit as defined by the current drill spacing.
		Sub-cells to a minimum dimension of 1.25 m(E) x 5 m(N) x 1 m(RL) were used to represent volume.
	Any assumptions behind modelling of selective mining units.	Selective mining units were not modelled.
	Any assumptions about correlation between variables.	Li <sub>2</sub> O was not correlated with any other analyte. Fe was highly correlated with Ca and K was highly correlated with Rb. There was a moderate correlation between Ta and Nb and Na and Cs was moderately correlated with Rb and Mg.
	The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	No production has taken place and thus no reconciliation data is available.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages have been estimated on a dry basis.



Criteria	JORC Code explanation	Commentary
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The Mineral Resource estimate for the Manna deposit has been reported above a cut-off grade of 0.6% Li <sub>2</sub> O to represent the portion of the resource that may be considered for eventual economic extraction by open pit methods. The interpreted pegmatites extend to a maximum of 500 m depth and a limiting depth was not applied to the reported resource.  This cut-off grade has been selected by Global Lithium in consultation with Snowden Optiro based on current experience and in line with cut-off grades applied for reporting of Mineral Resources of lithium hosted in spodumene bearing pegmatites elsewhere in Australia.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous.	The mineralisation at Manna extends from surface and is suitable for open pit and underground mining. It is considered that there are no mining factors which are likely to affect the assumption that the deposit has reasonable prospects for eventual economic extraction.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.	A comprehensive metallurgical test work program was completed at Nagrom Laboratory as part of the Definitive Feasibility Study. Geological domain composite samples for Zones 1, 2 and 3 were prepared from approximately 12 000 kg of diamond core obtained from multiple drilling programs completed at Manna between early 2022 and early 2023.  Zones 1 and 2 are defined primarily by lithology as spodumene dominant, then further differentiated by high and low lithia grade respectively. Zone 3 comprises mixed spodumene lepidolite ore with up to 10% lepidolite by volume.  Test work confirmed that the ore is amenable to whole of ore flotation and that a 5.5% Li <sub>2</sub> O spodumene concentrate can be produced.  Optimisation test work that focussed on magnetic separation, mica pre-flotation and deslime stages resulted in an increase in Li <sub>2</sub> O recoveries up to 78% for mixed composites. These results were released to the ASX on 30 August 2024 in the announcement titled "Manna DFS Metallurgical Testwork Program Completed".



Criteria	JORC Code explanation	Commentary
		For the DFS, the forecast life-of-mine average lithium recovery is 72.8%. Early mining focuses on the spodumene-dominant ore, which carry recoveries of approximately 76.5%. Recoveries are expected to decline in later years as the proportion of mixed spodumene-lepidolite ore in Zone 3 increases, reducing the overall recoverable Li <sub>2</sub> O.
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation.	No environmental impact assessments have been conducted. It is assumed that any remedial action to limit the environmental impacts of mining and processing will not significantly affect the economic viability of the project.
Bulk density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.  Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Bulk density was measured for the June 2024 resource estimate for 2,569 core samples (including 359 samples of pegmatite) from diamond holes using Archimedes measurements.  The density data overall ranged from 1 to 6.82 t/m³ and the density data within the pegmatites has a range of 2.62 to 3.27 t/m³. Outliers were screened out of average density applied to resource model.  A bulk density of 2.68 t/m³ was applied to the pegmatite with low grade spodumene/lepidolite mineralisation (<= 0.4% Li <sub>2</sub> O) and a value of 2.72 t/m³ was applied to the high grade spodumene pegmatite mineralisation for tonnage estimation.  Approximately 99% of the mineralised pegmatite is within the fresh material.  Data from an additional 1,972 drill core samples obtained in the 2023 drilling programme that informed the June 2024 resource update, confirmed the average values for the fresh pegmatite and mafic and intrusive sequences.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.  Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	The Mineral Resource has been classified as Indicated and Inferred based on confidence in geological and grade continuity and by considering the quality of the sampling and assay data, and confidence in estimation of Li <sub>2</sub> O content.  Indicated Mineral Resources have been defined where there is infill drilling up to 80 m along strike and 40 m across strike, and the geological and grade continuity was robust.



Criteria	JORC Code explanation	Commentary
	Whether the result appropriately reflects the Competent Person's view of the deposit	The assigned classification of Indicated and Inferred reflects the Competent Persons' assessment of the accuracy and confidence levels in the Mineral Resource estimate.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	The Mineral Resource has been reviewed internally as part of normal validation processes by Snowden Optiro.  No external audit or review of the current Mineral
		Resource has been conducted.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person.	The assigned classification of Indicated and Inferred reflects the Competent Persons' assessment of the accuracy and confidence levels in the Mineral Resource estimate.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.	The confidence levels reflect potential production tonnages on an annual basis, assuming open pit mining.
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No production has occurred from the deposit.

# Section 4: Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Con	Commentary			
Mineral Resource estimate for conversion to Ore Reserves	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	The Mineral Resource estimate that this reservated upon has been compiled by Snowden ousing data supplied by Global Lithium Resource (GLR). It was issued to the ASX on 12 June 2 The Mineral Resource estimate at 0.6% Li <sub>2</sub> O is:		wden Optiro, Resources June 2024.		
			Category	Million Tonnes (Mt)	Li <sub>2</sub> O, %	Ta <sub>2</sub> O <sub>5</sub> ppm
			Indicated	32.9	1.04	52
			Inferred	18.7	0.92	50
			Total	51.6	1.00	52
	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	l _	Mineral Res erves.	ources are	inclusive of	the Ore
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	Atlar unde out,	Guy Simpson ntech (Comp erground mir reviewed all ng Solutions	etent Perso ling) when t early works	on for both on the contract of the contract of the contract of the contract on the contract of	ppen cut and as carried by Resolve



Criteria	JORC Code explanation	Commentary
		Site visit included viewing all areas selected for development including the mining and processing areas plus the waste dump and stockpiling locations.
Study status	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	This maiden Ore Reserve estimate has been produced for the Open Pit during the December 2025 Definitive Feasibility Study (DFS), and for the Underground from the December 2025 Pre-Feasibility Study (PFS).  The Ore Reserve considered only the Measured and Indicated Resources published as part of the Mineral Resource estimated announced for the Manna Lithium Project (MLP).  It should be noted that there is an additional contained metal as Inferred Resources within the Ore Reserve designs which has been assigned zero revenue and excluded for the purposes of this Ore Reserve estimate.
	The Code requires that a study to at least Pre- Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	The project is considered technically achievable and economically viable. The resulting mine plan considered material Modifying Factors such as dilution and ore loss, various project boundary constraints, processing recoveries and all costs associated with mining, processing, transporting and selling the product to be produced by the operation. Financial modelling completed to support this Ore Reserve estimate is based on the two studies and this modelling shows that the Ore Reserve is economically viable at CIF SC6.0 prices supported by consensus long term price scenarios from US\$1,400 /tonne.  It should be noted the economic analysis does not include revenue from the Inferred resource.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The Mineral Resource provided was a geologically domained resource_based on logged lithium units and a maximum Fe grade of 8%; this geological model was modified for ore loss and dilution and evaluated to determine which blocks produced cash surplus when treated as ore.  The Ore Reserve was estimated using a 0.50% Li <sub>2</sub> O cut-off for the open pit and 0.60% Li <sub>2</sub> O for the underground  The cut-off grade contemplates all pre-tax costs associated with the processing and selling of a Li <sub>2</sub> O concentrate product. The costs of Incremental ore haulage, stockpile re-handle, processing, transport and overheads are all paid for by the 0.5% Li <sub>2</sub> O cutoff. The revenue was determined using an average price for SC6.0 CIF Li <sub>2</sub> O concentrate of US\$1,400 per tonne and an exchange rate of US\$0.67 per AU\$1.00.



#### JORC Code explanation Commentary **Open Pit** Mining factors The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Pit optimisations & sensitivity analysis were assumptions Mineral Resource to an Ore Reserve (i.e. either by completed using Whittle software to produce a range of pit shells using recommended slope design criteria, application of appropriate factors by optimisation or mining dilution, ore loss and processing recoveries by preliminary or detailed design) together with mining, processing, transport and sales cost estimates, and revenue projections to form the The choice, nature and appropriateness of the basis for detailed pit designs and subsequent mining selected mining method(s) and other mining and processing schedules. parameters including associated design issues such Selective mining methods of the ore zone for the as pre-strip, access, etc. open pit have been assumed with a Smallest Mining Unit (SMU) size of 2.5m x 5m x 5m (XYZ) applied to The assumptions made regarding geotechnical the resource block model to produce a diluted mining parameters (eg pit slopes, stope sizes, etc), grade model. control and pre-production drilling. This SMU size was selected as the most appropriate block size considering the mining fleet and mining The major assumptions made and Mineral Resource methods proposed by the preferred Mining model used for pit and stope optimisation (if Contractor Tender submission. Selective ore mining appropriate). will also need to be supported by machine guidance systems, production blasthole grade control The mining dilution factors used. processes, and the highly visual nature of ore in comparison to the waste material. The mining recovery factors used Pit slope design criteria are based on a DFS Any minimum mining widths used Geotechnical study completed by Peter O'Bryan and Associates in May 2024. Design sectors are based The manner in which Inferred Mineral Resources on the weathered, transitional and fresh rock zones are utilised in mining studies and the sensitivity of as they occur vertically through the mining sequence. the outcome to their inclusion. The slope design criteria selected for pit designs is based on a non-depressurised pit slope\_walls being The infrastructure requirements of the selected effectively depressurised. mining methods. The mine schedule is based on a processing plant nameplate capacity of 1.8 - 1.9Mtpa (dry) and the mining excavator fleet proposed by the preferred Mining Contractor that has an average annual mining capacity of 50 Mtpa (dry) over the mine life. The MLP will be mined in three stages with an initial pit followed by two cutbacks. Ramp widths for pit designs vary from 25m for single to 35m for double lane at a maximum operating gradient of 10%. Minimum mining widths for the pit design are 60m with cutback widths a minimum of 100m wide. Inferred Mineral Resource for the purpose of the Ore Reserve estimate is treated as waste which has been economically carried by the Ore. In addition, Inferred Resources were included in several pit optimisation runs to ensure infrastructure and waste dumps were not located on potential future economic resource. Mining Infrastructure required to support the mine plan includes waste rock dumps, integrated waste landforms (rock waste, dry tailings and ore sorter rejects), ROM pad, haul roads, crusher and processing plant, tailings storage facility, explosives storage facility, water storage, workshops and other buildings required for a contract mining operation Underground



Criteria	JORC Code explanation	Commentary
		The mining method selected for the Manna deposit is sublevel open stoping. Access to the Manna underground deposit is via a number of portals in the planned open pit each with a dedicated decline. The 6.0 m x 6.0 m declines will also act as the primary ventilation intake into the mine with the exhaust to surface via a return a raise bored return air raises (RAR). Internal pillars are utilised for overall stability. The narrow (2.5 to 5 m) ore body width, vertical orientation, and competent host rock ground conditions and internal rock pillars allows for sublevel open stoping mining without back fill to be utilised as a viable low-cost mining method.  Inferred material was optimised, designed and scheduled. Stopes have been classified on a dominant resource category basis, where the dominant resource category for the stope is reported
		as the resource category for the entire stope. Stopes that have a dominant resource category of Inferred are not reported as part of the Ore Reserves.
		Underground design criteria are based on a PFS Geotechnical study completed by Peter O'Bryan and Associates in October 2024.
		Manna underground assumptions:
		Dilution – 0.3 m
		Shape Height (Sub level) – 25 m.
		Minimum Width (Across Strike) – 2.5 m and 5.0 m.
		Stope strike length – 23m
		Rib pillar strike length – 5m (minimum)
		Sill pillar height – 5m (minimum)
		Sill pillar occurrence – 4 Levels / 100m
Metallurgical factors or assumptions	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	Metallurgical testwork of the MLP process flowsheet has been completed on composite samples generated from approximately 12,000kg of diamond core obtained from multiple drilling programs
	Whether the metallurgical process is well-tested technology or novel in nature.	completed across the Manna Central and Manna North open pits.
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.	Testwork initially focussed on ore characterisation, spodumene mineralogy, comminution and liberation studies to determine the optimum beneficiation flowsheet. Coarse spodumene beneficiation adopting Dense-Media Separation (DMS) technology is not suitable for the Manna deposit. GLR formed the opinion that the spodumene recovery was not high
	Any assumptions or allowances made for deleterious elements	enough to warrant the additional capital cost to include a DMS circuit and added complexity. Consequently, a three-stage crushing, ore sorting
	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	and ball mill flotation flowsheet employing a combination of de-sliming, magnetic separation, and mica flotation technology was selected for DFS design and continued metallurgical studies.



