BUTCHERBIRD EXPANSION STUDY

Growing Manganese Production to Capture Economies of Scale

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Element 25

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Butcherbird Expansion Feasibility Study Targets 1.1 Mtpa Manganese Production to Capture Economies of Scale.

A strong result supporting progress toward a Decision to Mine.

Element 25 Limited (Company or E25) (ASX: E25) is pleased to announce that it has completed a Feasibility Study (Study or FS) to investigate the potential to expand the production of manganese concentrate at the Company's 100% owned Butcherbird Project (Project), located in the southern Pilbara region of Western Australia. The Study demonstrates strong economics with robust economic returns and rapid capital payback. The financial summary of the Study outcomes are shown below.

Capital Cost	NPV_8	IRR	Cashflow	Payback
AU$49.8	AU$228M	113%	AU$57.3M	1.2
(incl. contingency)	(Pre-tax, real)		(annual)	(years)

HIGHLIGHTS

The FS examines the expansion to 1.1Mtpa manganese concentrate production using expanded open-cut mining methods, a modified primary comminution circuit and a dense media separation **(DMS)** back-end solution to optimise grade and recoveries.

The expansion establishes Butcherbird as a low-cost Mn operator **(USD 2.76/dmtu C1 cost)** able to produce at a cost lower than the low manganese sale price points seen within the Mn market.

The FS utilises all the available measured and indicated resources within the mine plan supporting this Study. The Company plans to undertake infill drilling in areas containing Inferred Resources, outside the current mine plan, within the next 12 months targeting an additional 20-25 years of mine reserves at the proposed production levels.

The Measured, Indicated and Inferred Mineral Resources used to support the 7.2 years mine life from 2024 to 2031 represents **36.0%** of the total mineral resource inventory within the granted mining lease M52/1074.

Low capital requirement of **AUD 49.8M** capital.
Average base case annual operating cashflow of **AUD 57.3M** at full production.

No changes to the Proven and Probable Ore Reserve of **49.2Mt at 10.2%** Mn containing 5.0Mt Mn (4.1Mt Recoverable Mn).

Forecast cashflows generate a simple **paybackperiod of 14months** from start of operations.

Expanded mining production and process commissioning is currently scheduled to commence within 11 months, subject to final investment decision and securing project financing.

The base case involves an annual production and sale of 1.1M tpa of lump manganese ore grading 32% Mn.

The concentrate production strategy complements and enhances the Company's plan to develop the proposed high purity manganese sulfate **(HPMSM)** plant in Louisiana to supply offtake partners General Motors LLC **(GM)** and Stellantis NV **(Stellantis)** with high purity manganese for EV battery manufacture[1].

1 **Reference: ASX Releases dated 9 January 2023 and 26 June 2023.**

CAUTIONARY STATEMENTS

The production target referred to in this announcement is based on 26% Measured Resources, 53% Indicated Resources and 21% Inferred Resources for the 7.2 years mine life. The mine plan comprises 86% of current Measured and Indicated Resources within the Yanneri Ridge resource, located East of the Goldfields Gas Pipeline. The Company has used Inferred Mineral Resources as part of the production scenario where it is mined as part of the mine plan and the impacts of the use of Inferred mineralisation is included within the report.

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 that the production target itself will be realised. The use of Inferred mineralisation is not a determining factor in the viability of the project.

The Company intends to upgrade the mineral resource inventory within 2024 with the Yanneri Central and Coodamudgi Central resource areas. This potential extension has not been factored into the mine plan for this feasibility and will be subject to a revised feasibility if the resource is upgraded.

The Study is based on the material assumptions described elsewhere in this announcement. These include assumptions about availability of funding.

The Company considers all the material assumptions to be based on reasonable grounds, however there is no certainty that they will prove to be correct or that the range of outcomes indicated by the Study will be achieved. The Company is fully funded based on currently cashflow forecasts.

The Company has concluded that it has a reasonable basis for providing the forward-looking statements included in this announcement and believes it has “reasonable basis” to expect it will be able to fund the development of the Project using existing cash reserves.

The Study focuses on a development option which has been selected as the most likely mining start up scenario. The Expansion Study has targeted a part of the manganese resource where it is considered that reasonable grounds exist for the production target to be achieved in both the grade and size which has been reported. This Study development options are also well supported by the larger Butcherbird Mineral Resource where there are additional Indicated and Inferred Mineral Resources.

FORWARD LOOKING STATEMENTS

Some of the statements contained in this report are forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning estimates of tonnages, expected costs, statements relating to the continued advancement of Element 25 Limited's projects and other statements that are not historical facts. When used in this report, and on other published information of Element 25 Limited, the words such as 'aim', 'could', 'estimate', 'expect', 'intend', 'may', 'potential', 'should' and similar expressions are forward looking statements.

Although Element 25 Limited believes that the expectations reflected in the forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that the actual results will be consistent with these forward-looking statements. Various factors could cause actual results to differ from these forward-looking statements including the potential that Element 25 Limited's Project may experience technical, geological, metallurgical, mechanical problems, changes in manganese price and other risks not anticipated by Element 25 Limited.

Element 25 Limited is pleased to report this summary of the study in a fair and balanced way and believes that it has a reasonable basis for making the forward-looking statements in this announcement, including with respect to any mining of mineralised material, modifying factors, production targets and operating cost estimates. This announcement has been compiled by Element 25 Limited from the information provided by the various contributors to the announcement.

EXPANSION STUDY SUMMARY

Element 25 Limited (Company, Element 25 or E25) (ASX: E25) is pleased to announce that it has completed a Feasibility Study (Study) to investigate the potential to expand the production of manganese concentrate at the Company's 100% owned Project, located in the southern Pilbara region of Western Australia.

This Study has been developed from the Pre-Feasibility Study update released in December 2020 and utilises the production data from current operations along with a detailed review of the process flow design to optimise the design of an expanded processing facility.

The Project consists of eight known manganese mineral resources located in an approximately 600km2 area of the southern Pilbara region, approximately 1,050km North of Perth and 130km South of Newman, Western Australia (WA). The Butcherbird site is accessible directly from the Great Northern Highway.

Element 25 has held exploration tenure in the Butcherbird area since 2009 and commenced mining and manganese concentrate processing operations at Butcherbird in early 2021. Since then, the Company has exported eleven shipments of Manganese concentrate to customers in Asia.

The Project is 100% owned by the Company and comprises the granted Mining Lease M52/1074 and two granted exploration licences E52/2350 and E52/3606 as well as several granted and pending Miscellaneous Licences required for Project infrastructure.

Mining Lease M52/1074 encompasses the Yanerri Main, Yanerri Central and Yanneri West and Coodamudgi Central and Coodamudgi West manganese deposits. This expansion plan is predicated on the mining of the measured and indicated mineral resources located at Yanneri East, i.e.: East of the Goldfields Gas Pipeline. The Study does not rely on the inclusion of Inferred Mineral Resources within the granted Mining Lease, however the Company intends to undertake additional infill drilling to look to expand the available mining inventory in coming months.

The Company has two Native Title mining agreements in place servicing the project area and covering all planned production areas used in the Study. The Butcherbird project is located on two pastoral stations and the Company has access agreements in place to allow project expansion to be undertaken.

This expansion Study includes updated macro-economic inputs and other design parameters where appropriate based on current market conditions and on the improved understanding of the optimal processing methodology derived from production data since the commissioning of the current processing plant.

The Study contemplates a revised comminution and procession circuit based on learnings gained from the operation of the current Butcherbird processing facility since 2021. Changes to the processing circuit include the use of a mineral sizer for primary comminution, and a DMS drum for final beneficiation.

A summary of the parameters used in this study include:

- DMS process recovery of 96%.
- Increased manganese concentrate production to 1.1Mtpa.
- Increased ore recovery and decreased ore loss due to change in processing equipment.
- Exchange rate (USD:AUD) of 0.66 from 2024, with a longer-term assumption of 0.69 from 2027 onwards.
- Capital cost estimate of AUD 49.8M including:
  - Construction of expanded processing infrastructure;
  - Construction of a nearby mining camp, at a capital cost of AUD 5.5M; and
  - Construction of an airstrip to enable direct flights to Butcherbird, at a capital cost of AUD 2.2M.
- An updated site organisation chart has been developed with updated costs reflective of the proposed expansion.
- Updated mining costs based on the expanded mining requirements.
- Updated sustaining capex involving an expanded tails storage facility (TSF).
- Updated manganese ore pricing to reflect current spot and forecast pricing.

The Study results confirm that the robust economics of the site are maintained and improved for the planned expansion offering the Company opportunities to further improve the economics and performance of the Project by taking advantages of the inherent economies of scale achieved in the larger scale production operations. This results in better utilisation of mining and processing equipment, improved operational efficiencies and better utilisation of the large resource/reserve base underpinning the Project.

Ongoing resource delineation drilling is already planned to increase the mine life by adding Yanneri Central and Coodamudgi Central into the Indicated/Measured resource categories in H1 2024.

The seven-year project utilises 86% of the Measured resources[2] and 61% of the Indicated resources available within the Butcherbird resource base.

The use of inferred resources is not a determining factor for project viability of the expansion, See Table 1 and Figures 6 to 8 below.

Table 1: Impact of Inferred Mineralisation on Key Financial Outputs

	Including Inferred	Excluding Inferred
NPV_8 (AUD M) (Pre tax)	228.2	163.9
IRR (%)	113%	95%
Mine Life Utilising existing Mining Reserves (Years)	7.2	5.8
Annual Cash Flow (AUD M)	57.3	53.9

Table 2: JORC Resource Mineralisation Usage by Scenario

	Resources Utilised (Mt)	%
Measured	12.2	26%
Indicated	25.1	53%
Inferred	10.2	21%
Total	**47.4**	**100%**

2 Reference: Company ASX Announcement dated 17 April 2019.

KEY OUTCOMES OF BASE CASE

This FS includes preliminary pit shells, estimated mining and production schedules and metallurgical testing relevant to manganese processing and recovery. Capital costs were based on detailed engineering designs and industry sourced quotations provided by technical experts within Element 25 and by external consultants. Operating costs were sourced from supplier quotations for major operational contracts including mining, ore haulage and camp facilities. The balance of the operating costs were sourced from quotations and database costs and are considered to be at ±15% level of estimation. Open pit optimisation, design and mine scheduling were performed by an external consultant, overseen by Element 25 staff, based on design and operating parameters provided by Element 25.The Study base case for the Feasibility Study consists of:

- An Open pit mining and beneficiation operation producing 1.1M tpa (years 1-7) of manganese lump concentrate at an average grade of 32% Mn per annum.
- An initial mine life of 7.2 years based on the use of existing Proved and Probable Ore Reserves[3] with Inferred mineralisation used where it is mined to gain access to the Proved and Probable reserves in the later years of the Project.
- The current project scenario utilises 26% Measured and 53% Indicated and 21% Inferred resources, with years 1-4 using 43% Measured and 52% Indicated and 5% Inferred resources.
- Inferred mineral resources are included in the base case study, comprising 21% of the 7.2 year ore supply. The inferred resources are not a determining factor for project viability; Refer Table 1 above.
- Operating expenses, C1, over the life of mine are currently estimated at AUD 4.02 / Dry Metric Tonne Unit (dmtu) (USD 2.76/dmtu), assuring a low-cost operation that will be profitable throughout the manganese price cycles.
- Low estimated capital costs of AUD 49.8M (USD 32.9M) including working capital.

Using a manganese concentrate price curve, based on market analysis provided by Project Blue with a long-term average manganese price of USD 5.75/dmtu Mn 44% Cargo Insurance and Freight (CIF) China, NPV_8 (Net Present Value at 8% discount factor) pre-tax is AUD 228.2M (USD 150.6M), post-tax AUD 150.6M (USD 99.4M), with an Internal Rate of Return (IRR) of 113%.

The Project NPV_8 of AUD 228.2M highlights that the Project is robust and offers returns even at conservative pricing assumptions. The Project breaks even at a manganese price of USD 4.38/dmtu 44% CIF China for the life of the Project.

The assumptions for the expansion study are listed and detailed within the remainder of the Study.

3 Reference: Company ASX Announcement dated 19 May 2020.

DEVELOPMENT TIMELINE

A project implementation plan and schedule has been developed based on forecast lead times for equipment procurement, permitting, project financing and construction. The total time required for project delivery from contract signature to start of commissioning is estimated at approximately 11 months from Final Investment Decision (FID).

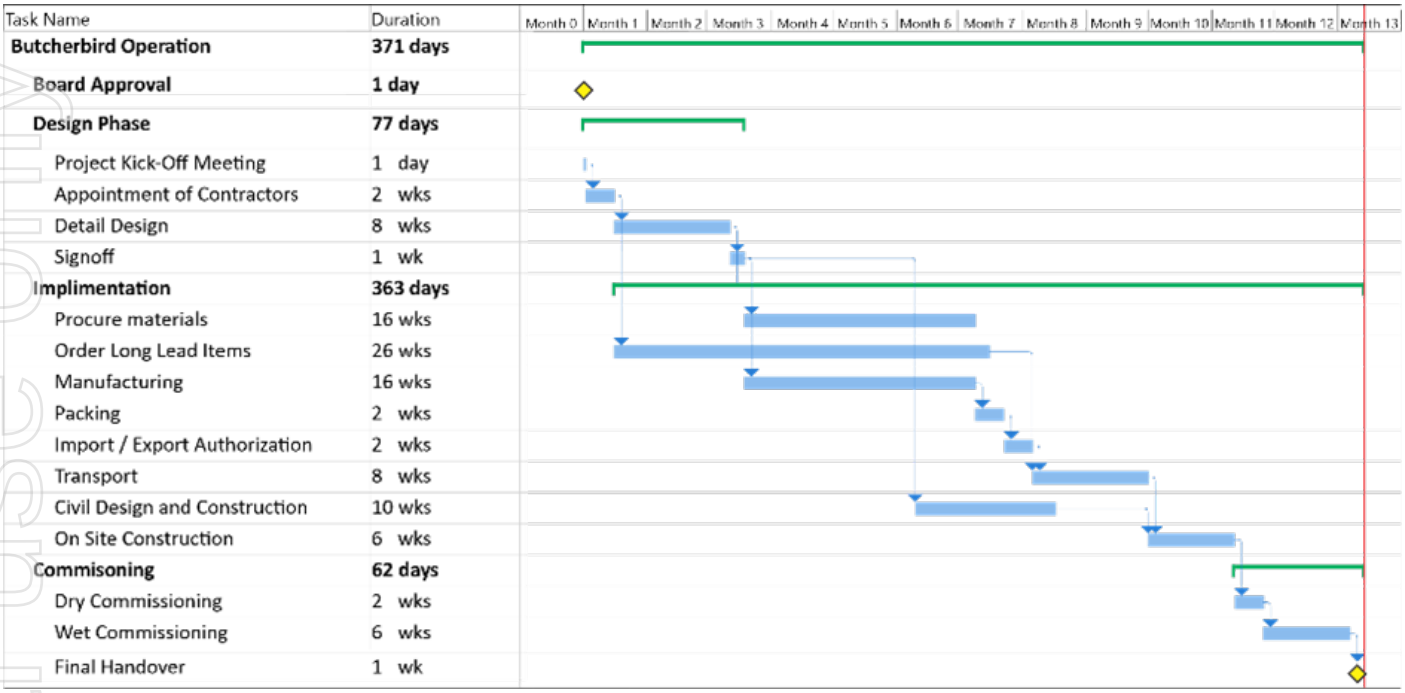


Figure 1: Project Development Timeline

EXPANSION PROJECT APPROACH

Element 25 have been working closely with specialist WA project delivery consultant, ProjX, for the proposed Butcherbird expansion project. ProjX designed the original Butcherbird facility and managed all project and construction activities, and as the owners team. ProjX and Element 25 are jointly designing the proposed Butcherbird expansion plant, which incorporates plant design and supply by specialist vendors of key process equipment.

Given that various process equipment is subject to long lead times, an optimised project delivery schedule is currently being developed that aims to identify all opportunities for schedule improvement, including Early Contractor Involvement (ECI) partnerships to identify long lead time items for early procurement, optimisation of manufacture strategy (i.e. local manufacture overseas), fast track of certain design elements, and innovative construction methodologies. Element 25 are targeting a project period of 11 months, followed by a 2 month commissioning period.

1. GEOLOGY

The manganese mineralisation at the Project with the most economic value occur where the manganiferous shales of the Ilgarari formation intersect the weathering profile and display a supergene overprint where deep chemical weathering have upgraded the grade of the manganese and partitioned the manganese mineralisation into discrete high grade bands, resulting in an ore that is amendable to simple physical beneficiation.