Criteria	JORC Code explanation	Commentary
	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	This flowsheet encompasses four stages of gangue rejection after grinding the ore. The ground ore is treated via low and high intensity magnetic separators to remove iron bearing gangue minerals before being de-slimed using hydrocyclones. Deslimed non-magnetics are then sent for mica flotation where mica impurity minerals are rejected before spodumene flotation to produce a final concentrate.
		The flotation testwork has been completed on a range of composite samples, with a total of 150 flotation tests performed to establish the optimal flowsheet configuration for the MLP, whilst achieving target product specifications and maximum recoveries and ensuring practical scale up from laboratory to operations.
		Sufficient metallurgical testwork has been completed to achieve the flotation flowsheet recovery of 78%.
		To understand the recovery in different geological domains composited samples for Zones 1, 2 and 3 were prepared for test. Zones 1 and 2 are defined primarily by lithology as spodumene dominant, then further differentiated by high and low lithia grade respectively. Zone 3 comprises mixed spodumene lepidolite ore with up to 10% lepidolite by volume.
		Test work confirmed that the ore is amenable to whole of ore flotation and that a 5.5% Li <sub>2</sub> O spodumene concentrate can be produced. Optimisation test work that focussed on magnetic separation and mica pre-flotation stages resulted in an increase in Li <sub>2</sub> O recoveries up to 75% for mixed composites. These results were released to the ASX on 7 March 2024 in the announcement titled "Manna Metallurgical Test Work Update".
		Considering ore variation factors and mineralogy in the mine, an average metallurgical recovery of 72.8% was selected for the DFS.
		Recoveries taper in the later years of the schedule as the proportion of mixed spodumene lepidolite ore in Zone 3 increases, which reduces the recoverable Li <sub>2</sub> O.
		Further metallurgical testwork will be performed to support impacts of site water quality and ore variability over life-of-mine on flowsheet recovery.
		Metallurgical testwork has been performed at Nagrom Laboratory located in Perth, Western Australia and supervised by the GLR process team.
Environmental	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	Baseline flora and fauna studies have been completed and it is considered unlikely, given current knowledge that impacts on conservation significant flora, fauna and ecological communities will result from development of the project.



Criteria	JORC Code explanation	Commentary
Infrastructure	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	The MLP is well served by existing infrastructure with the Trans Access Road and Trans Australian Railway running adjacent to the Project.  The MLP will be serviced by an owner operated gas fired power station.  The process plant and Integrated Waste Landforms (IWL) can be constructed on the 21-year mining lease granted in August 2025.  The location of boreholes for water supply is yet to be established. Modelling and site-based pumping trials provides confidence that sufficient available bore water of good quality may be available from within the MLP tenements and regional sources.  Site facilities such as camp accommodation and facilities, fibre optic connection, sewerage plant, processing plant, maintenance facilities, and dry tailings storage will be required.  Other surface facilities will include a power/water reticulation, ventilation fans to support underground mining activities, a ROM pad, haul roads, areas for Contractor built/supplied workshops and other Contractor facilities. Lithium concentrate will be transported via road train from mine site to the Port of Esperance, for shipment overseas.  The study assumes a camp will be constructed on a miscellaneous licence, an application for which has been lodged and is currently being reviewed.  Underground  Ventilation - The overall primary airflow requirement for the project that will satisfy statutory diesel dilution criteria for the peak fleet is estimated to be 1100 m³/s. The airflow requirement to satisfy mining activity is 1,500 m³/s. The overall design airflow allocation of 1,500m³/s will satisfy the diesel requirements and provide sufficient airflow for mining activity. The underground mine has a large footprint with several available working areas and therefore Velocity on Demand (VoD) is essential to ensure the available airflow is distributed efficiently Electrical - The underground electrical equipment is comprised of electrically powered production equipment (development jumbos, production drill rigs, diamond drills and raise-borers), auxilia
		ventilation fans, pump stations, sump pumps (1,000V) and 240V supply for lighting and general services.
Costs	The derivation of, or assumptions made, regarding projected capital costs in the study.	The capital cost estimate for the overall MLP has been developed by GR Engineering Services (GRES) and Mincore to a ±15% level of accuracy and is based on a mechanical equipment list with vendor pricing for major equipment together with recent database rates for bulks such as concrete and steel. Electrical and earthworks were estimated separately.
	The methodology used to estimate operating costs.	
	Allowances made for the content of deleterious elements.	
	The source of exchange rates used in the study.	
	I	<u> </u>



Criteria	JORC Code explanation	Commentary
	Derivation of transportation charges.  The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	The operating cost estimate for the Process Plant and associated NPI has been developed by GRES and Mincore to a ±15% level of accuracy and is based on quantities developed from testwork results and benchmark information, and rates based on quotes and inhouse GRES and GLR data.
	The allowances made for royalties payable, both Government and private.	Forecast exchange rates for AUD:USD were sourced from The Economy Forecast Agency providing long term forecasts with a range of 0.62 to 0.70 (excluding outliers). GLR has assumed 0.67 as its life of mine exchange rate.  Haulage and ship loading costs were provided by an
		established haulage company that currently provides stevedoring services at the port of Esperance. Port costs were obtained from the Port of Esperance. Estimated shipping costs were used to determine CIF costs to potential off-takers.
		Government and Native Title Mining Agreement royalties were deducted from the project revenue to determine overall economics.
		Open Pit mining operating costs have been sourced from mining contractor submissions. Two mining contractors were provided with the DFS mining plan including based on haul profiles, stage plans, mine designs and completed mine schedules, and submitted fixed and variable schedule of rates to undertake all mining activities.
		The contractor based operating costs were verified against an owner-mining option with underlying cost information provided by equipment suppliers.
		Underground mining operating costs have been developed utilising an owner-mining model and generated from first-principles. Equipment manufacturers supplied the underlying cost information which was verified by mining contractor estimates.
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	SC6.0 is not currently sold on exchange traded markets and is largely transacted under contractual arrangements between the mining company and its customers.  Detailed feed grades were derived from the mine plan. Financial assumptions, including sales prices,
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	exchange rates, treatment costs and transport, freight, and insurance costs were derived from GLR's corporate financial and economic assumptions. These economic assumptions are generally derived from relevant industry references such as analyst forecasts and industry commercial terms for similar products.
		Revenue was calculated as the in-situ value after allowances have been made for:
		<ul><li>Recovery to concentrate.</li><li>Concentrate transport.</li></ul>
		Taxes and Royalties.



Criteria	JORC Code explanation	Commentary
		Lithium concentrate recovery is a constant 72.8% and occurs at all feed grades.  Gross revenue assumes 100% of Spodumene on a 5.5% Li <sub>2</sub> O Payable spodumene concentrate pricing (SC5.5).  Revenue assumptions are based on long-term concentrate pricing of CIF (Asia) SC6.0 US\$1,400 /tonne and adjusted for product the concentrate
		grade of 5.5% Li <sub>2</sub> O.
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.  A customer and competitor analysis along with the identification of likely market windows for the	Demand for lithium is forecast to increase significantly over the next decade driven by the use of lithium-ion batteries in automotive applications and energy storage. With continued strong demand and consumption growth, a supply deficit is expected to occur in the late-2020's.
	Price and volume forecasts and the basis for these forecasts	
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	
Economic	The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.	An 8% real discount rate has been utilised to determine the NPV for the MLP.  A range of sensitivities to significant assumptions and inputs has been provided in the body of this report including spodumene prices, exchange rates, metallurgical recoveries, Capex and Opex.
	NPV ranges and sensitivity to variations in the significant assumptions and inputs.	
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	The Kakarra Part B People are Traditional Owners of the area that actively overlays the Project. GLR has signed a Native Title Mining Agreement with the Kakarra Part B People relating to mining, exploration and prospecting activities, which permits GLR to mining, explore for minerals within the Kakarra Part B Determination Area, and sets the framework for GLR to conduct aboriginal heritage surveys in support of the MLP and support the community.
		A Pastoral Access Agreement has not been negotiated.
Other	To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	There are no obvious or likely naturally occurring risks that have been identified or which may negatively impact the Project or Project area.  GLR is a 100% owner of the deposit and has entered into an off-take agreement with Canmax for 30% of the spodumene concentrate produced by GLR. Further off-take arrangements are being discussed with potential off-take partners.
	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	



Criteria	JORC Code explanation	Commentary
	The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	All statutory government agreements, permits and approvals commensurate to the status of the Project are current and in good order.
Classification	The basis for the classification of the Ore Reserves into varying confidence categories.  Whether the result appropriately reflects the Competent Person's view of the deposit.  The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	Ore Reserves reported here are classified as Probable as they are derived from the Indicated Mineral Resources in accordance with the JORC Code (2012).  The Competent Persons are satisfied that the stated Ore Reserve classification reflects the outcome of technical and economic studies.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	External audits of Ore Reserve Estimate have not been undertaken.  The Mineral Reserve estimate, mine design, scheduling, and mining cost model has been reviewed by an external expert. No material flaws have been identified.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.  The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.  Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage	Reporting of the project Ore Reserve considers;  • the Mineral Resources are compliant with the JORC Code 2012 Edition,  • the conversion of these resources into an Ore Reserves, and  • the costed mining plan capable of delivering ore from a mine production schedule.  Dilution of the Mineral Resource model and an allowance for ore loss was included in the Open Pit Ore Reserve estimate. All the Mineral Resources intersected by the mine designs classified as Measured and Indicated Resource has been converted to the Proved and Probable Ore Reserves after consideration of all mining, metallurgical, social, environmental, statutory and financial aspects of the Project.  The mine planning and scheduling assumptions are based on current industry practice, which are seen as globally correct at this level of study.  The project team has estimated the cost estimates and financial evaluation with specialist consultants and team members, which are considered sufficient to support this level of study. The accuracy of the cost estimate is +/-15%.



Criteria	JORC Code explanation	Commentary	
	It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	The combined open pit and underground financial model demonstrates that the Project is economic at the Ore Reserve forecast price which are lower than the Project forecast prices.  Ore Reserve is most sensitive to unfavourable changes in factors that influence revenue. These include mining dilution and ore loss, processing recovery, and concentrate price. Processing recovery has been based upon included feed grades and	
		metallurgical testwork. Mining dilution and ore loss have been tested to within industry benchmarks for global values.	





# MANNA LITHIUM PROJECT

Definitive Feasibility Study

Dec 2025

**ASX: GL1** www.globallithium.com.au





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## **GLOSSARY**

Abbreviation	Description		
AISC	All-in Including Sustaining Capital		
AMS	Aerodrome Management Services		
DEMIRS	Department of Energy, Mines, Industry Regulation and Safety		
DD	Diamond Drillholes		
DFS	Definitive Feasibility Study		
DMS	Dense Media Separation		
EBITDA	Earnings Before Interest, Taxes, Depreciation and Amortization		
FID	Financial Investment Decision		
GHG	Greenhouse Gas		
GLR	Global Lithium Resources Limited		
GRES	GR Engineering Services Ltd		
IT	Information Technology		
IWL	Integrated Waste Landform		
JORC	Joint Ore Reserves Committee		
JV	Joint Venture		
LCT	Lithium-Caesium-Tantalum		
LOM	Life of Mine		
MLP	Manna Lithium Project		
MRE	Mineral Resource Estimate		
Mt	Million tonnes		
Mtpa	Million tonnes per annum		
NTMA	Native Title Mining Agreement		
PAF	Potential Acid Forming		
RC	Reverse Circulation		
RCD	RC holes with diamond tails		
ROM	Run of Mine		
SAG	Semi-autogenous Grinding Mill		
SC	Spodumene Concentrate		
tpa	Metric tonnes per annum		
WA	Western Australia		

Revision 0





#### 1. EXECUTIVE SUMMARY

#### 1.1 Project Highlights

The Manna Lithium Project (MLP) is an attractive deposit with long mine life and long-term source of spodumene concentrate:

- MLP is the third largest lithium deposit located in the Eastern Goldfields.
- Total resource estimate of 51.6Mt at 1.00% Li<sub>2</sub>O.
- Life of Mine (LOM) of 14.3 years with an estimated total spodumene concentrate production of 2.763Mt SC5.5 (dry tonnage).
- 82% of the mining inventory for first 14 years is supported by Ore Reserves.

#### Robust financials:

- Cash operating cost for LOM of US\$646/t or A\$965/t SC5.5.
- Robust post-tax NPV8 of A\$472M, 25.7% IRR and a 3.5-year payback at US\$1400/t SC6.0 CIF.
- Breakeven price (EBITDA=0) of US\$784/t SC6.0.
- Breakeven price (NPV=0) of US\$1,060/t SC6.0.

Low risk open pit mining operation and flotation plant:

- Simple open-pit mining operation for 8.3 years.
- Process plant to use convention flotation plant with 72.85% spodumene recovery.
- Native Title Mining Agreement in place and Environmental Approvals well advanced.

The key physical and financial metrics of the MLP are presented in Table 1-1.





Key Metric	Unit	DFS
Life-of-Mine (LOM)	Years	14.3
Nameplate Mill Capacity	Mtpa	1.8
ROM Feed Grade (Years 1-2)	% Li <sub>2</sub> O	0.93
ROM Feed Grade (Years 1-10) Open Pit	% Li <sub>2</sub> O	0.91
ROM Feed Grade (Years 6-18) Underground	% Li <sub>2</sub> O	0.83
LOM Average Strip Ratio Open Pit (Waste/Ore)	t/t	14.9
LOM Processing Recovery	%	72.8
Annual SC5.5 Production – Nominal Dry Tonnes	tpa	236,470
LOM Total Spodumene Concentrate Production of SC5.5	Mt	2.736
Pre-Production Mining Costs (Site Mob, Establishment, Pre-Strip)	A\$M	81.9
Process Plant & Infrastructure	A\$M	157.5
Engineering, procurement and construction indirect costs	A\$M	49.3
Owners Costs	A\$M	110.4
Contingency and growth allowance	A\$M	40
Total CAPEX	A\$M	439.1
Exchange Rate	AUD:USD	0.67
LOM Cash Operating Unit Cost*	A\$/t SC5.5	965
LOM AISC OPEX	A\$/t SC5.5	1,101
Spodumene Concentrate Price (SC6.0 CIF)	USD/t SC6.0	1,400
Spodumene Concentrate Price (SC5.5 CIF)	USD/t SC5.5	1,253
Project NPV8 (inclusive of Royalties, post-tax) <sup>1</sup>	A\$M	472
Project IRR (inclusive of Royalties, post-tax)	%	25.7
Payback from start of production	Years	3.5

<sup>1</sup> Cash operating costs include all mining, processing, maintenance, transport and administration costs, but exclude all royalties and sustaining capital.

Table 1-1 Key Physicals and Financial Metrics

Global Lithium Resources Limited Manna Lithium Project Definitive Feasibility Study

<sup>&</sup>lt;sup>1</sup> NPV valuation timing based on date of first project capital spend





#### 1.2 Ore Reserves

Total Mineable Reserve of 19.4Mt @ 0.907% Li<sub>2</sub>O is declared.

Mr Guy Simpson is the competent person for declaration of the Ore Reserve with 35 years of relevant experience in the estimation, assessment, evaluation and economic extraction of Ore Reserves in open pit and underground mining. Mr Simpson holds a Bachelor of Science in Mining Engineering from the WA School of Mines.

#### 1.3 Introduction

Global Lithium Resources Limited (GLR) is developing the MLP located in the Eastern Goldfields of Western Australia (WA). The MLP is 100% owned and operated by GLR and lies 110km by road east of regional City of Kalgoorlie-Boulder on Mining Lease M28/414 and associated Miscellaneous Leases covering critical infrastructure. GLR holds title (directly or indirectly) over 350km<sup>2</sup> of exploration ground across the MLP (see Figure 1-1 Project Overview).

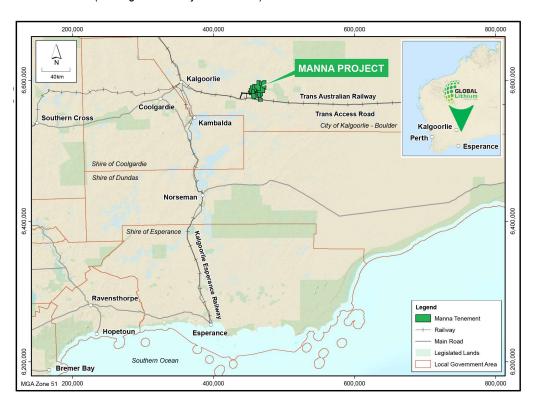


Figure 1-1 Project Overview

The Manna lithium deposit was discovered in 2018 by Breaker Resources NL (Breaker Resources). In December 2021, GLR through its wholly owned subsidiary GLR Australia Pty Ltd acquired an 80% interest in the Manna lithium and lithium associated co-mineral rights (LCT Rights) from Breaker





Resources NL. This initial acquisition was initially restricted to a JV Area within E28/2551 and E28/2522 for an upfront cash consideration of \$13.0M.

In October 2022, GLR acquired the remaining 20% interest in the Manna Lithium Project from Breaker Resources and the underlying project tenements E28/2551 and E28/2522. A total cash consideration of \$60M was paid to Breaker Resource for the remaining 20% interest and exploration. As part of the final acquisition, GLR granted Breaker Resources a 1.5% net smelter return royalty (Royalty) over E28/2551 and E28/2522 tenements (excluding the Manna JV Area) for all minerals excluding gold, silver and platinum group metals that are mined by Breaker Resources. GLR granted Breaker Resource precious metals rights over the tenements.

GLR has completed extensive drilling across the MLP with the deposit remaining open at depth and down dip to the northeast. A total of 113,227 metres of drilling has been completed with 391 reverse circulation (RC) drillholes for a total of 91,928 m, 20 RC holes with diamond tails (RCD) for a total of 12,133 m, and 44 diamond drillholes (DD) for a total of 9,166 m.

The MLP has a Mineral Resource estimate of 51.6 million tonnes (Mt) at an average grade 1.0% Lithium Oxide (Li<sub>2</sub>O) and is anticipated to produce an average of circa 236,470 tonnes per annum (tpa) dry, or approximately 262,744 tpa (wet) of Spodumene Concentrate (SC) grading at 5.5% Li<sub>2</sub>O when in production.

Mining activities commence as a conventional open-pit operation providing mill feed for approximately 8 years and then medium and low-grade surface stockpiles reclaimed up to Year 10, before fully transitioning to an underground operation which continues for the remaining project life. At steady state operation, approximately 1.8Mtpa (dry) of ore will be crushed and ore sorted and then processed via a conventional flotation flowsheet. SC product will be transported via road to the Port of Esperance, where it will be exported in Handysize vessels to its final customers.

The MLP will be a standalone business comprising a new greenfields mining operation, beneficiation plant, power station, utilities, raw water borefield, accommodation village and miscellaneous infrastructure.

The MLP assumes the mining operation will be managed by a contract mining service provider under a long-term contract, while the process plant will be operated under an owner-operator model. Some supporting service functions will be contracted, such as operation of the accommodation village, air services, product haulage, shipping and Information Technology (IT) support.

GLR engaged GR Engineering Services Ltd (GRES), Mincore and Atlantech as the lead consultants to undertake a Definitive Feasibility Study (DFS).





#### 1.3.1 Previous Studies

A Scoping Study was completed by Minsol Engineering and RMS in February 2023, confirming the potential for a globally competitive lithium project with the following metrics:

- Total MRE of 32.7Mt at 1.00% Li<sub>2</sub>O.
- Life-of-mine (LOM) of 10 years with an anticipated 2.2Mt of spodumene product.
- Concentrator plant nameplate capacity of 2Mtpa of ROM ore.

On the back of the robust initial results of the Scoping Study, the GLR board decided to proceed directly to a DFS in April 2023.

Sufficient engineering has been completed to compile a Class 3 capital and operating cost estimate to an accuracy of +/- 10-15% accuracy. The following sections describe the project scope and economic parameters for a final investment decision (FID).

#### 1.4 Definitive Feasibility Study Team

The GLR project development and exploration team consists of high calibre, experienced mining and mineral processing professionals. The project team was supported by a number of specialist consultant companies. These companies, and their respective components of the DFS, are provided in Table 1-2.

Consultant	Component	Scope of Work
GR Engineering Services Ltd	DFS Engineering for Process Plant & Estimation for total project	<ul> <li>Overall DFS compilation</li> <li>Process plant engineering</li> <li>Project layout</li> <li>Overall capital and operating cost estimates</li> </ul>
Mincore	DFS Engineering – Non Process Infrastructure	Non Process Infrastructure design     Non Process Infrastructure costs
Atlantech	Mining & Ore Reserve Estimation	<ul> <li>Open pit and underground mining costs</li> <li>Ore Reserves Estimation</li> <li>Mine Scheduling</li> <li>Revised tailings storage strategy into fine and coarse tailings stockpiles</li> </ul>
Snowden-Optiro	Geology and Resource Estimation	Mineral Resource Estimation
Peter O'Bryan and Associates	Mine Geotechnical Design	Geotechnical diamond core logging and testing     Geotechnical pit wall and stope stability     modelling





Consultant	Component	Scope of Work
Resolve Mining Solutions	Mine Design & Ore Reserve Estimation	<ul> <li>Open pit wall design parameters</li> <li>Underground stope and pillar design parameters</li> <li>Haul ramp design</li> <li>Overburden landform stability modelling</li> <li>Resource optimisation</li> <li>Final open pit and underground designs</li> <li>Vent simulation modelling</li> <li>Mine scheduling</li> <li>Open pit and underground mining costs</li> </ul>
Nagrom and Steinert	Metallurgical Testwork	Ore Reserve estimation     Comminution testwork     Magnetic separation testwork     Bench-scale flotation testwork (Nagrom)     Locked cycle flotation testwork (Nagrom)     Mineralogical assessment     Vendor equipment testwork     Large-scale ore sorting testwork (Steinert)
Galt Geotechnics	Civil Geotechnical Design	<ul> <li>Civil geotech drilling and test pitting</li> <li>Sample testing and analysis</li> <li>Burrow pit sampling and testing</li> <li>Civil pavement design for main access road</li> </ul>
Mincore and Katalyst IT	Communication Infrastructure	<ul> <li>Telecommunications design and engineering</li> <li>Telecommunications capital cost estimate</li> <li>Telecommunications operating cost estimate</li> </ul>
Frontline Services, Mincore and Katalyst IT	Business Enterprise Systems & IT	Operational readiness study for business enterprise and IT systems     Capital and operating cost estimation
Mincore	Power & Fuel Supply	Pre-qualification tender evaluation of power supply     Commercial evaluation of natural gas and diesel fuel options
Mine Earth	Tailings Disposal	Waste management storage strategy     Tailings stability testing
GLR	Hydrogeology	Raw water exploration     Borefield hydrogeological modelling





Consultant	Component	Scope of Work
		Ground water resource estimation
		Pit dewatering investigation
		Pit lake assessment
Worley-Advisian	Surface Water	Development of study level design concepts for:
	Hydrology	Flood modelling (final design included in Pre FID activities)
		Flood diversion infrastructure design verification
		Surface water impact assessment
Mincore & GLR	Economic Modelling	Development of project financial model
		Project economic evaluation
Consultants	Simon Coyle	Peer review mining and risk assessment
		workshop attendance
	Scott Barry	Process design development

Table 1-2 DFS Consultants' Scope of Work

#### 1.5 Tenure

The Manna deposit is located on granted Mining Lease (M28/414) to allow development of the MLP's mining and processing plant, including open pit mining operation, waste dumps, low grade stockpiles, process plant, explosives facility and mining contractor yards. The Mining Lease (M28/414) for 21 years was granted by the Department of Mines, Petroleum and Exploration (DMPE) in August 2025 after a Native Title Mining Agreement (NTMA) was reached with the Kakarra Part B Native Title Group.

A summary of the tenure held across the MLP is provided in Table 1-3. Figure 1-2 shows the location of the tenements listed in Table 1-3.

Tenement	Area (Ha)	Annual Rent	Status	Granted	Expected Grant Date
M28/414	2,405	\$57,774	Granted	22/08/2025	
L28/84	7,852	\$8,795	Granted	11/09/2024	
L28/85	6,760	\$7,571	Granted	11/09/2024	
L28/86	1,477	\$35,472	Pending		H1 2026
L28/93	230	\$5,313	Pending		H1 2026
L28/96	354	\$8,496	Pending		H1 2026
L28/97	220	\$5,304	Pending		H1 2026
L28/98	454	\$12,012	Pending		H1 2026
E28/2522	11,760	\$16,590	Granted	14/09/2017	





Tenement	Area (Ha)	Annual Rent	Status	Granted	Expected Grant Date
E28/2551	4,200	\$11,205	Granted	04/02/2016	
E28/3357	7,840	\$4,508	Pending		H1 2026
E28/3359	5,320	\$3,059	Pending		H1 2026
E28/3549	4,200	\$2,595	Pending		H1 2026
Total	53,072	\$178,694			

Table 1-3 MLP Tenement Details

The following Miscellaneous Licence applications for supporting infrastructure including roads, water transfer pipelines, power and communication corridors, accommodation village have been lodged to provide required tenure for the following infrastructure items:

- L28/86 Main Access Road.
- L28/93 Solar Farm.
- L28/96 Raw Water Pipeline Corridor.
- L28/97 Fibre Optic Corridor.
- L28/98 Accommodation Village.

These Miscellaneous Licence applications are expected to be granted in H1 CY26, subject to finalisation of objections by Cowarna Downs Pty Ltd, which holds a pastoral lease over the project area, and the Kakarra Native Title group. Once granted, all Mining Act tenure will have an initial 21-year term and can be renewed for a further 21-year term at GLR's election.





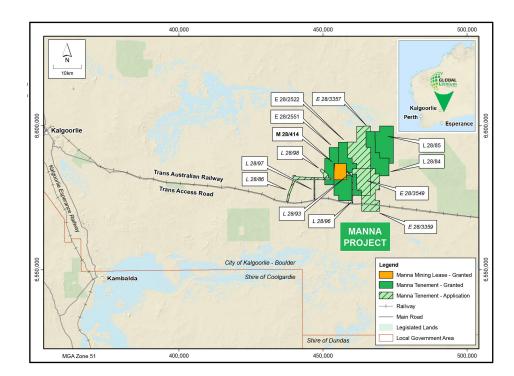


Figure 1-2 MLP Mining Tenure





#### 1.6 Geology

The Manna deposit is characterised as lithium-caesium-tantalum (LCT) type pegmatite swarms. The greenstone sequences within the vicinity of the Manna deposit are dominated by mafic and felsic-intermediate igneous rocks, with minor sedimentary rocks, of the Kurnalpi Terrane of the Archean Yilgarn Craton. It is thought that the LCT pegmatite swarms, which includes the Manna lithium deposit, is likely to be associated with the Cardunia granitoid body.