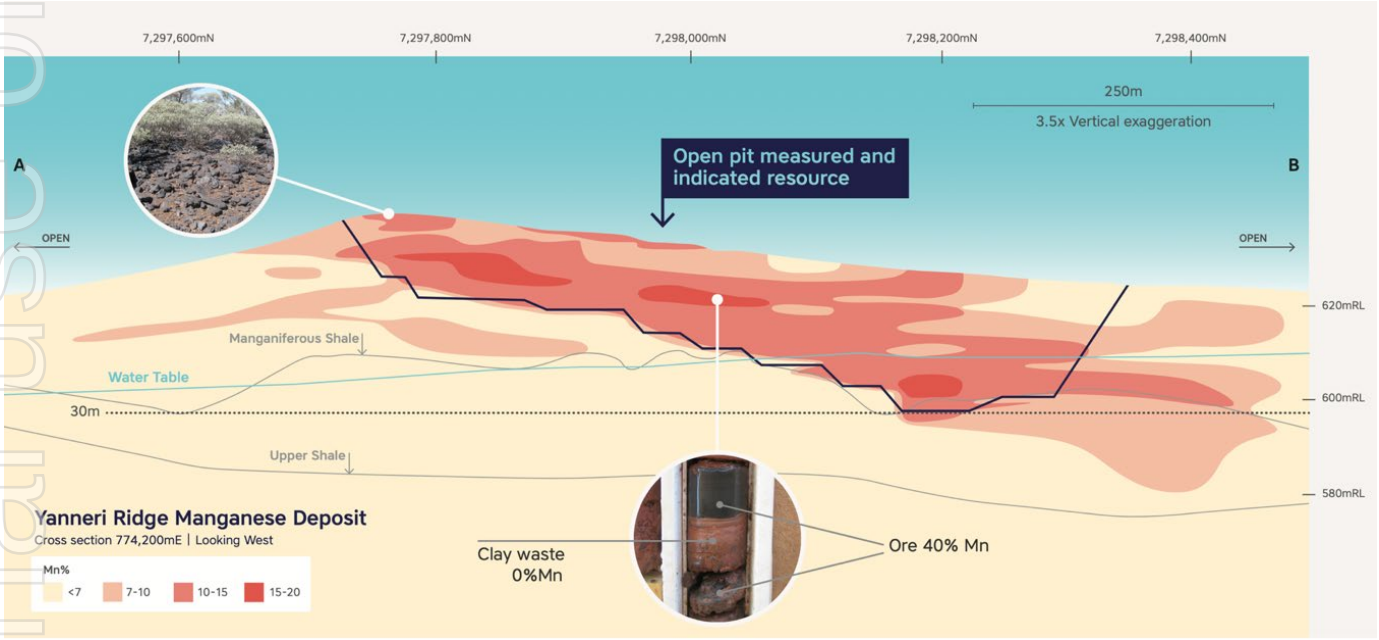


Figure 1. Yanneri Ridge Deposit cross section with simplified geology

Figure 2 illustrates the interlayered supergene manganese layers in the manganiferous shale unit which is the primary ore source at Butcherbird.

The photo was taken during the bulk sampling program conducted in December 20191 and is typical of the mineralisation style at the Project.

Ore beneficiation is achieved by separating the non-manganese bearing clays and shales via comminution, scrubbing, screening and dense media separation (DMS).

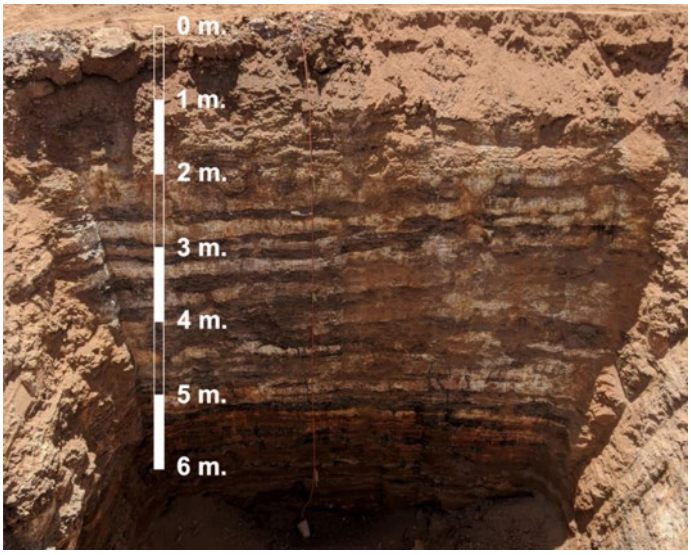


Figure 2. Bulk Sample Trial Pit - Pit Wall showing Manganese Lithology

[1] Reference: Company ASX Announcement dated 19 December 2019.

2. RESOURCE ESTIMATE AND MINING RESERVE

2.1 Resource Estimate

The 2019 JORC Measured, Indicated and Inferred Mineral Resource Estimate was completed by IHC Robbins following a major infill drilling program in 2018. The Mineral Resource including mining depletion to 30 June 2023 is shown below.

Table 1. 2019 Butcherbird Manganese Project Mineral Depleted Resource Estimate[2]

Category	Tonnes (Mt)	Mn (%)	Fe (%)	Si (%)	Al (%)
Measured	14.1	11.4	11.7	20.6	5.7
Indicated	40.8	10.0	11.0	20.9	5.8
Inferred	206.0	9.8	11.4	20.8	5.9
Total	**260.9**	**9.9**	**11.4**	**20.8**	**5.9**

Notes:
- Reported at a 7% Mn cut-off for the Measured and Indicated categories and an 8% Mn cut-off for the Inferred categories.
- All figures rounded to reflect the appropriate level of confidence (apparent differences may occur due to rounding)

2.2 Mining Reserve

Based on the results of the Butcherbird Concentrate Pre-Feasibility Study[5], E25 published a Maiden Ore Reserve for the Project of 50.5Mt in May 2020 in the Proved and Probable categories. The depleted Ore Reserve summary as at 30 June 2023 is shown below:

Table 2. Butcherbird Depleted Ore Reserve Summary[2]

Classification	Tonnes (Mt)	Grade (Mn%)	Contained Mn (Mt)	Recovered Mn (Mt)
Proved	13.0	11.1	1.4	1.2
Probable	36.2	10.1	3.6	3.0
Total	49.2	10.2	5.0	4.1

The estimated ore reserves and/or mineral resources underpinning the production target have been prepared by a competent person or persons in accordance with the requirements in Appendix 5A (JORC Code).

3. MINING

The mine plan has been strategically crafted to harness the distinctive tabular structure of the mineral deposit at Yanneri Ridge, enabling the establishment of an uncomplicated and cost-effective mining process. The mining operations will employ multiple pit configurations, including excavation beneath the water table. Open Pit dewatering measures will be implemented, as necessary. Geotechnical Studies supported by current mining activities have identified that the orebody will mostly be mineable using free dig techniques. In specific segments of the Yanneri pits, drilling and blasting will be required to remove the resilient cap rock. Ore extraction from the Yanneri central and the Coodamudgi Central pits will necessitate its transportation and any other

[2] Reference: Element 25 Limited Reserve Statement lodged with ASX 19 May 2020.

waste material across APA's Goldfields Gas Pipeline (GGPL). An initial blueprint has been formulated to incorporate engineered crossovers on the GGPL at 3 strategic locations to facilitate this process without any disturbance or risk to the GGPL.

Mining has been scheduled to maintain ore supply to the processing plant to meet production requirements. Mining will consist of hydraulic excavators mining 2.5m tall benches and delivering the ore to the ROM Pad via diesel haul trucks, where it will be fed directly to the processing plant or stockpiled for future feed.

To enable the excavator to efficiently extract the ore, the ore will be cross ripped with a dozer prior to mining. This is shown schematically below in Figure 3.

The Butcherbird mining area is a part of the Yanneri mineral resource delineated to the west by the GGPL and to the east by the Mining Lease boundary. It covers an area of some 2150m East-West and 1,000m North-South, centered around the processing plant.

The optimised final pit shapes for Yanneri East Pit have a mine life of 7.2 years. These pits target the higher-grade proved and probable mining reserve and allows access for mine scheduling with minimal waste removal from the Yanneri Ridge mineral resource.