The Manna deposit is underlain by greenstone and granitoid rocks of the Kurnalpi Terrane. Two cratonscale structural corridors transect the project area: the Keith-Kilkenny Lineament, known locally as the Roe Shear Zone, and the Celia Fault, locally known as the Claypan Shear Zone. Greenstone sequences are dominated by mafic and felsic intermediate igneous rocks, with minor sedimentary rocks.

There are forty-two sets of anastomosing pegmatite veins which contain significant lithium mineralisation and used for resource estimation. The pegmatites have been defined from geological logging and surface mapping. The lithium-mineralised zones were defined using all samples which were logged as either pegmatite in Lith1 or Lith2 from the logging. An upper cutoff limit of 8% for iron (Fe) was also applied to exclude samples with a significant amount of country rock.

The pegmatite veins strike northeast-southwest and dip at -60° to -70° to the southeast. The main area is a set of fourteen pegmatites which has been drilled over an area of 1,900m by 400m and to a depth of 480m. There are fourteen pegmatites to the north, four to the east and ten pegmatites to the southwest of the main area. The individual mineralised pegmatites are 1m to 14m thick and have an average thickness of 3.6m.

Mineralisation at Manna remains open at depth and down dip to the northeast. Visual logging along the 700m long outcrop indicates that the lithia mineralogy varies from spodumene-only in the southwest to spodumene-dominant to the northeast (with up to 10% lepidolite by volume). The pegmatite dykes dip at approximately 70–80° to the southeast, cutting across north-south trending greenstones dominated by basalt and gabbro. Weathering of the pegmatite is negligible, and fresh spodumene can be observed at surface.





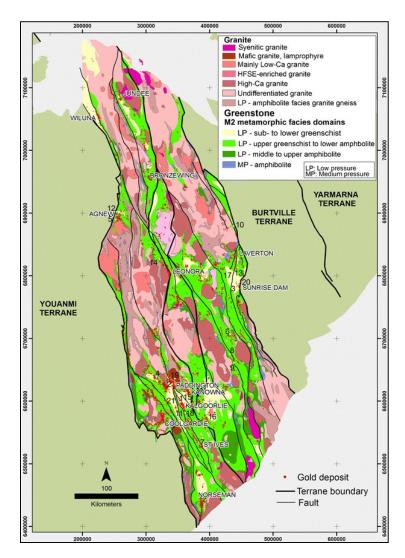


Figure 1-3 Geology Map of the Archean Kurnalpi Terrane

#### 1.7 Mineral Resources

GLR has completed extensive drilling across the MLP with the deposit remaining open at depth and down dip to the northeast. Figure 1-4 shows the resource growth of the MLP since acquiring the project in December 2021.

A total of 113,227 metres of drilling has been completed with 391 RC drillholes for a total of 91,928m, 20 RCD holes for a total of 12,133m, and 44 DD for a total of 9,166m. Figure 1-5 provides the location of the drill collars and the current resource and open pit outlines.





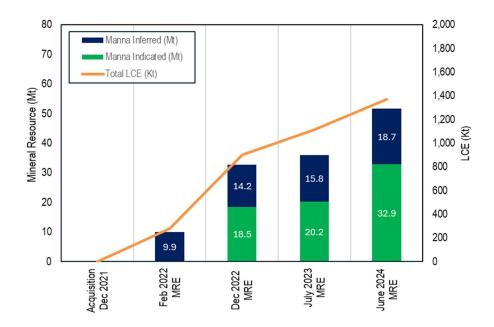


Figure 1-4 Growth of Manna Lithium Project

The Mineral Resource Estimate (MRE) for the Manna deposit is 51.6Mt at a grade of 1.00% Li<sub>2</sub>O as at June 2024 and is presented in Table 1-4. The Mineral Resource has been classified in accordance with the guidelines of the JORC Code (2012) and has been reported above a cut-off grade of 0.60% Li<sub>2</sub>O.

The MRE has 32.9Mt at a grade of 1.04% Li<sub>2</sub>O in the Indicated category representing 66% of contained lithia in the total Mineral Resource. There is a further 18.7Mt at 0.92% Li<sub>2</sub>O in the Inferred category.

Mineralisation at Manna remains open at depth and down dip to the northeast and additional mine life may be realised with further exploration drilling.

Resource Classification	Cutoff Li₂O (%)	Tonnes (Mt) <sub>1</sub>	Grade Li₂O (%)	Grade Ta₂O₅ (ppm)
Indicated	0.6	32.9	1.04	52
Inferred	0.6	18.7	0.92	50
Total	0.6	51.6	1.00	52

t = metric dry tonnes; Appropriate rounding has been applied, and rounding errors may occur.

Table 1-4 Manna Lithium Project Mineral Resource Estimate (June, 2024)

Subsequent to the July 2024 MRE update, GLR announced results from ore sorting trials which demonstrate excellent recoveries across a range of ore grades. This potential allows for a lower overall feed grade to be processed through the plant, given the mass rejection of waste from the coarse fraction and subsequent uplift in lithium grade. Ore sorting of low-grade ore achieved significant upgrade of Li<sub>2</sub>O and supports material between 0.40 - 0.60% Li<sub>2</sub>O being included for processing. The June 2024 MRE





update included Manna grade and tonnage reporting above a range of cut-off grades including 0.5% Li<sub>2</sub>O (Table 1-5) which has been used as a cut-off grade within the open pit portion of the Ore Reserve while the underground cut-off grade remained at 0.6% Li<sub>2</sub>O.

Cumulative Resource by Grade					
Cut-off Grade (%)	Million Tonnes	Li₂O (%)			
0.25	90.0	0.72			
0.30	76.1	0.81			
0.35	66.7	0.87			
0.40	61.3	0.92			
0.45	58.1	0.95			
0.50	55.7	0.97			
0.55	53.7	0.98			
0.60	51.6	1.00			
0.65	49.3	1.02			
0.70	46.5	1.04			
0.75	43.2	1.06			
0.80	39.5	1.09			
0.85	35.3	1.12			
0.90	30.8	1.15			
0.95	26.8	1.19			
1.00	22.8	1.22			

Table 1-5 Manna grade and tonnage reporting above a range of cut-off grades (June, 2024).





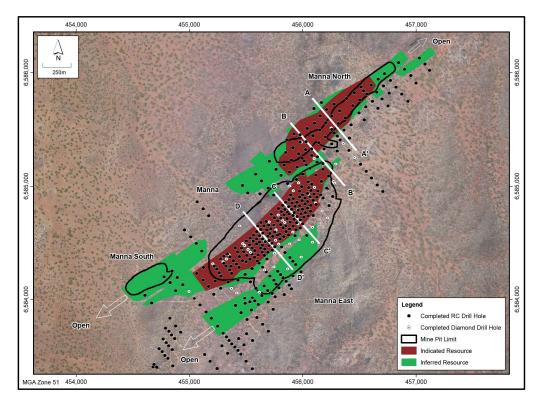


Figure 1-5 Manna Lithium Project Drill Collar Map

### 1.8 Ore Reserves

The Ore Reserve is derived from, and are a sub-set of, the MLP Mineral Resource Estimate. The Ore Reserve is 19.4Mt at a grade of 0.907% Li<sub>2</sub>O as detailed in Table 1-6.

It has been prepared in accordance with the guidelines outlined in the JORC Code 2012 Edition and is based on the July 2024 Mineral Resource Estimate and utilises a Spodumene Concentrate pricing of US\$1,400/tonne SC6.0 CIF.

The modifying factors for this Ore Reserve are based on the results of the DFS. The classification of the MLP Ore Reserve has been carried out in accordance with the principles of the JORC Code 2012 Edition. It reflects drilling and sampling density, estimation methodology, understanding and confidence of the ore body continuity, and the proposed mining and metallurgical recovery methods.

Equipment vendors, mining contractors, and other mining service providers have submitted cost estimates used to develop the current DFS mining cost models built from first principles to meet the mine production schedule. All updated DFS costs have been used to derive this Ore Reserve estimate. The modifying factors are summarised in the draft JORC Code Table 1.





Source	Classification	Tonnes <sup>6</sup> (Mt)	Grade % Li₂O	Contained Li <sub>2</sub> O (t)
Open Pit <sup>4</sup>	Probable	14.4	0.93	133,920
Underground⁵	Probable	5.0	0.84	42,000
Total <sup>1, 2, 3, 7</sup>	Probable	19.4	0.907	175,920

#### Notes:

- 1. Ore Reserves are a subset of Mineral Resources.
- 2. Ore Reserves conform with and use the JORC Code 2012 definitions.
- Ore Reserves are calculated using a spodumene concentrate SC6.0 CIF price of US\$1400/t.
- 4. The open pit Ore Reserves are calculated using a cut-of grade of 0.50% Li<sub>2</sub>O.
- 5. The underground Ore Reserves are calculated using a cut-off grade of 0.60% Li<sub>2</sub>O.
- 6. Tonnages are reported including mining dilution
- 7. All figures are rounded to reflect appropriate levels of confidence which may result in apparent errors of summation.

Table 1-6 MLP Ore Reserve Estimate

For planning and design purposes, the optimised pits and subsequent DFS pit designs are derived using all available Mineral Resources, including Inferred material. The Inferred mineral inventory within the pit designs does not determine the economic viability of the MLP and does not contribute materially to the first ten years of the mine schedule with 91% of the ore to be mined between Years 1 to 10 comprising Ore Reserves. Overall, the total mineral inventory from the open pits and underground is mainly from Probable Ore Reserves (82%). Only 18% of the total mineral inventory is in the inferred resource category.

A simple cost and revenue model, with earnings before interest, taxes, depreciation and amortisation (EBITDA) has been developed by RMS for open pit and underground resources to determine the economic viability of the project for the estimation of the Ore Reserves.

Figure 1-6 shows the updated cashflow and NPV $_8$  at the multiple lithium price assumptions. The chart indicates that the project in its current form requires a price of over US\$1060/t SC6.0 to breakeven at an 8% discount rate, or US\$784/t for positive undiscounted cash flows.







Figure 1-6 Cashflow at Various Revenue Prices

This economic evaluation shows that the sales price is the most likely factor affecting viability and as it is unlikely that the project would proceed without sales contracts above the price required to meet GLR's economic hurdles then it is reasonable to estimate an Ore Reserve based on the US\$1,400/t SC6.0 CIF revenue price.

A separate Ore Reserve schedule was developed for the underground mine to support the Ore Reserve estimate given the large percentage of Inferred resource (49%) within the LOM mineral inventory is located at the lower levels.

The Ore Reserve mine design and schedule for the underground operation remains a subset of the full mineral inventory LOM production plan, but excludes as much of the Inferred mineralisation as possible. The mineral inventory associated with the Ore Reserve mine schedule does include some Inferred Mineral Resource, which is associated with Inferred material located along some ore drives.





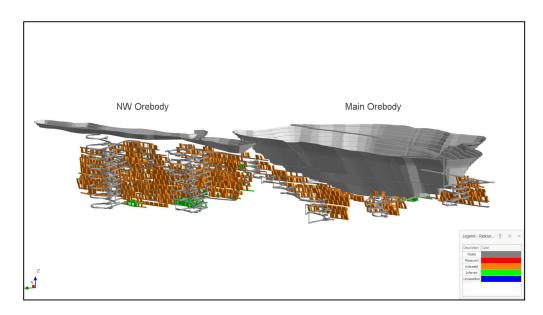


Figure 1-7 Underground Ore Reserve (Gold = Probable Reserves; Green = Inferred)

#### 1.9 Mining

The MLP LOM production plan contains a mineral inventory 23.7Mt at a grade of 0.88% Li<sub>2</sub>O to achieve a combined 14-year mine life from open pit and underground mining activities. Mining activities commence as a conventional open pit operation providing mill feed for approximately 8 years. Feed to the process plant is supplemented from an underground operation from Year 8 onwards over a 14-year period. The LOM production plan mineral inventory includes 4.3Mt of Inferred Mineral Resources, of which 74% is from the underground mineral inventory.

The open pit operation has a pre-production period of seven months covering site establishment, prestrip activities and building of ROM stockpiles before processing commences, with underground mining activities commencing in Year 6 of operations and incorporating seven months of underground mine development activities before ore production is achieved.

The Manna pit mine is initially high graded for the first 18 months of production during the ramp-up phase. An ore sorting plant is commissioned with first production. The crushing and ore sorting plant feed rate is 1.8Mtpa. After ore sorting, the process plant is feed rate is 1.5 to 1.6Mtpa at a steady rate up to year 10. Thereafter the processing rates steadily declines to an average of 1.45Mtpa once the open pit inventory is depleted and operations are solely sustained by the underground mine for a further 4 years (Years 11-14).





#### 1.9.1 Open Pit Mine Design

#### **Block Model**

Ore loss and dilution were estimated through a Standard Mining Unit (SMU) analysis using regularisation of the resource model. Table 1-7 summarises the results of the SMU reblocking and clearly shows significant ore loss and dilution at the larger blocks sizes. This is not un-expected due to the nature of the pegmatite lenses being relatively narrow across the strike of the blocks, which when merged with the adjacent waste blocks results in grade below the resource cut off.

As the block size becomes smaller, reflecting a greater emphasis on grade control and excavator management at smaller flitch heights, both ore loss and dilution reduce. It is expected that the application of visual cues and ore spotting will further reduce these values when mining occurs.

There is a material improvement when the cross-strike dimension ('X') is reduced to 2.5m, although it is also noted that this is probably the smallest dimension expected to be able to be mined with the machinery planned for the project. This is an area of risk to the quality control, however by ensuring that specific ore mining equipment is available the narrow pegmatites should be recoverable, therefore the 2.5m x 5m x 5m reblock was selected for the DFS study.

Block Size (X x Y x Z)	Classification	Tonnage (Mt)	Li₂O (%)	Contained Li₂O (Mt)	Ore Loss (%)	Dilution (%)
Resource	IND	36.9	0.98	0.36		
Model	INF	24.4	0.82	0.20		
	TOTAL	61.3	0.92	0.56		
10 x 10 x 10	IND	29.7	0.60	0.18	51%	19%
	INF	13.8	0.52	0.07	64%	43%
	TOTAL	43.5	0.58	0.25	56%	29%
5 x 5 x 5	IND	37.4	0.71	0.27	27%	1%
	INF	21.3	0.62	0.13	34%	13%
	TOTAL	58.7	0.68	0.40	29%	10%
2.5 x 5 x 5	IND	38.6	0.80	0.31	15%	5%
	INF	23.8	0.69	0.16	18%	3%
	TOTAL	62.4	0.76	0.47	16%	2%

Table 1-7 SMU Analysis at 0.4% Li<sub>2</sub>O Cut-Off Grade

#### Pit Optimisation

Pit optimisation was performed at range of lithium price assumptions to determine the sensitivity of the pit shells and estimate the influence of the Inferred mineralisation and how these pits may change at varying concentrate prices. Pit optimisations were performed over a range of lithium prices to analyse





the sensitivity of the deposits to the changing lithium price. Undiscounted cash flows were generated for each optimised pit shell at each respective revenue factor. The individual pit shell cashflows were then stress tested to changing lithium prices to produce a range of cash flow curves for all the optimised pit shells.

In addition, the key metrics of each optimised pit shell were tabulated to assess the following:

- Ore tonnes.
- Waste tonnes.
- Total material movement.
- Lithia grade.
- Strip ratio.
- Calculated breakeven price.

The cash breakeven price was back-calculated to determine at which lithium price the cost parameters for each RF1.0 pit shell equalled the calculated revenue. This is an important value to recognise during the current low lithium price market environment and assists in understanding the economic robustness of each pit.

The pit shell at US\$1,500/t SC6.0 CIF was selected the basis of design for the open pit design. Figure 1-8 shows the pit optimisation results at a price of US\$1,500/t SC6.0 CIF, including Inferred mineralisation. The RF1.0 pit shell contains total mineral inventory 21.9Mt at 0.82% Li<sub>2</sub>O of mill feed in a pit shell of 357Mt, and at a strip ratio of 15.3.

The difference from the Indicated only pit shells is immaterial with only an additional 18% of mill feed attributed by the inclusion of Inferred, with marginal changes in shells occurring along the south-east wall of the main zone, a satellite pit in the south-west (all inferred) and slight increase to the smaller satellites in the northern zone.

The selection of the final pit stages followed a review of the strategic schedule along with a visual review of the pit shells to ensure sufficient cutback widths to the 100m target based on mining contractor feedback to provide sufficient floor area for required activities. The pit stages selected for detailed design guidance and basis of design with a minimum cutback width of 100m were three stages consisting of the following:

- Stage 1, RF=0.54, Pit Shell 13.
- Stage 2, RF=0.72, Pit Shell 22 but pushed to final limits on the western wall.
- Stage 3, RF=1.0, Pit Shell 36 (including Inferred), which allows the inclusion of the additional Inferred mineralisation on the eastern wall.





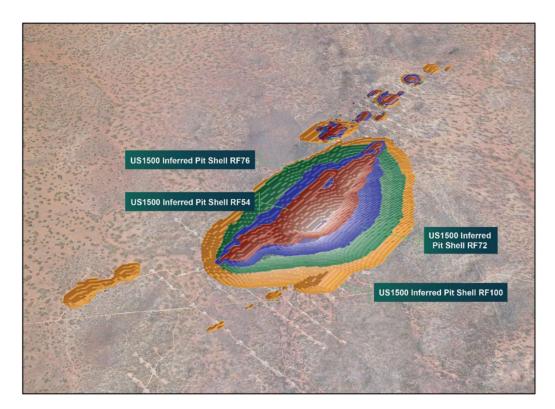


Figure 1-8 Selection of US\$1,500/t SC6 CIF Pit Shell Outputs (RF 0.54 to RF 1.0)

#### Pit Designs

Following on from the resource optimisation, RMS developed the pit designs and defined the mineral inventories for the deposits using the optimised pit shells. The mine design parameters were based on DFS geotechnical work completed by Peter O'Bryan and Associates. Geotechnical pit wall slope design parameters were fully supported by geotechnical diamond drilling program.

The pit designs have a minimum cutback width of 100m with a mining width of 60m. Operating bench heights are 10m for bulk waste and 5m for ore. Ore will be mined in two passed at 2.5m flitches. Minimum standoff distance from pit edge was assessed to be 60m for stockpiles and dump designs. Pit ramps are 35m in width to provide dual lane access for 220t class haul trucks.

The Manna pit design incorporates three stages, with a satellite pit in the northern zone, namely Manna North, that is developed in two stages, and a satellite pit in the southwest zone, Manna South, which is entirely Inferred mineralisation.

The pit stage and final open pit mineral inventories are shown in Table 1-8 with the final pit design illustrated in Figure 1-9. The inventory is based on the 0.50% Li<sub>2</sub>O cut-off grade with the low-grade component (0.5-0.6% Li<sub>2</sub>O) included in the mill feed totals.





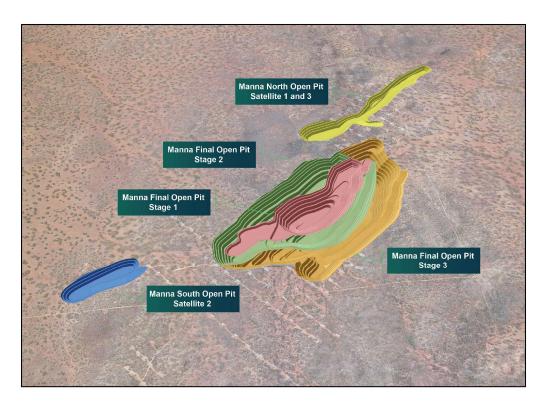


Figure 1-9 Isometric View of the Pit Stages

Manna Stage 1 pit design targets early ore at a higher average grade and lower than average strip ratio. This has resulted in a pit that is centred on the thicker pegmatite lenses on the eastern side of the main deposit. Stage 1 has an average depth of 80m and is relatively long and thin at 1,100m long and only 300m wide. The Stage 1 pit contains 2.3 Mt of mill feed at a 0.50% Li<sub>2</sub>O cutoff, however as this pit is mined first, mill feed at the elevated cutoff of 0.60% Li<sub>2</sub>O will be sent to the ROM with the lower grades stockpiled for reclamation later in the mine life. At the 0.60% Li<sub>2</sub>O cutoff there is 1.6Mt of inventory at 1.06% Li<sub>2</sub>O, which is all Indicated.

Pit Stage	Ore (Mt)	Li <sub>2</sub> O (%)	Fe₂O₃ (%)	Indicated (%)	Waste (Mt)	Total Material (Mt)	Strip Ratio (W:O)
Manna Stage 1	2.1	090	5.51	100	18.2	20.5	8.0
Manna Stage 2	5.2	0.89	6.01	99	76.0	82.0	12.7
Manna Stage 3	7.38	0.88	5.52	94	124.5	134.0	13.1
Manna North (Satellite 1 & 3)	0.5	0.68	6.48	72	9.6	10.1	20.6
Manna South (Satellite 2)	0.3	0.62	5.15	0	2.9	3.2	8.8
Total	15.5	0.88	5.70	94	218.6	234.1	14.9

Table 1-8 Open Pit Mineral Inventory

Stage 2 cutback is a key stage in the open pit development as it pushes the western wall to final limits but then steps in at 330mRL to ensure continuous inventory is exposed. The cut-back to final wall





position for the upper part of Stage 2 is to ensure target mining widths can be achieved on the western wall given the size of the Stage 1 pit. Two cutbacks on the western wall would not have been possible.

Stage 2 has a geotechnical berm on the 370mRL, and a double width haul road for the top benches which is included to allow mining of stage 1 and stage 2 together. The stage 2 pit is, on average, 180m deep, 1,200m long and 550m wide.

Stage 3, and final stage, pushes all walls to final limits and brings in the small Inferred lenses on the southeast edge of the main zone deposit. The design has the ramp system on the eastern wall which allows the western wall to be slightly steeper than the overall slopes angles from the pit optimisations. The design includes a further geotechnical berm at the 270mRL and has slightly more irregularity to the pit floor as the pegmatites either finish or become too narrow to be economic.

Figure 1-10 shows cross-sections through the Manna pit. For a sub-vertical multi-stacked pegmatite deposit, the strip ratio for the Manna pit at 12.3 should be considered at the lower end of the range for this style of deposit.

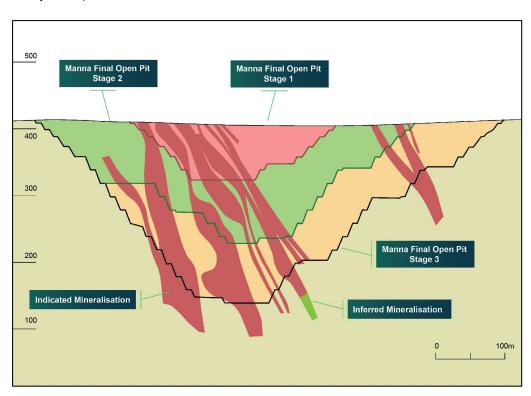


Figure 1-10 Cross Section Manna Pit Stages with Mineralisation (Indicated – Red, Inferred – Green)





3000' Mineralised Waste Stockpile Low Grade Manna · **Stockpile** Waste Dump / Integrated North **Waste Landform Medium Grade** Stockpile **ROM Pad** Manna Location of Process **Plant** Manna -South

Figure 1-11 provides final mine layout of the open pit operation and supporting infrastructure.

Figure 1-11 Manna Open Pit Mine Layout GS

## 1.9.2 Underground Mine Design

The underground mine design has been completed to a PFS level. The design is based on underground mining beneath the completed open pits using top-down long hole open stoping with rib pillars separating stopes on the level and sill pillars separating blocks of four stoping levels on a 25m floor to floor interval. No backfilling of stope voids is planned.

#### Stope Optimisation

Stope optimisation was run in Deswik SO to determine the initial mineable stope shapes for detailed design and economic assessment. Minimum mining widths of 5m and 2.5m were run on the Indicated only, and the Inferred Mineral Resource at a cut-off grade of  $0.50\%~\text{Li}_2\text{O}$ , consistent with the mineral resource estimate.

Figure 1-12 shows the optimised stope shapes clipped to the open pit designs. The majority of the potential stopes are in the northern zone of the deposit as was expected given the size of the resource in this area and generally shallow satellite pit above. There are also stope shapes under the main Manna





pit, southeast lode which is all Inferred as well as some minor stope shapes in the southwest under the other satellite open pit.

The available mineral inventory from the underground beneath the open pit design is 18.6Mt at 0.81% Li<sub>2</sub>O at a cutoff grade of 0.60% Li<sub>2</sub>O and assuming a spodumene concentrate price of US\$1,400/t SC6.0 CIF.

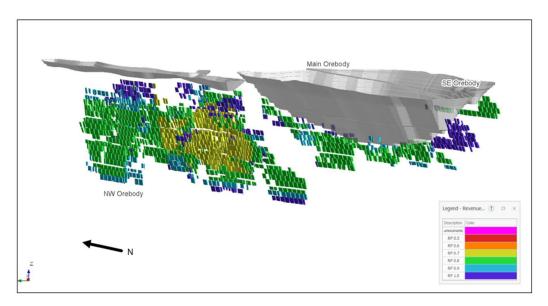


Figure 1-12 Stope Optimiser Long Section by Revenue Factor

### **Underground Design**

Underground design has allowed for 50t trucks to be utilised. The following design parameters have been used for the Manna underground design:

•	Decline	5.5m x 5.8m
•	Truck Stockpile Profile	5.5m x 6.5m
•	Lateral Development / Ore Drive	5.0m x 5.0m
•	Escapeway Rise	1.5m diameter
•	Return Airway Rise	3.5m diameter
•	Stope levels (floor to floor)	25m
•	Stope height (floor-to-floor)	20m
	Stope strike length	23m with 5m rib pillars





There are twin portals in the Mann North pit to access the northern zone underground stopes. The portals are located at the base of the pit access ramp allowing the remaining parts of the pit floor to potentially be used for waste backfill.

There are three portals in the main Manna pit. A portal on 260mRL bench coming off the second pit ramp switchback to access the northern extents of the main zone. Second portal for accessing the Inferred southeast lodes and is also coming off the first pit ramp switchback on the 330mRL level. Third portal located towards the base of the pit at approximately 180mRL and accesses the remaining main zone stopes underneath the main zone pit and the southern extremities of the mineralised strike length.

Figure 1-13 illustrates the underground development and stope designs under the open pits, and displays the stopes by resource classification.