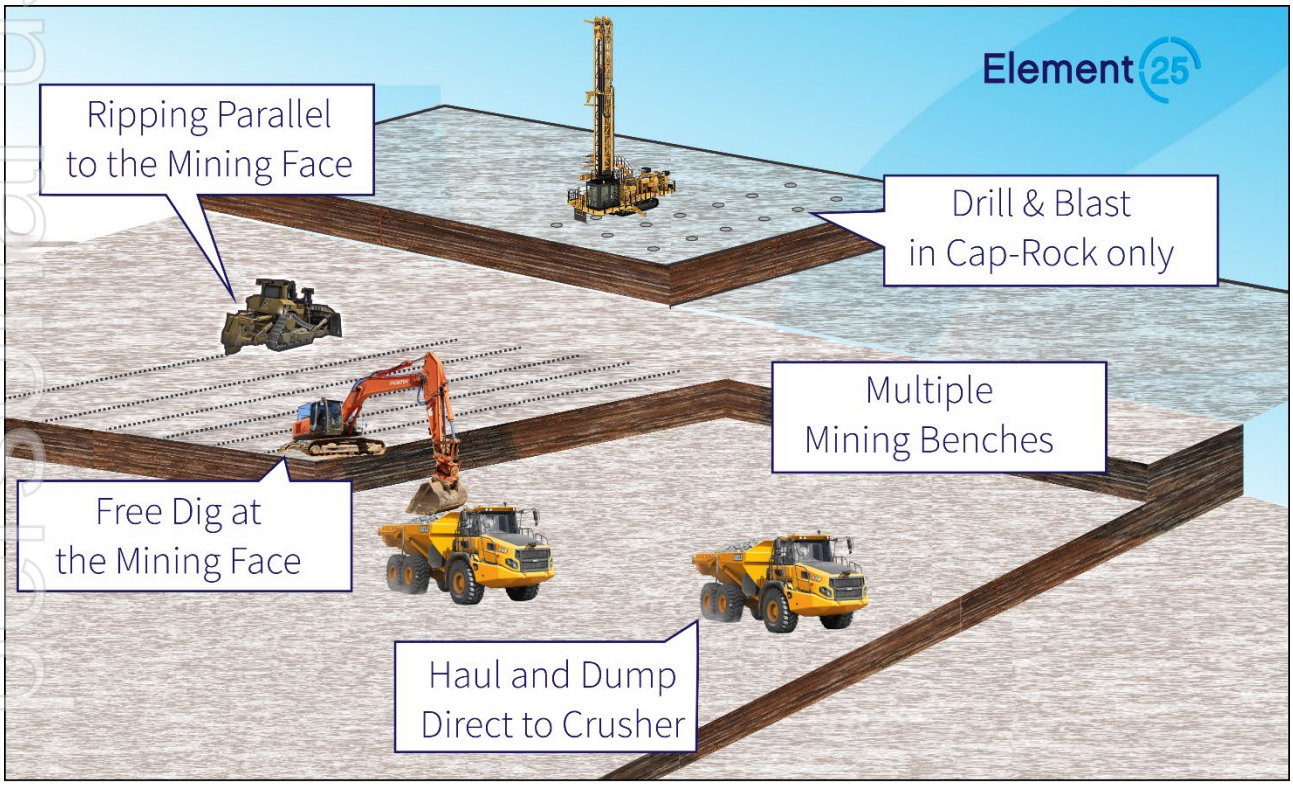


Figure 3. Mining System Schematic

The pit designs contain 47.7Mt of ore at an average grade of 9.7% Mn and is expected to be mined along with 12.3Mt of waste for an overall strip ratio of 0.26 to 1 (Waste: Ore volume). The optimisation of the pit shells uses a base price of USD4.50/dmtu 44%Mn CIF China. The pit design on which the expansion is modelled contains 26% Measured Resources 53% Indicated Resources and 21% Inferred Resources scheduled at the end of the 7.2-year mining life. A preliminary mining schedule is illustrated in Figure 4 below.

The current mining schedule was designed as a series of nested pits within the ultimate pit shell. Project economics are not significantly impacted if Inferred resources were utilised later in the life of mine schedule.

Given that there is a low level of geological confidence associated with Inferred Mineral Resources, their treatment as an ore source after the Measured and Indicated ore is depleted is considered conservative. Resource definition drilling has been included as an operating cost to allow the conversion of Inferred to Indicated mineralisation.

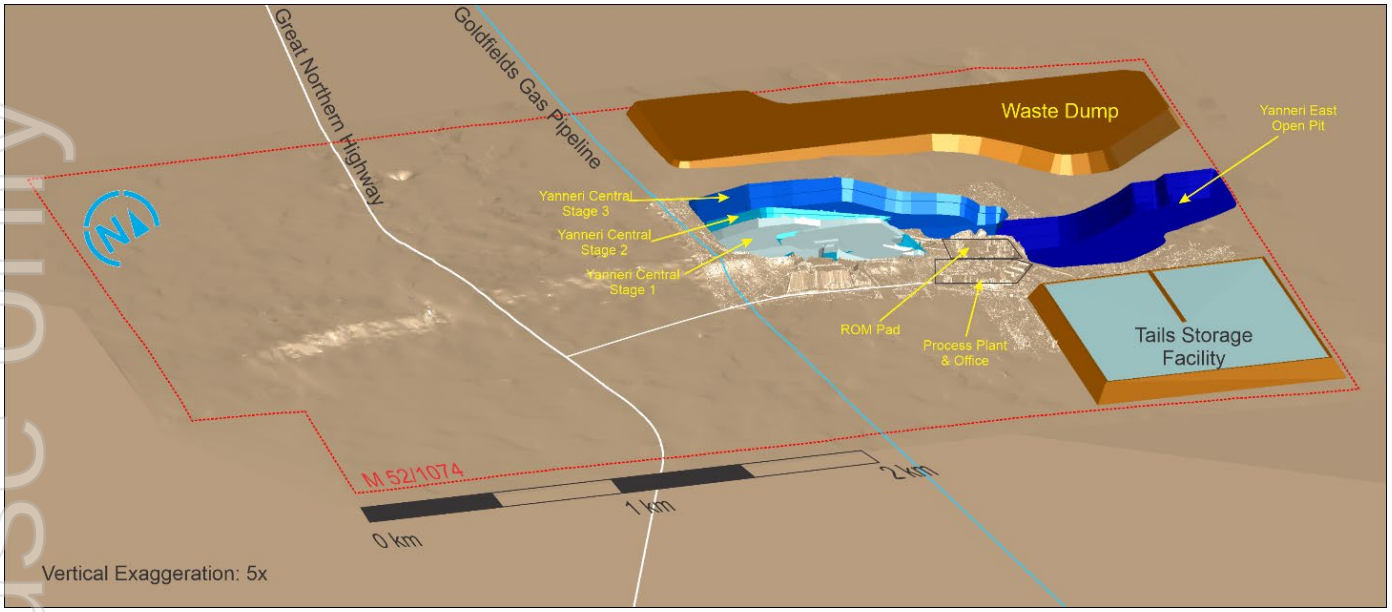


Figure 4. Butcherbird Site Layout showing Open Pit Staging, Looking Northeast

3.1 Pit Design

Although not anticipated in the original planning at Butcherbird, Mining has encountered some relatively small areas of caprock, that will require Drill and Blast operations. These areas include mainly the upper levels of the Yanneri resource, down to a depth of approximately 6m from the surface must be drilled and blasted to ensure the hard cap rock is fully broken. The drill and blast processes to be deployed will require the use of a contractor with specialized blasting skills with significant experience of blasting close to critical infrastructure (the Goldfields Gas Pipeline). This is to ensure no vibration induced disturbance on the Goldfields Gas Pipeline adjacent to the mining operations that will require blasting. The costs for the drill and blasting have been incorporated into the financial model. The rest of the Yanneri Ridge mineralisation within Mining Lease M52/1074 will be mined by dozer ripping and extraction using conventional hydraulic excavators to mine directly from the mining face into haul-trucks which will transport ore to the crusher. Similarly, waste will be mined by diggers and transported to the dedicated waste dump.

Mining costs used for the pit optimisation and subsequent financial evaluation were sourced from the companies mining contractor in September 2023, which was based on the 7.2-year mining plan for the expanded operation at Butcherbird.

Mining factors used for the pit optimisation include 95% ore recovery and 5% dilution. Because all mineralisation within the pit designs will be processed these factors are considered appropriate.

The open pit design is based on pit shells derived from an open pit optimisation study using mining costs of $9/bcm mined which include Mining, ROM Management and Fines disposal to the TSF, processing of $13.60/t product, and administration of $6.85/t product. With ex-site costs $55/t ore haulage and $16/t port charges were used, together with a manganese concentrate price based on a USD 4.50/dmtu CIF 44% China.

Mining production by JORC resource category and average yearly manganese grade is shown below as Figure 5. Ore Supply by JORC Resource Category.

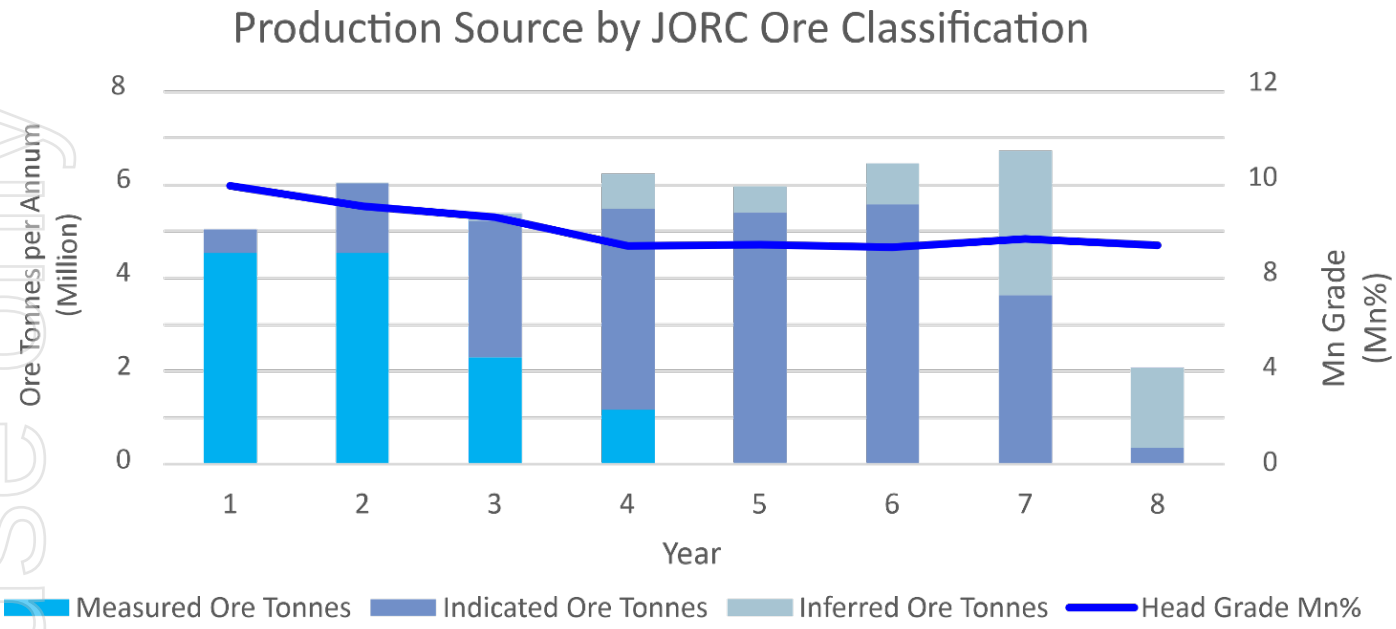


Figure 5. Ore Supply by JORC Resource Category

A summary of the mining schedule showing ore and waste movement as well as average stripping ratio is shown below in Figure 7.

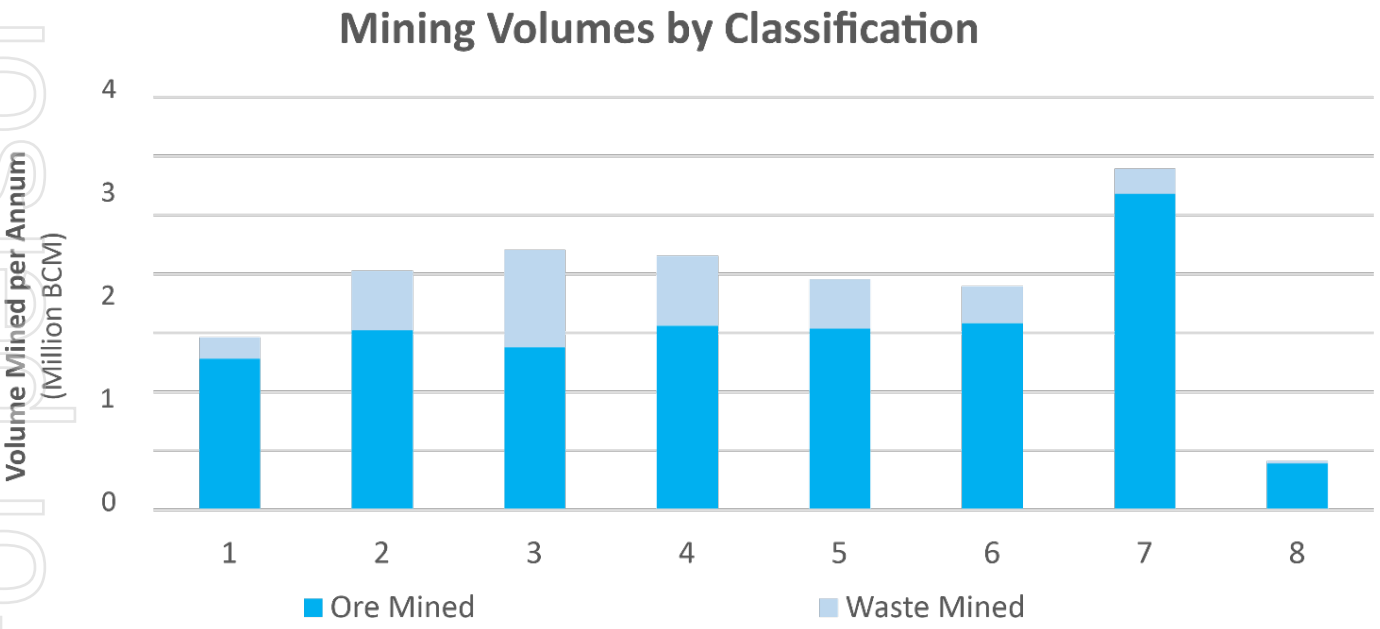


Figure 6. Mining Material Movement and Stripping Ratio

3.2 Geotechnical and Diggability Assessment

Peter O'Bryan and Associates were engaged to conduct an open pit geotechnical assessment study on the Yanneri Ridge section of the deposit. The Study was based on nine geotechnical holes and was completed in March 2019.

A prefeasibility geotechnical assessment for open pit mining was undertaken for the Yanneri Ridge Deposit by Peter O'Bryan & Associates in March 2019. The assessment utilised information on geotechnically logged boreholes from June 2018 to conduct wall stability analysis. Kinematic Analysis and Limit Equilibrium Analysis were undertaken under the following conditions:

- Likely Case Materia Properties -Static loading.
- Worst Case Materia Properties -Static loading.
- Worst Case Materia Properties -Seismic loading.

The key findings of the base case wall design parameter limits for all walls in the Yanneri Ridge pit considered highly conservative design parameters which include:

- Face height 5m from surface to 5m depth.
- Face height 10m below 5m depth for the first 10m.
- Face angles 50˚ from surface to 15m depth.
- Face angles 60˚ below 15m depth with a face height of 10m.
- Berm width - 5m throughout.

Subsequent geotechnical inspections on site by Peter O'Bryan and Associates have supported the original findings and design considerations and show that there is a very low pit stability risk at Butcherbird.

4D Geotechnics (4DG) were engaged and completed two detailed diggability reports evaluating likely excavation rates. These reports were completed on 18 July 2018 and 15 March 2019.

The 4DG study used ten diamond drill holes. Hole sections were assessed and tabulated with ninety-seven individual ratings. Of these ninety-seven ratings the high values were two values above 60 (62 at 3.9m to 6.0m and 68 at 1.0m to 1.3m) and seven values in the 51 to 60 range. The study concludes that based on the results of their examination and testing of ten diamond holes in the Yanneri Ridge area, the area to be mined will mostly be free digging.

Mining activities at Butcherbird have mostly been completed since 2021 as free-dig. However, some areas, mostly on the upper portions of the Yanneri resource have not been able to be mined using Free-Dig or local ripping alone. The Feasibility has included a drill and blast component to allow for the drilling and blasting of the cap rock in these areas.

3.3 Goldfields Gas Pipeline

The location of the GGPL has been specifically included in assessment of the geotechnical stability involved with mining adjacent to the GGPL. The recommended open pit wall design profile and proposed stand-off from the Goldfields Gas Pipeline reserve make it extremely improbable for ground disturbance due to instability within the adjacent pit wall to even approach the reserve boundary. Material loss due to erosion over time cannot conceivably cause pit crest retreat to approach the pipeline reserve. Debris from mass wastage would remain at/ near the toe of the pit wall and retard and eventually choke the process. This can be alleviated by the placement of mine wastes against the walls whilst mining other areas of the open pit.

The pit sectors adjacent to the pipeline are designed to allow a stand-off of ≥ 75m from the crest of the ~25m deep pit to the near boundary of the pipeline reserve. This approach places the outer toe of an abandonment bund ≥ 50m from the pipeline reserve boundary. Limit equilibrium analysis of slopes adjacent to the gas pipeline under anticipated likely case conditions yield a minimum FS of 3.71 for geometrically feasible rotational shearing surfaces approaching the pipeline reserve (Figure 14), noting however that the lowest FS of a surface that intersects the natural surface at the pipeline reserve boundary is ~ 4.8.

3.4 Mining Costs

Mining costs were sourced from a quotation from the companies mining contractor, ReGroup. These costs have been used in the financial evaluation of the expansion study.

These costs include:

- Mining Equipment and personnel supply.
- Maintenance parts and equipment.
- Service truck.

The scope of work includes:

- Mining.
- Ore Haulage to the ROM Pad.
- ROM Pad management and plant feed.
- Fines haulage and from the process plant and placement at the TSF.
- Road construction and Maintenance.

Other mining costs were developed from first principals based on a staff allowance and staff pricing sourced from mining industry recruitment agencies. Details of the Mining costs are discussed in the Economic Analysis section.

4. PROCESSING

Beneficiation test work has been conducted over an extensive period since 2009 both specifically focusing on a manganese ore product and more recently on the feed material for the hydrometallurgical process to produce EMM.

Since the construction of the Butcherbird Stage 1 plant commissioned in April 2021, the Company has been able to collect real data regarding plant performance and identify areas where the plant design can be improved to deal with the manganese ores being processed.

4.1 Butcherbird Operations 2021 to 2023

During the period from April 2021 to June 2023, the operation mined a total of 3,073,102 tons of ore. This resulted in a manganese concentrate production of 436,498 tonnes being produced at a grade of 29.7% Mn. This is an overall mass yield of 14% across that period. The manganese concentrate had a measured dilution of 8.5% and ore loss to ejects of 6.2%, which is in-line with expected ore sorter performance.

The plant expansion will be redesigned to minimise ore loss and concentrate dilution, by the introduction of a custom manganese processing circuit including a DMS drum circuit. This will minimise ore loss and product dilution by enabling a cleaner cut between manganese concentrate and waste materials.

4.2 DMS Testwork Conducted

In a recent analysis, Element 25 evaluated the efficacy of the proposed Dense Medium Separation (DMS) process for processing Butcherbird ore, compared to the current ore sorting methods. This assessment involved a composite sample, combining both the product and rejects from our existing ore sorter, which was sent to Bootu Creek for DMS testing.