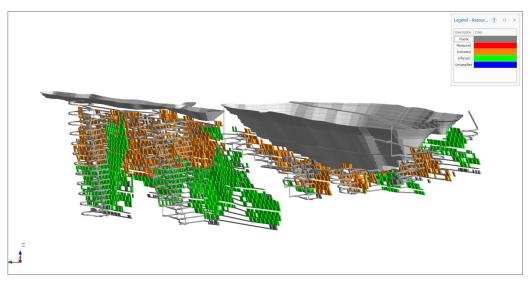


Figure 1-13 Isometric View of Underground Design – Indicated Stopes (Gold), Inferred Stopes (Green)

Figure 1-14 shows a long-sectional snapshot of the stopes and pillar designs as per the recommended geotechnical parameters. The introduction of the pillars results in a total loss of mineral inventory of 3.5 Mt at 0.83% Li<sub>2</sub>O, of which 51% is Indicated resource. The only option to reclaim some of this inventory and increase overall resource recovery would be to introduce backfilling into the operation.

The final mineral inventory for the completed underground designs is shown in Table 1-9.

Classification	Cutoff Grade % Li₂O	Ore (Mt)	Grade (%Li <sub>2</sub> O)	Fe₂O₃ (%)
Indicated	0.6	5.0	0.84	5.26
Inferred	0.6	3.19	0.80	5.10
Total	0.6	8.19	0.81	5.18

Table 1-9 Underground Mineral Inventory





Stopes have been classified on a dominant resource category basis, where the dominant resource category for the stope is reported as the resource category for the entire stope.

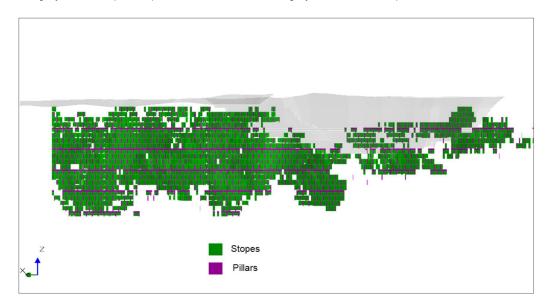


Figure 1-14 Long-Section Schematic Showing Stopes and Required Pillar Designs

#### 1.9.3 Mine Schedule

The total combined mineral inventory for the open pit and underground mine design is shown in Table 1-10. The open pit is based on a 0.50% Li<sub>2</sub>O cut-off, and the underground a 0.60% Li<sub>2</sub>O cut-off.

Source	Classification	Mill Feed (Mt)	Li₂O (%)	Fe₂O₃ (%)
Open Pit	Indicated	14.4	0.93	5.64
	Inferred	1.1	0.64	6.53
	Sub-total	15.5	0.91	5.70
Underground	Indicated	5.0	0.84	5.26
	Inferred	3.2	0.80	5.10
	Sub-total	8.2	0.82	5.18
Totals	Indicated	19.4	0.907	5.55
	Inferred	4.3	0.77	5.33
	Total	23.7	0.88	5.49

Table 1-10 Combined Open Pit and Underground Mineral Inventory

Combining the two individual schedules has resulted in the commencement of underground capital development in Month 1 of Year 7. This has coincided with minor adjustments to the open pit mine





schedule to obtain the best transition within the constraints and objectives established to achieve a 15-year LOM production plan.

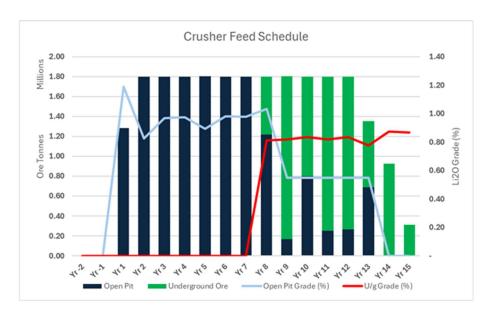


Figure 1-15 Combined Schedule - Annual ROM and Li₂O % Grade





#### 1.10 Processing

The MLP flowsheet will consist of three-stage crushing, ore sorting, milling, magnetic separation, slimes removal, mica flotation and spodumene flotation, as depicted in Figure 1-16. The process plant is designed to produce a spodumene concentrate with a target grade of  $\geq 5.5\%$  Li<sub>2</sub>O. Extensive metallurgical testwork has been undertaken to confirm the flowsheet and allow sufficient engineering to be completed to support the DFS.

The crusher feed rate is 1.8Mtpa of high-grade ore with an average lithia content of 1.00% Li<sub>2</sub>O will be fed directly to the ore sorter plant where low grade/no grade ore is rejected to a 'rejects' stockpile.

The ore sorter will reject up to 20% of the ROM ore feed requiring a mill feed rate of 1.5Mtpa to 1.6Mtpa for rehandling to the mine waste area.

Mill feed ore will be transported to a Fine Ore Bin with live storage capacity of 12hours.

Crushed ore will be milled in a single-stage ball mill circuit to achieve an 80% passing size ( $P_{80}$ ) of  $180\mu$ m, ensuring suitable liberation for froth flotation.

Magnetic and iron-bearing gangue minerals are removed from the milled ore via magnetic separation, with slimes then removed from the ore prior to flotation. Mica minerals, including lepidolite, biotite and muscovite are removed via the Mica Flotation stage, with the float tails then processed via the Spodumene Flotation stage to produce final spodumene concentrate product.

The MLP flowsheet includes a range of dewatering equipment, including cyclones, thickeners and belt filters, to dewater spodumene concentrate product and final plant tailings.

Final plant tailings are separated into a 'fines' and 'coarse' streams. The 'fines' stream is dewatered using a vacuum belt filter and stockpiled. Mine trucks will transport 'fines' plant tailings to a dedicated stockpile where it may be re-processed in the future under the right economic conditions.

The 'coarse' stream is dewatered using cyclones and high frequency dewatering screen and stockpiled. Mine trucks will transport 'coarse' plant tailings within the IWL (waste dumps).

Spodumene concentrate is stored in the concentrate storage shed prior to being loaded into road trains where is delivered to the Port of Esperance for storage. Delivery to market is via ocean freight.

The MLP flowsheet will be serviced by a range of water, air and fuel facilities located throughout the Process Plant.

Processing water will be supplied from a borefield near the mine. Initial water exploration carried out during 2023/24 has indicated quality, fracture hosted, water available within the current tenement package. Pumping tests have indicated a flow rate of 12.8l/s from the current bores. Total water required





for the processing plant, camp and mine site will be approximately 18l/s from the water balance calculation. It is planned that more water exploration will be carried out to meet the water supply requirement before the FID, including the testing of an interpreted palaeochannel approximately 17km northeast of the proposed processing plant site.

Extensive testwork has been completed to support the process flowsheet and Process Design Criteria for sizing plant equipment within the process plant developed by GL1 and GRES. An overall metallurgical recovery of 76.5% of spodumene ore in main ore reserve Zone 1 and Zone 2 at early mining years have been assumed for the DFS. Typical stage losses through the flowsheet are shown in Table 1-11. In Zone 3, there is appearance of Spodumene/Lepidolite mixed ore (with up to 10% lepidolite by volume), recoveries may decline in later years as the proportion of mixed spodumene-lepidolite ore in Zone 3 increases. The forecast Life-of Mine average lithium recovery is set at 72.8% in this DFS.

Plant Area	Units	Li <sub>2</sub> O Loss%
Ore Sorting	%	2.0
Magnetic Separation	%	13.4
Desliming	%	2.8
Mica Flotation	%	2.4
Spodumene Flotation	%	2.9
Overall Lithium Recovery	%	76.5

Table 1-11 Lithia Loss and Overall Plant Recovery in Zone 1 and Zone 2

The key process design parameters applied for the design of the MLP Process Plant are summarised in Table 1-12. Vendor testwork has been completed to allow equipment process guarantees to be obtained. Figure 1-17 shows a layout of the process plant.

Design Parameter	Units	Nominal
Throughput – Crushing (dry)	t/y	1,800,000
Throughput – Wet Plant (dry)	t/y	1,530,000
Average Mill Feed Grade	% Li <sub>2</sub> O	1.00
Grind Size (80% passing)	μm	180
Crusher Feed Rate (dry)	tph	310
Grinding Feed Rate (dry)	tph	190
SC Lithium Target Grade (Minimum)	% Li <sub>2</sub> O	>5.50
SC Iron Content (Maximum)	% Fe <sub>2</sub> O <sub>3</sub>	<1.4

Table 1-12 Key Ore and Process Parameters (Design)





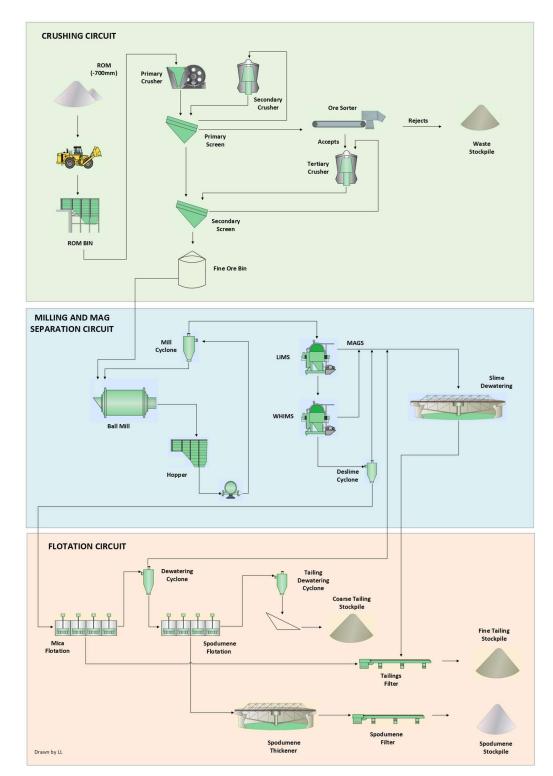


Figure 1-16 MLP Process Plant Flowsheet





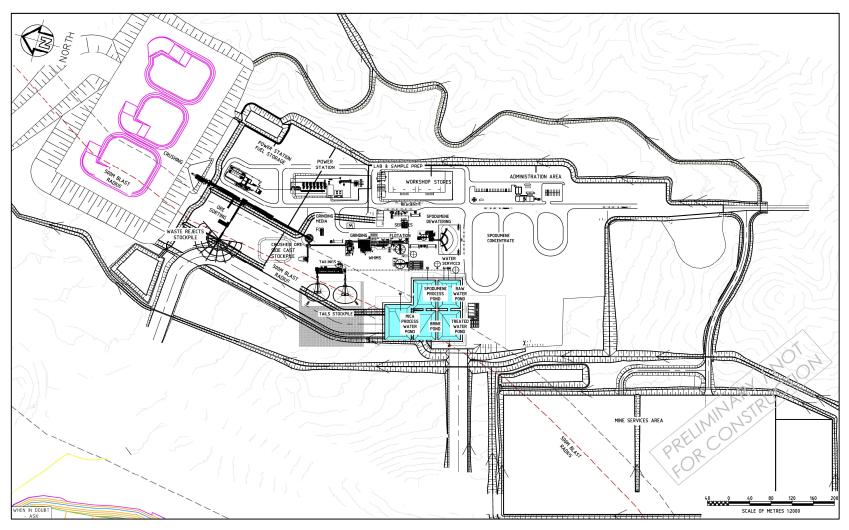


Figure 1-17 Manna Process Plant Layout





#### 1.11 Infrastructure

The infrastructure component of the MLP includes all supporting facilities located outside the mining area. Infrastructure includes the engineering, design, procurement and management for the following site infrastructure works:

- Main access road.
- Internal roads (village, mining contractor's yard, explosive compound, borefield).
- Bulk earthworks including clearing of all required areas, installations including culverts, hard stands, dams, drains, catchments, services trenching and water storage ponds for the process plant site, accommodation village, power station, internal roads, borefields, and explosive magazine storage.
- Accommodation village to house 380 people
- Communications and IT systems.
- Transportable buildings including offices, change rooms, crib rooms and ablutions.
- Steel framed buildings including workshops, warehouse and SC storage shed.
- Fuel storage and distribution facility.
- Power station build, owned and operated by GL1. Future solar farm is allocated on the site plan and could be provided by a third-party provider.
- HV Power reticulation.
- Site fencing and security.
- Borefield raw water supply.
- Potable water supply and waste-water treatment.

#### 1.11.1 Roads

The mine site will comprise a network of roads for access including the main access road, village and access road, explosives storage access road, and other ancillary roads. All mine site roads have been designed in accordance with Main Roads Western Australia and Austroads Design Guidelines. The site wide roads are shown below in Figure 1-18.

The main access road allows access from the Trans Access Road to the process plant pad and associated infrastructure. This road is approximately 28km long with an average formation width of 10m along the length and will, for the initial 9km, run along the alignment of the existing Blamey Road used by the pastoralist. The Main Access Road requires the level crossing at Blamey to be upgraded with boom gates to an active rail crossing.





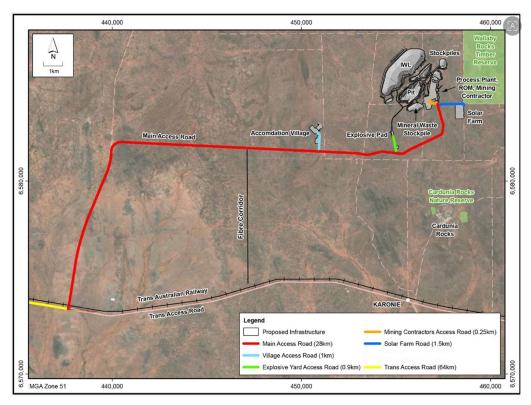


Figure 1-18 Site Wide Roads

## 1.11.2 Accommodation Village

The Manna Accommodation Village will contain 380 rooms.

The village will be laid out with the alignment for the accommodation units running lengthwise in a southeast to north-west direction to minimise the exposure to solar heat. The units will be installed in a backto-back arrangement enabling easy reticulation and connection to services. Common facilities will be centrally located to the accommodation units.

Village design specification was developed by GRES with permanent accommodation units consisting of four rooms per module, each with en-suite bathrooms and the following standard specifications:

- 4 Room Accommodation module size is 12.125m x 4.885m.
- Double insulated walls between all rooms

Figure 1-19 provides an artist's rendering of the accommodation village.





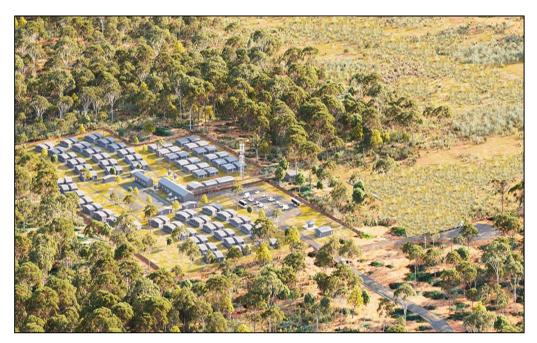


Figure 1-19 Accommodation Village - Overall Layout

#### 1.11.3 Communications and IT

Katalyst IT was engaged by Mincore to complete the engineering of the site-wide telecommunications and information technology (IT) system for the MLP.

The Manna site has the advantage of being located near the ARTC railway line, which has existing major fibre infrastructure connecting the east and coast of Australia. Multiple giga-bit services are available from either Telstra or Vocus. A new fibre will be installed from the ARTC corridor to the Manna Accommodation Village. Two 40m communications towers will be installed at the accommodation village and the process plant. Mobile 4G/5G services will be installed on the two new towers to provide communications across the entire project area.

The main elements of the telecommunications infrastructure include:

- Wide Area Network (WAN) fibre link (connection to the outside world).
- Public 4G/5G mobile service.
- Communications towers.
- Communications shelters.
- Communications power systems.
- Fibre-optic cabling.
- Private microwave links.
- Two-way radio system.
- Access control system.





- Borefield telemetry system.
- CCTV system.
- Corporate Local Area Network (LAN).
- Telephone system.
- Computing infrastructure.
- Corporate IT infrastructure.

## 1.11.4 Bulk Fuel Storage

The main bulk fuel storage facility will consist of one 110kL self-bunded tanks located adjacent to the bulk unloading facility. The tank is assigned for LV/HV refuelling. This will provide just under 14 days of bulk fuel storage capacity, excluding the mining operation. The mining contractor will supply its own fuel for refuelling the mining fleet HVs and LVs.

Bulk LNG Supply Bullets and Vaporiser unit are provided for the power station.

A diesel price of \$1.00/L delivered has been assumed for the DFS based on bulk fuel supply quotations. This price is after diesel excise rebate of \$0.506/L and excluding GST.

# 1.11.5 Power Supply

Mincore completed a detailed power solution options analysis including power station options from diesel only to gas only, hybrid solution with a combination of gas engines and solar with BESS to support the PowerStation during the transition from solar to gas thermal engines options Capex/Opex estimates were prepared for the Life of Mine.

Based on the evaluations from the quotations and engineering calculations, the optimal solution selected is gas (LNG) thermal engines only.

The delivered gas supply cost based on the quotation submitted by EVOL is \$18.44/GJ, considering gas storage farm to be owned and operated by GL1.

In future, this power station can be extended with installation of solar plant and combine both solar and gas engines as there is high cost for installation of solar farm, but operation cost is minimal.

The average electrical demand of the MLP, as summarised in Table 1-13, is estimated to be 11MW.

The initial load of the plant will be 11 MW demand and after 7 Years when the underground mining will start there will be additional load of approximately 7MW. The cost for the additional load is not accounted in the initial capital estimate.

GRES has estimated the total installed load for the Process Plant to be 9.4 MW, with the additional load of administration, contractor area, mine explosive area, sewerage treatment plant, water treatment plant, communications tower and village services an estimated demand power is calculated to 11MW.





Based on Mincore modelling and commercial enquiries, the preferred option is selected as LNG thermal engines and predicted to offer the lowest total cost of power at \$0.188/kWh.

Sr.No	Description	Connected Load(kW)	Demand Load(kW)
1	Process Plant Load	9,469	7,575
2	Admin buildings, plant buildings and mining contractor's area installed power, lighting and A/C	1,356	1,085
3	Water treatment plants at the plant site (low salinity RO plant, potable water RO plant and spodumene water treatment plant, low salinity water transfer pump to village)	116	93
4	Comms tower at plant site	10	8
5	Power supply at mine magazine and explosives mix area (run off the buried cable from plant site to village)	100	80
6	Power for the village rooms (380 rooms with split system A/C units) &Village mess and refrigeration cool rooms and freezers	2,304	1,843
7	Village comms tower	10	8
8	Village Water Services	267	214
9	Village sewerage treatment plant	50	40
	Total Load	13,682	10,945
	Future Loads	After 7 Years	
1	Ventilation main fans		
2	Ventilation minor fans	Add 7 MW	When the underground Mining starts
3	Mine dewatering pumps	Add 7 MVV Approx.	
4	Underground electrical supply (at 1,000V) for jumbo's etc.	/ γρίολ.	
5	U/G mine comms		

Table 1-13 Manna Connected & Demand Loads





ltem	Units	Year 1-7	Year 7+
Unit Cost of Electricity	\$/kWh	0.188	0.188
Installed Load	MW	13.6	20.6
Average Demand	MW	11	18
Maximum Contract Demand	MW	11	18
Annual Contract Demand (Sent Out)	GWh	107.28	141.51

Table 1-14 Manna Summary Power Annual Demand and Cost Table

The availability of the process plant is 93.5%. The unit cost of energy has been derived from the Mincore financial evaluation with recommended option of gas only option.

Additional capital expenditure to add 10 MW solar farm (capital cost of approximately \$20 million) would reduce the unit cost of energy to \$0.139/kWh and this can be an additional option to be accessed postproduction.

## 1.12 Product Logistics

Spodumene concentrate will be exported through the Port of Esperance via road freight.

Campbell Transport provided a turnkey solution for concentrate haulage from site to the Port of Esperance. Road trains consisting of Four (4) off 'A triple' trailers will be loaded via a front-end loader in the concentrate storage shed located at the process plant. The road trains will deliver the concentrate to the Port of Esperance inner precinct and stockpile in an existing under cover storage warehouse.

GLR is engaging with the Southern Ports Authority (SPA) with a view to entering an agreement for the storage and shiploading of Concentrate. Once there is enough concentrate for a shipment, concentrate will be reclaimed using a Front-End Loader and loaded into a 25k dwt Handysize vessels for bulk sea transport.





#### 1.13 Capital Estimate

#### 1.13.1 Basis of Estimate

The capital cost (mining, processing and infrastructure) estimate developed for the DFS assumes a contract mining operation for open pit mine, an Engineering, Procurement and Construction Management (EPCM) contract model on a schedule of rates basis for the process plant and project infrastructure packages; including the accommodation village, access roads, communications infrastructure and process water supply borefield.

GLR assumes management of general project risks for regional infrastructure performed under the EPCM contract for process plant and non-process infrastructure.

The capital cost estimate includes project contingency to cover the normal risk sensitivities. The mining pre-production capital costs are included in the overall MLP capital cost estimate.

The capital cost estimate has been compiled in line with the Australasian Institute of Mining and Metallurgy (AusIMM) guidelines for a Class 3 estimate and includes all costs associated with project management, process engineering, design engineering, drafting, procurement, construction and commissioning services required to construct and commission the processing facilities and associated supporting infrastructure. In addition, the estimate also includes costs associated with the establishment of mining services utilities facilities, critical operating spare parts and the provision of first fills and consumables required for the commencement of operations.

The estimate has been based upon the preliminary engineering designs, material quantity estimates taken from these preliminary designs, budget price quotations for major process equipment and budget rates for the supply of bulk commodities. Unit rates for site installation works are based on those recently achieved by GRES on similar Australian resource projects under construction.

All dollar amounts shown in this section are in Australian dollars unless specified otherwise. Majority of pricing was provided in Australian dollars (A\$), however any pricing received in a foreign currency was converted to Australian dollars. Approximately 66% of process equipment costs was quoted in foreign currencies.

The estimate (converted to Australian dollar pricing) accuracy is considered to have an accuracy of  $\pm 15\%$  with a validity date of Q4 CY25





## 1.13.2 Capital Cost Estimate Summary

The total capital cost of the MLP is \$439M, inclusive of \$40M in growth and contingency allowances. A high-level summary of the capital cost estimate is presented in Table 1-15.

Mining pre-production capital totals \$81.9M, which includes mobilisation and site establishment of the mining contractor, pre-strip activities and development of run-of-mine (ROM) ore stockpiles. The direct capital cost for the process plant and supporting project infrastructure is \$348.7M (excluding mine pre-production capital) bringing the total direct capital cost for the project to \$439M. Indirect capital costs, including Owner's costs, project management, growth allowances and contingencies, total \$112.5M (or approximately 26% of the total project costs) for a total capital cost of \$439M.

Project Area	Capital Cost (\$)
Mining Pre-Production Capital	81,940,000
Bulk Earthworks	11,304,458
Process Plant & Infrastructure (including buildings)	146,740,267
Non-Process Infrastructure	63,902,810
Raw Water Borefield	5,850,000
First Fills, Spares & Miscellaneous Items	3,926,833
Total Direct Cost	313,664,368
EPCM Indirects	53,142,907
Owners Costs	32,335,700
Contingency & Growth Allowances	39,931,158
Total Capital Cost	439,074,133

Table 1-15 Project Capital Cost Estimate Summary

The EPCM estimate for the MLP Process Plant and associated plant infrastructure, including all buildings within the process plant footprint is \$269.6M plus \$24.3M in growth and contingency allowances.





The remaining capital items not included in the EPCM capital estimate will be delivered by GLR at a total capital cost of \$145.2M (including mine pre-strip, growth & contingency). These items are predominantly supporting infrastructure needed for the project and include the following items:

- Mine pre-strip (\$81.8M).
- Bulk earthworks (access roads, village, explosive compound and rubbish tip) (\$11.3M).
- First Fills, Commissioning and Capital Spares (\$3.9M).
- Owners Costs (\$32.3M).
- Contingency & Design Growth on Remaining Capital items (\$15.7M)

Wherever possible GLR will seek to deliver these items including the accommodation village under a combination of supply and construction packages grouped by common scope of work and complexity. Packages performed on a schedule of rates with execution risk will remain with GLR. All remaining items have been estimated using vendor quotes or contractor unit rates and material take-offs (MTOs).

A growth allowance was included by GRES for each line item to reflect the level of scope maturity or engineering completed to-date and pricing accuracy, which is dependent on the number of suppliers that have quoted and the range in price submissions on an item or package. Growth allowance averaged 5% of the total amount inclusive of EPCM margin and Indirects. A 10% contingency allowance was included for all remaining capital items. Giving an overall growth and contingency allowance in the capital estimate of 9%.

The following allowances are not included in the cost estimate set out in Table 1-15.

- Escalation of supply and contractor prices from the base date.
- Principal financing costs or interest.
- Foreign currency exchange rate fluctuation.
- Goods and Services Tax (GST) (it is expected not to apply).
- Sunk costs incurred by GLR prior to project implementation.





#### 1.13.3 Sustaining and Development Capital

Sustaining and development capital comprises life-of-mine costs of a capital nature, including establishment of underground mining infrastructure, underground mining pre-production costs, lateral and vertical mine development costs, ventilation and ongoing underground mining infrastructure upgrades.

The LOM capital costs are summarised in Table 1-16 and included in the MLP financial model.

Area	Total Sustaining and Development Capital (A\$)
Underground Mining Start-up Infrastructure and pre production	68,800,164
Closure Costs	10,000,000
Total	78,800,164

Table 1-16 LOM Sustaining and Development Capital Cost Summary

## 1.14 Operating Cost Estimate

The LOM cash cost of production and all-in sustaining cost (AISC), inclusive of mining, processing, product transport (Free-On-Board, Esperance), sustaining capital costs and royalties is presented in Table 1-17. The operating cost estimate assumes contract mining operation for the open pit phase and owner-operator operation for the underground mine.

The average C1 Cash Cost for the MLP over the LOM is AUD\$946/t SC 5.5 or US\$634/t SC5.5 (FOB, Esperance) excluding royalties.

The AISC operating cost, inclusive of mining, processing, product logistics, sustaining capital costs and royalties (State and Native Title) over the LOM from Years 1-14 is A\$1,101/t SC5.5 or US\$738/t SC5.5 (AISC, Esperance).

The production plan assumes ramp-up occurs over the first 4 months and the process plant achieves 1.8Mtpa through the crushing and ore sorting circuit and 1.5Mtpa to 1.6Mtpa through the comminution circuit.