Our findings are significant. During the evaluation period, the ore sorter produced a manganese (Mn) grade of 24.4% with a recovery rate of 82.1%. Notably, the grade in the ore sorter rejects was 13.83% Mn, indicating substantial residual manganese.

In contrast, the Bootu Creek DMS testing yielded markedly superior results. The DMS process achieved a remarkable Mn grade of 31.99% in the sinks fraction at a density of SG2.7. The rejects from this process contained a significantly lower Mn grade of only 4.69%. Projecting these results across the average operational period since the plant's inception, the DMS circuit is expected to recover 96.15% of the manganese processed by the DMS circuit, a substantial increase in both the recovery rate and the grade of manganese compared to our current ore sorting operations.

Further enhancing the efficiency of the DMS circuit is its ability to process a broader size range of material. The DMS circuit can handle particles larger than 8mm, compared to the ore sorter's limitation to a screen cut size of 12mm in the dry circuit. This capability means a greater mass of feed will be directed to the DMS circuit. Additionally, we have increased the crush size in the DMS circuit from 63mm to 85mm, which is expected to reduce the generation of fines and consequently increase the mass percentage of Run-of-Mine (ROM) ore processed by the DMS, as compared to the current ore sorting plant.

In summary, the introduction of the DMS circuit at our processing facility represents a significant advancement in our manganese recovery process. This enhancement not only improves the efficiency and yield of our operations but also underscores our commitment to technological innovation and operational excellence.

4.3 Process Plant Design

The beneficiation process plant and other infrastructure have been designed in accordance with industry practice and the unit operations included in the flowsheet are well established within the resources industry for the processing of manganese and clay ore feeds.

The design philosophy has utilised fixed plant equipment with a focus on minimising materials handling and complexity whilst enabling efficient unit operations as well as access for maintenance and minimising spillage.

The processing plant is broken up into three major processing areas namely the crushing section, the screening and scrubbing section and the DMS section.

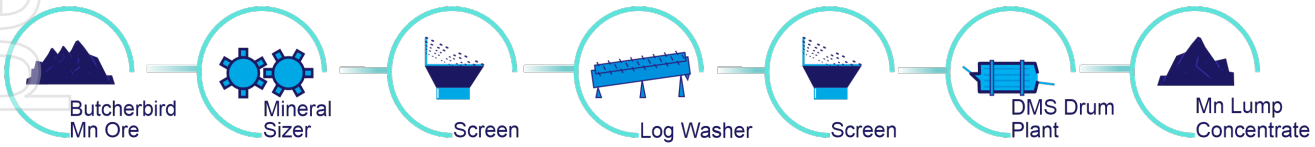


Figure 7. Butcherbird Schematic Flowsheet

4.4 Crushing

The Crushing section is designed to minimize materials handling and a big focus was placed on ensuring that it will manage to process material with a high clay and moisture content.

The selection criteria of the crushing circuit were based on these major factors.

- Run of Mine (ROM) material is fed into the crushing circuit from a 90 tonne mine truck directly into the feed bin.
- The ROM material is then transported to a wobbler screen using an apron feeder.

- The wobbler screen is selected to remove the -80mm material and deposit everything that is +80mm directly into a mineral sizer.
- The mineral sizer is selected to break the oversize material down to -80mm due to its exceptional effectiveness to handle material with a high clay loading combined with its ability to crush the oversize to precise discharge size.
- A transfer conveyor that is running in length under the plant from the apron feeder collects the fines dropped by the apron feeder, the wobbler screen undersize as well, and the mineral sizer and discharges material into the primary screening facility.

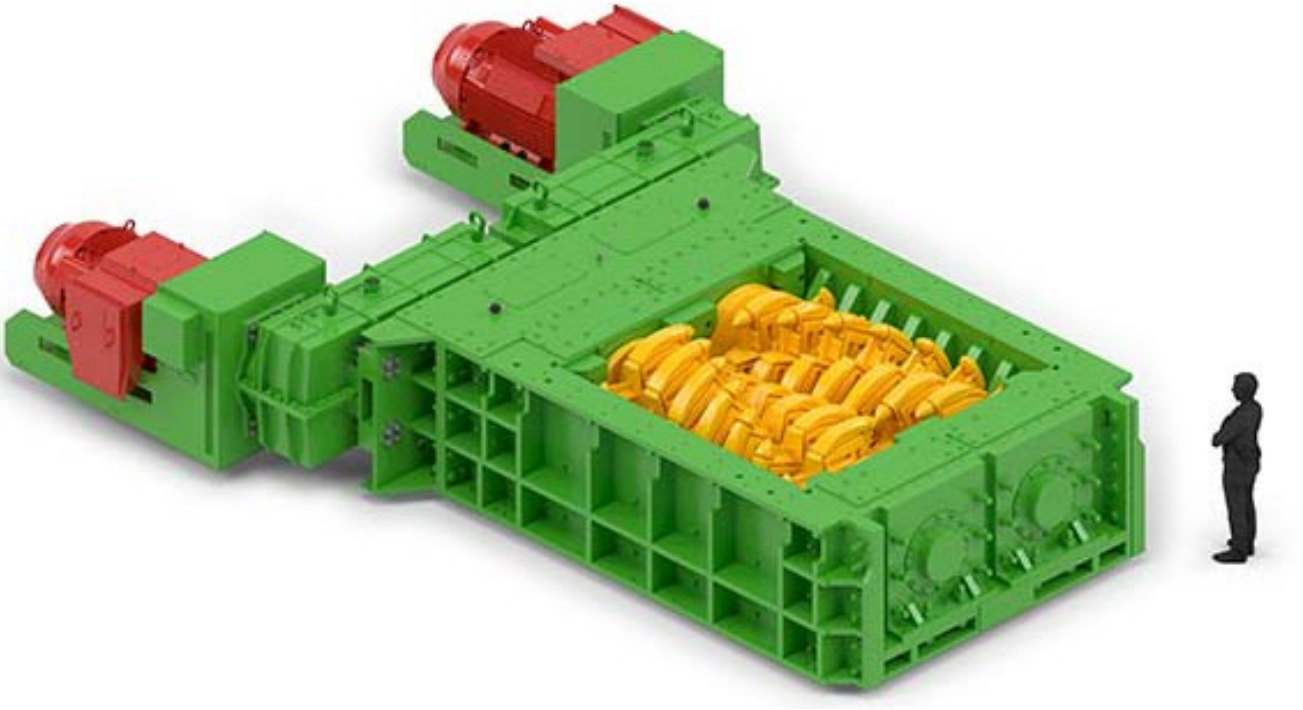


Figure 8. Mineral Sizer

Figure 9. Feed Hopper and Mineral Sizer

4.5 Screening and Washing

Screening will be carried out by a Dabmar screening module due to its ability to handle clay and sticky material with minimal blinding. The high amplitude of the screen (24mm) and the proprietary design of this screen has a higher screening efficiency and lower wear component.

This will be followed by a log-washer to effectively scrub the feed material prior to DMS. Log-washers have a very effective scrubbing action that has been proven to work well on the ore at Butcherbird.

- The 8.7m x 2.2m Dabmar double deck screen with an 80mm top deck to remove any potential oversize and a 10mm bottom deck to remove fines will process the complete stream of crushed run of mine material. This screen is a dry screening stage to minimize water consumption.
- The following step is to process the -80mm +8mm stream on another washing screen to prep the feed going into the log-washer and remove any additional fines that may adhere to this fraction.
- The washed and prepped feed then enters the log-washer where any additional clays are broken up and scrubbed to generate a clean ore for the DMS circuit.
- The log-washer discharge is then washed on a dewatering screen to remove all potential residual fines or clay from the feed.
- All fines generated by the two wet screens and the log-washer are pumped back to the slimes facility with make-up water being fed back from the process water pond.

4.5.1 DMS Circuit

The DMS operation at the Butcherbird site utilises a specific, detailed process involving a single module Heavy Media Drum (HMD) unit. This DMS process is designed to maximise the recovery of manganese from the ore, taking into consideration the specific characteristics of the material being processed, including size and clay content. The use of the HMD and the precise control of the dense medium facilitate efficient separation and recovery of valuable manganese ore.

The proposed processing circuit for the Butcherbird expansion is as follows:

4.5.1.1 Dense Medium Separation

- The oversize material from the DMS preparation screen is directed to the HMD.
- Here, particles containing manganese are separated from waste material.
- Material enters the HMD through gravity feed from a conveyor, while the dense medium is pumped into the drum via various inlets, powered by the Correct Medium (CM) pump.

4.5.1.2 Separation in Heavy Media Drum

- Inside the HMD, manganese-rich material sinks, and waste material (buoyant discard) floats due to the specific gravity of the dense medium.
- This separation is the core of the DMS process, effectively concentrating the manganese ore.

4.5.1.3 Drain and Rinse Screens

- The separated materials are then discharged onto respective drain and rinse (D&R) screens.
- The dense medium used in the separation is drained through these screens and returned to the correct medium tank for recirculation by the CM pump.

4.5.1.4 Handling of Separated Material

- The floating discard material is conveyed to a discard stockpile.
- The denser, dewatered product (manganese-rich material) is transported to a dedicated product stockpile.