	LOM Total			
Operating Item	A\$ 000's	A\$/t SC5.5	US\$/t SC5.51	
Mining - open pit	1,152	417.0	279.4	
Mining - Underground	567	205.2	137.5	
Processing	947	342.7	229.6	
Cash Cost (FOB, Esperance)	2,666	964.7	646.3	
Sustaining Capital	79	28.5	19.1	
Royalties	315	111.3	76.4	
AISC <sup>2</sup> (FOB, Esperance)	3,010	1,101	7382	





Note 1. AUD:USD exchange rate of 0.67 assumed

Note 2. The AISC price doesn't include sea freight. Sea freight cost will be US\$30/t.

Table 1-17 LOM Operating Cost Estimate (FOB, Esperance).

#### 1.15 Economic Evaluation

Financial analysis of the MLP has been undertaken using a discounted cash flow model (constructed by Mincore) based on DFS estimates for production rates, capital costs, free-on-board (FOB) operating costs, lithium price, ocean freight rates and currency exchange rates. This financial evaluation is based on post-tax, ungeared (100% equity) project cash flows, modelled on a monthly basis in real dollars. The valuation date is based on the first month of capital spend.

The key financial metrics for the Project include NPV, IRR, EBITDA and measures of capital efficiency (NPV to capex ratio) and investment payback (payback period).

The financial evaluation demonstrates robust financial metrics, as presented in Table 1-18, which support the Project's equity and debt funding plan.

Item	Outcome <sup>1</sup>
Post-tax NPV8 (ungeared)	\$472.4M
Post-tax IRR (ungeared)	25.7%
Total LOM EBITDA	\$2,196M
Average EBITDA per annum	\$146M
NPV8 to capex ratio	1.1x
Payback period (from first sales)	3.5 years

Note 1. All dollar values presented in Australian dollars unless specified.

Table 1-18 Financial Highlights

Sensitivity of the post-tax  $NPV_8$  to changes in key assumptions is set out in Figure 1-20 below. The MLP NPV is most sensitive to changes in spodumene product price and exchange rate, and least sensitive to capital and operating costs.





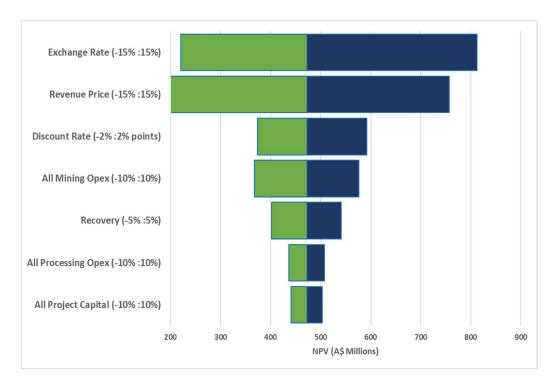


Figure 1-20 Post-Tax NPV8 Sensitivity Analysis (\$M)

Post-tax project cash flows for the construction period and the 15 years of production are shown in Figure 1-21.





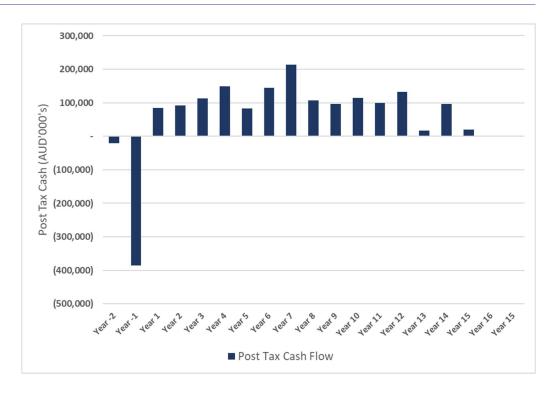


Figure 1-21 Post tax Project Cash Flows

Cumulative net cash flows over the entire project life are shown in Figure 1-22. Total LOM revenue is approximately \$5.2Bn.

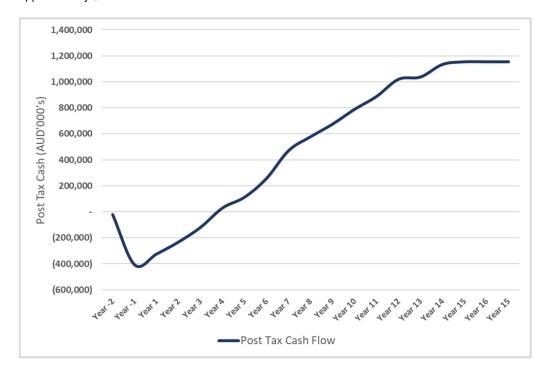


Figure 1-22 Cumulative Post Tax Project Cash Flows





# 1.16 Production Assumptions

Spodumene concentrate production over the 15 years of production is shown in Figure 1-23. Total spodumene production from the MLP is estimated to be 2.763Mt (dry), with sales commencing 25 months after first capital expenditure.

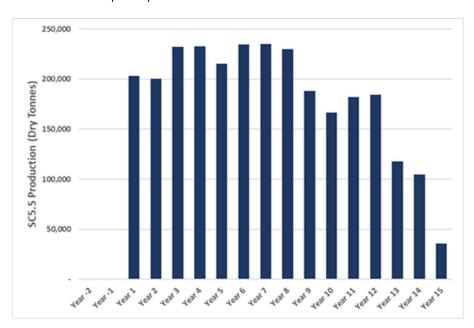


Figure 1-23 Spodumene Concentrate Production

# 1.17 Project Implementation

A total project development timeframe of 76 weeks is anticipated from final investment decision (FID) to ore commissioning and concentrate production.

Prior to FID, over a 12-week period, critical path activities have been allocated for:

- 1. Contract and Procurement Packages Pre FID
- 2. Basic Engineering and Design
- 3. Pilot/Temporary Access Road to Village & Plant Site Clearing
- Award Construction Camp (80 Rooms) (Stage 1)

Figure 1-25 shows a high-level schedule.

The Process Plant and associated plant infrastructure has been estimated to take:

- 12 weeks for site access road and plant bulk earthworks pads from FID (this work occurs concurrently with the process plant package)
- 2. 68 weeks process plant & infrastructure build) from commencement of detailed engineering to practical completion, which is then followed by
- 3. Ore commissioning and ramp up period of 8 weeks.

Detailed design begins at week 'zero' of the 76 weeks and relies upon the sufficient bulk earthworks design to be known such that the basement RL's are fixed for the plant design.





Ordering of Long Lead Equipment commences at week 8 of the schedule.

First concentrate production is scheduled to commence in week 68 (From FID)

The key process plant construction milestones and activity durations are summarised below, based on commencing engineering for long lead procurement 8 weeks from the commencement date:

- Place orders for long lead equipment from week 8, including (ex Works delivery dates):
  - Primary crusher 20 weeks delivery.
  - Ball mill 36 weeks delivery.
  - Magnetic separators 16 weeks delivery.
  - Flotation cells 16 weeks delivery.
  - Filters 36 weeks delivery.
  - MCC/HV Switchgear Package 50 weeks delivery.
- Ball mill delivery to site complete by week 44
- Forecast completion of dry commissioning week 66.
- Ore commissioning completed week 68.
- Basic and detailed engineering design duration of 40 weeks.
- Procurement and subcontract management duration of 48 weeks.
- Site construction works program duration of 56 weeks.
- Dry, wet and ore commissioning duration of 12 weeks.
- Water treatment plant completion duration of 34 weeks.
- Electricity connection duration of 60-62weeks from FID.

To meet the proposed project implementation timeline, an early engineering program over 12weeks has been proposed to immediately follow FID and to commence detailed engineering for the award of long lead procurement items.





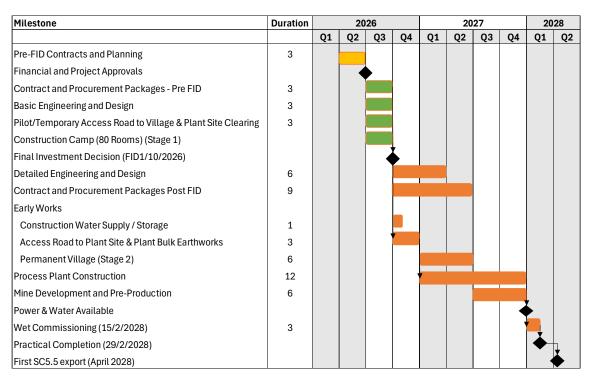


Figure 1-24 Key Schedule Activities and Milestone Summary





#### 1.18 Approvals

GLR was granted a Mining Lease (M28/414) for 21 years in August 2025 to allow development of the MLP's mine and processing plant, including open pit mining operation, waste dumps, low grade stockpiles, process plant, explosives facility and mining contractor yards.

All supporting infrastructure including roads, water transfer pipelines, power and communication corridors, a solar farm and accommodation village will be situated on Miscellaneous Licences expected to go to grant in H1 2026.

A Native Vegetation Clearing Permit (NVCP) will be submitted along with a Mining Proposal, Mine Closure Plan and Works Approval applications to allow vegetation clearing, mining and construction to proceed. Table 1-19 summarises the required approvals to develop the project, as well as estimated assessment timeframes.

All flora, fauna and heritage surveys have been completed over the project area. The remaining studies required for secondary approvals include:

- Hydrogeology assessment of the raw water borefield (once bore locations finalised).
- Heritage and ecological surveys of borefield infrastructure (once bore locations finalised).
- Finalisation of potential acid forming (PAF) mine waste management options.
- Design report for Integrated Waste Landform (IWL) that meets DMPE requirements.
- Closure cost provisioning.
- Greenhouse Gas (GHG) assessment.

Approvals	Purpose	Assessment Timeframe
Mining Proposal	Permits development of open pit and construction of access road	6-9 months
Mine Closure Plan	Required for all Mining Proposals	6-9 months
Native Vegetation Clearing Permit	Permits clearing of vegetation within project footprint	6 months
Works Approvals – Cat 5	Allows construction of process plant and tailings facility	6-9 months
Works Approvals – Cat 54	Allows installation of Waste Water Treatment Plant at the accommodation village and process plant	6 months
Works Approvals – Cat 54A	Allows installation of RO Plant for potable water	6 months
Works Approvals – Cat 64	Permits construction of putrescible landfill	6 months
Works Approval – Cat 52	Electrical power generation using fuel	6 months
Works Approval – Cat 73	Bulk storage of chemicals and reagents	6 months

Table 1-19 List of Required Manna Approvals and Permits





# 1.19 Risks and Opportunities

There are a number of project risks that need to be managed, and mitigation actions implemented to address these. The DFS study completed a project wide risk assessment, and these risks and mitigating actions are discussed within the study. The four key risks identified are:

- Raw Water Supply sufficient raw water and suitable quality of groundwater is needed to support
  the process plant. Further exploration has been planned to identify a long-term source of
  groundwater for the project.
- Mining Dilution the Manna project is hosted within a series of LCT pegmatite vein swarms. The individual mineralised pegmatites are 1m to 14m thick and have an average thickness of 3.6m. It is proposed for the pegmatite mineralised veins to be mined on a 2.5m width. The project aims to mitigate excessive ore dilution during mining by selecting suitable sized mining equipment for the nature of the ore body, implementation of the recommendations from the drill and blast study, developing mining procedures, grade control drilling and mining operator training before commencement of mining activities will be essential to control this risk. The installation of ore sorting in Year 0 of the project will provide best mitigating control for excessive ore dilution.
- Ore Variability testwork is required to be completed to confirm process recoveries are not impacted within different ore zones of the Manna deposit. This work is planned once a final raw water source for the project has been identified.
- Environmental Approvals it is proposed for the project to be approved through Part V of the WA Environmental Protection Act. This will still require up to 9 months for the necessary approvals to be granted and construction to commence. In order for the project to meet the required schedule, all miscellaneous licence applications will need to proceed to grant to allow the Mining Proposal and necessary Works Approvals to be submitted for assessment.





There are a number of opportunities identified through the study and have been captured in the DFS. The key opportunities include:

- Metallurgical Recovery Optimise flotation circuits and trial highly performed reagents to increase recovery to over 76.5% from 72.8% used in this DFS.
- Mining Cost the current base case for the open pit phase is to appoint a mining contractor. GLR is a junior mining company and will find it difficult to recruit and start-up the mine assuming an "Owner-Operator" model. The DFS assumes that the mine will be fully contracted to an experienced mining contractor. There is an opportunity to reduce mining costs by procuring the mining fleet and adopting an "Operate and Maintain" hybrid operating model. GLR has held initial discussions with Hitachi and Marubeni Finance to procure the mining and ancillary fleet and a draft term sheet obtained with the equipment held as security. This should be further explored to reduce mining costs for the project. Some mining contractors have indicated a reluctance to support an "Operate & Maintain" model, while others are interested in engaging further.
- Capital Cost there are a number of capital items within GLR's scope that are based on an EPCM schedule of rates basis. Further engineering should be completed and the market tested to determine whether a D&C lump sum contract can be obtained for these packages. This will provide price certainty and reduce execution risk held by GLR.
- Early Works GLR should undertake early works to install critical infrastructure to assist with the project construction schedule being met. The main access road, accommodation village, construction water and internet connection are all essential pieces of infrastructure to enable the project to be delivered on-time and on-budget.