4.5.1.5 Throughput and Equipment Specifications

- The HMD employed in this operation has dimensions of 3,660 x 3,660 mm.
- The system operates with a throughput rate of 240 metric tons per hour, ensuring efficient processing of the ore.
- The DMS circuit will recover 146 tons of ore per hour which equates to 66% of the feed to the HMD drum.
- The feed size distribution to the HMD drum is -80mm and the bottom size of 8mm.

4.6 DMS System

The dense media drum circuit design is shown below:

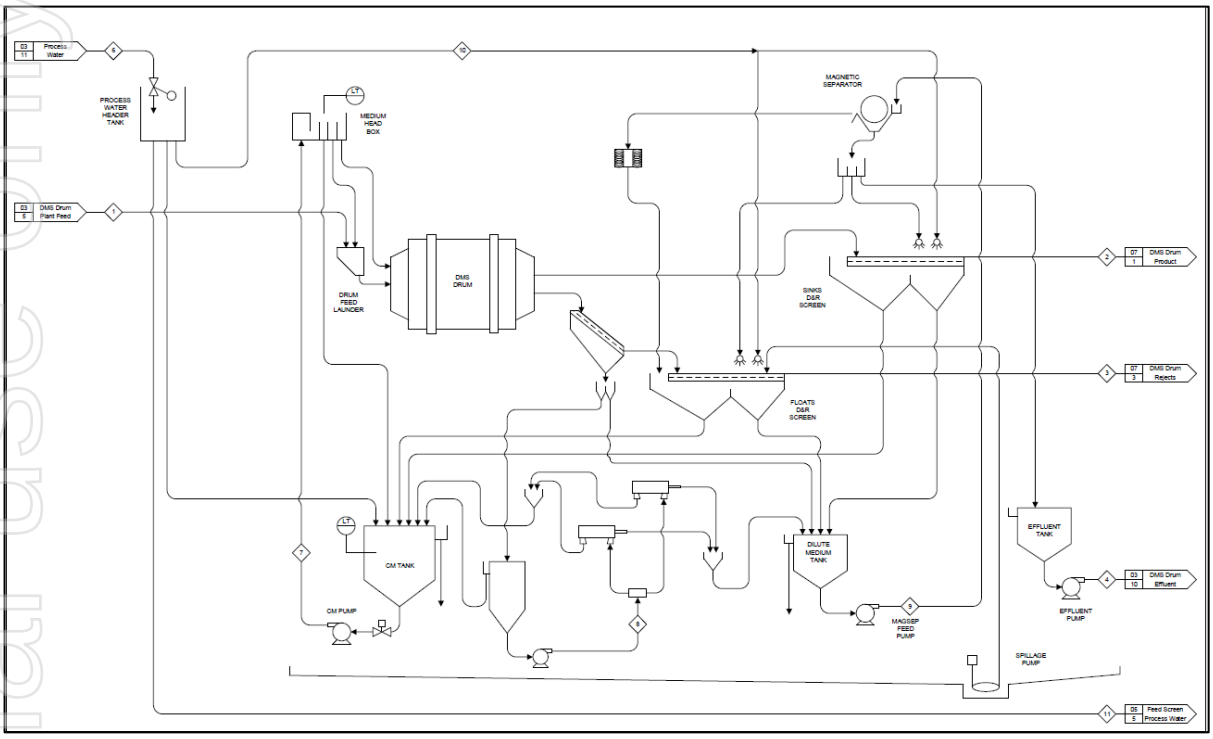


Figure 10. DMS Drum Plant Layout

4.7 Implementation Schedule

The implementation schedule of the processing plant will take 371 days from contractor appointments to full operation. All major mechanical equipment has been selected and detailed design stage will take place in parallel to long lead items being ordered.

A basic breakdown of the implementation schedule is outlined as follows:

Task Name	Duration
Butcherbird Operation	**371 days**
Board Approval	**1 day**
Design Phase	**77 days**
Project Kick-Off Meeting	1 day
Appointment of Contractors	2 wks
Detail Design	8 wks
Signoff	1 wk
Implimentation	**363 days**
Procure materials	16 wks
Order Long Lead Items	26 wks
Manufacturing	16 wks
Packing	2 wks
Import / Export Authorization	2 wks
Transport	8 wks
Civil Design and Construction	10 wks
On Site Construction	6 wks
Commisoning	**62 days**
Dry Commissioning	2 wks
Wet Commissioning	6 wks
Final Handover	1 wk

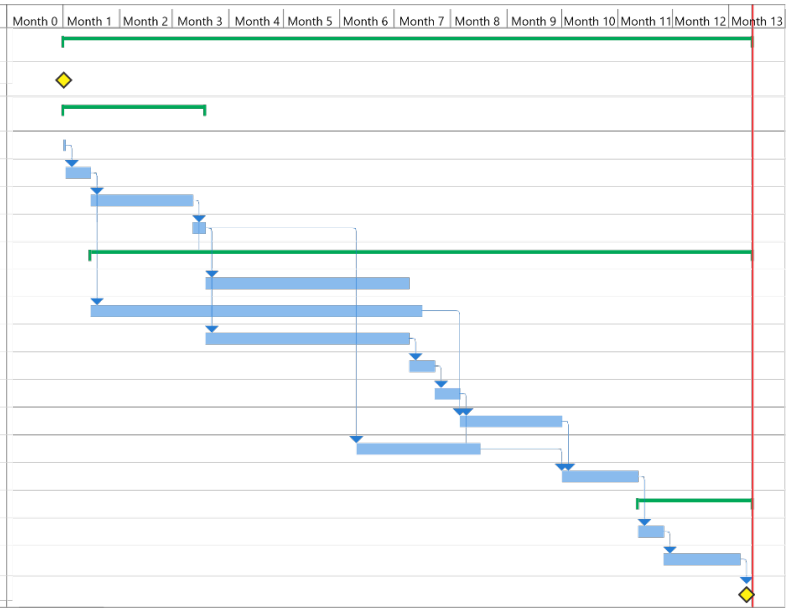


Figure 11. Expansion Project Schedule

5. LOGISTICS AND ORE TRANSPORT

Manganese concentrate produced at Butcherbird will be trucked 580 km from product stockpiles at the Butcherbird mine site to the Utah Point common user facility at Port Hedland via the Great Northern Highway, where it will be loaded on to ships for export.

Concentrate trucking and ship loading is proposed to be completed by a licenced operator and will be in compliance with Main Roads and Pilbara Ports and other requirements. A 'mine gate to ship' logistics cycle that is endorsed by the Pilbara Port Authority and that is like the approach utilised by other companies in the Pilbara will be adopted. This included dust measurement and minimization techniques.

The proposed concentrate handling method is fully compliant with Class 9 transport requirements and no special bulk shipping restrictions currently apply for UN 3077 mineral concentrates.

5.1 Concentrate Haulage

The company currently utilises a haulage contractor, ReGroup Pty Ltd, as a contractor for its ore haulage. The Butcherbird operation is located 1.6km off the Great Northern Highway, 130km south of Newman, which allows for quick turnaround times. The entire route is a defined route under the existing concessional loading provisions applying to the Pilbara allowing the uses of the quad road trains permissible under the Main Road permitting system. Transport costs have been included in the financial model are based on the commercial in confidence contracted rates with ReGroup.

The manganese ore is neither classified as a dangerous or, hazardous good in transit. It is a benign product and is not affected by typical atmospheric conditions (heat, cold, or rain).

5.2 Port Operations

Element 25 has an access and use agreement with Pilbara Port to utilise the Utah Point, common user facility at Port Hedland. Pilbara Ports have been handling the Butcherbird manganese concentrate since early 2021 under that agreement.

In discussions with Pilbara Ports, Element 25 has been advised that expansion to 1.1M tpa will be accommodated. The port has increased its manganese allocation within its operating licence under the Department of Water and Environmental Regulation as well as having increased the number of common user bunkers, available to public operators.

The Company utilises the services of Qube Logistics for stevedoring at the Utah Point facility. Qube logistics has been acting on behalf of Element 25 since the commencement of operations in 2021.

5.3 Shipping

Element 25 have engaged with a number of shipping lines and brokers to obtain indicative shipping rates. These ranged from USD15 to USD20/tonne, depending on the size of the vessel, the destination port(s).

Quotes are also based on an assumed bunker rate at the time of publication. The majority of Manganese ore shipments are sold on a Cost, Insurance and Freight (CIF) basis at the destination port, with some concluded on a Free on Board (FOB) basis at the source port. As cargo owners E25 does not have to provide for destination port charges. Cargo will be insured for sea movements based on the industry standards.

Element 25 has used a shipping cost of $16/t for the Study.

6. PROJECT INFRASTRUCTURE

The Project location is remote and has existing infrastructure which will be expanded to support the mining and process operations (see Figure 12). The expansion capital has provided capital and operating costs based on the infrastructure typical of the resources industry. This includes:

6.1 Borefield

Water is currently sourced from bores located within the E25 mineral tenements. An estimate of 4.4Ml will be required per 24hr cycle for site usage in processing and general activities. Preliminary investigations have concluded that adequate water is available from the existing borefield, located approximately 6km from the Project site, although the borefield will need to be expanded to meet this capacity. The geotechnical and evaluation work for the borefield expansion is underway and allowances have been made within the capital estimate for the exploration and development of a larger borefield.

6.2 Camp

Element 25 has an existing 44 fit for purpose man camp located at the Kumarina Roadhouse, approximately 30km south of the Project.

As part of the expansion plan, the Company will build a 100-man camp to be located within 5km of the mine site. This is included in the capital and expansion planning activities for the site.

The proposed location of the camp will lessen the impact of travel on operating roster times as well as having a positive impact on operating costs due to a lower man-day rate for the operation of the camp.

6.3 Access Roads

The Butcherbird operations has a main roads approved driveway off the Great Northern Highway enabling access to the mine site. The access road also crosses the Goldfields Gas Pipeline at a location approved by APA Ltd the Gas Pipeline Owner and operator. The access road is suitable for use in the expanded operation.

6.4 Power

A principal diesel power station will be leased and will be expanded for the processing equipment. Multiple smaller diesel generators will power the bore field and tails storage water recovery systems.

The company will be reviewing the option of installing a solar power station to supplement the power requirements on site. This will lower operating costs and decrease the carbon footprint of the operation.

6.5 Other infrastructure

Allowances will be included for additional administration and storage buildings, mine and plant workshops, laboratory, communications, power, security, fuel storage, product laydown area, waste and refuse management as well as an airstrip to allow shorter turn-around of staff during shift changes.

6.6 Tailings Storage Facility

Wet tails from the expanded processing facility will continue to be deposited into the existing TSF which will have capacity for two years of expanded storage capacity.

E25 has engaged Resource Engineering Consultants (REC) to undertake a design of the tailings storage facility (TSF) for the expanded operating volumes and mine life. The design assumes conventional wet tailings facility with an average deposition rate of 530,000tpa. Mine waste rock and dry processing waste streams will be the main material of construction for the TSF embankment walls. Fines generated from processing have been assessed and are suitable for use in the construction of TSF walls, reducing the costs and complexity of these works.

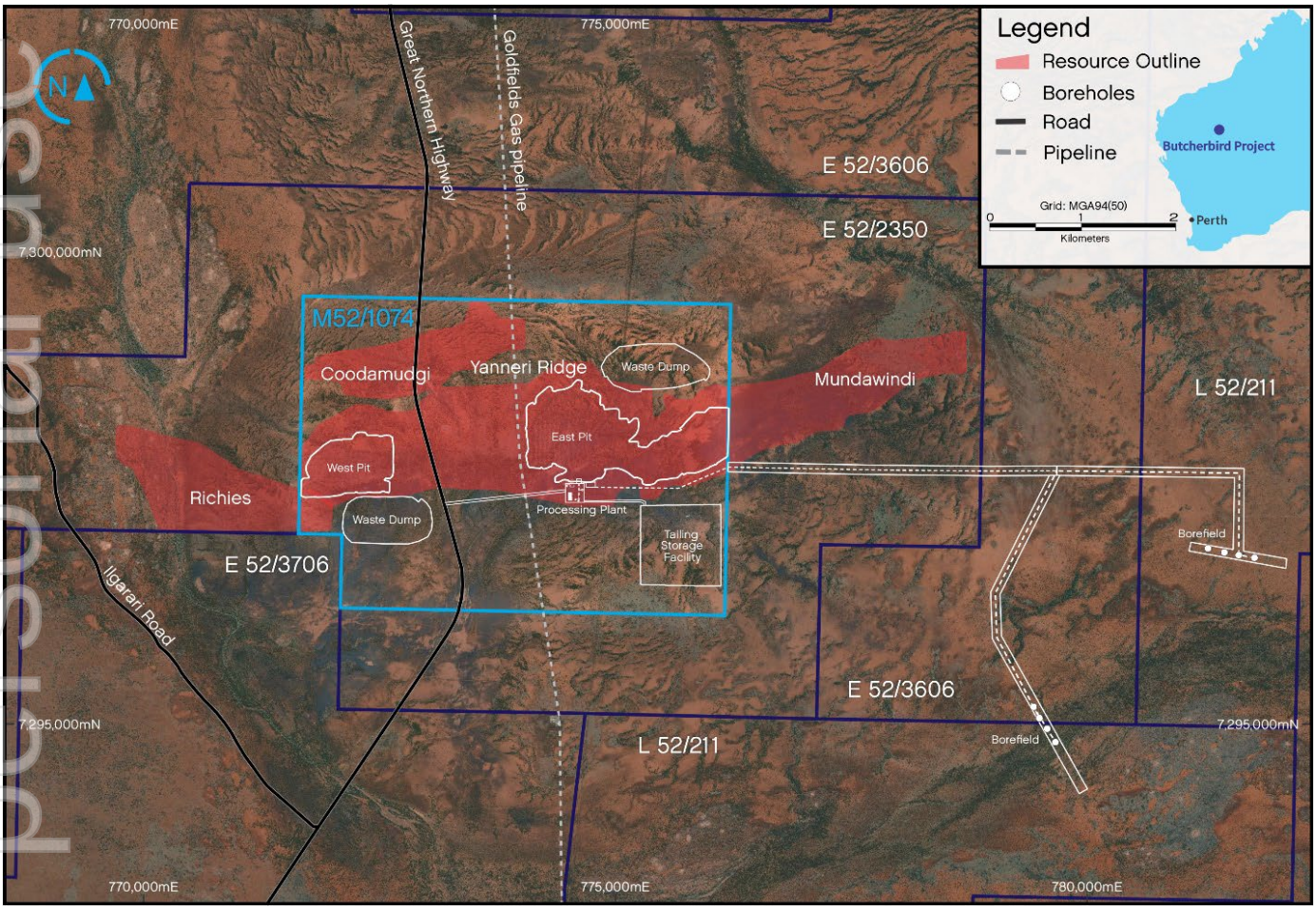


Figure 12. Butcherbird Project – Proposed Site Layout Diagram

Water recovery from the TSF will be designed to maximise water reclamation. There is no requirement for the TSF to be lined.

Costs for the TSF construction have been sourced from the companies Mining Contractor, who has completed a TSF wall lift in early 2023 of the existing TSF walls.

7. MANGANESE MARKET

The majority of manganese ore is used to produce manganese alloys (crude steel will account for 90% of the demand projection to 2050-Project Blue Manganese Long Term Outlook, July 2023), with a smaller proportion used to produce high-value Electrolytic Manganese Metal (EMM), refer Figure 13. Silicomanganese (SiMn) alloys have seen the most significant market growth.

Manganese alloy is mainly used in the steel industry to strengthen steel. Smaller volumes find its way into stainless steel and aluminium production. The manganese content of steel has progressively been increasing in recent decades.

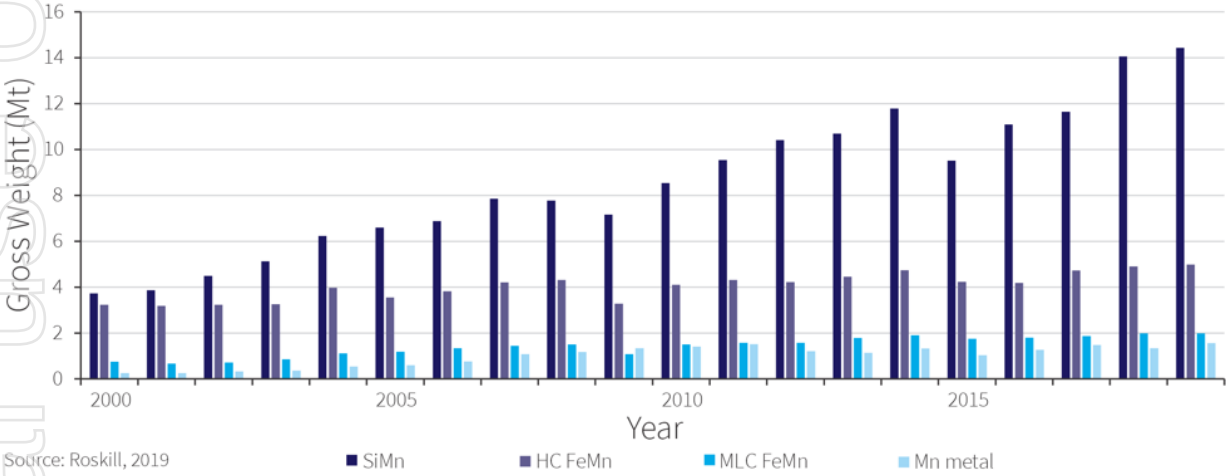


Figure 13. Global manganese alloy production, 2000 to 2019 (Mt gross weight)

Manganese ore production has grown more than threefold in the last 20 years. It is forecast that demand will marginally outstrip supply in the forecast period through to 2033. The decline in low-grade ore production in China has resulted in the average manganese content of ore increasing over the same period. However, the grade for most individual producers has been reducing gradually.

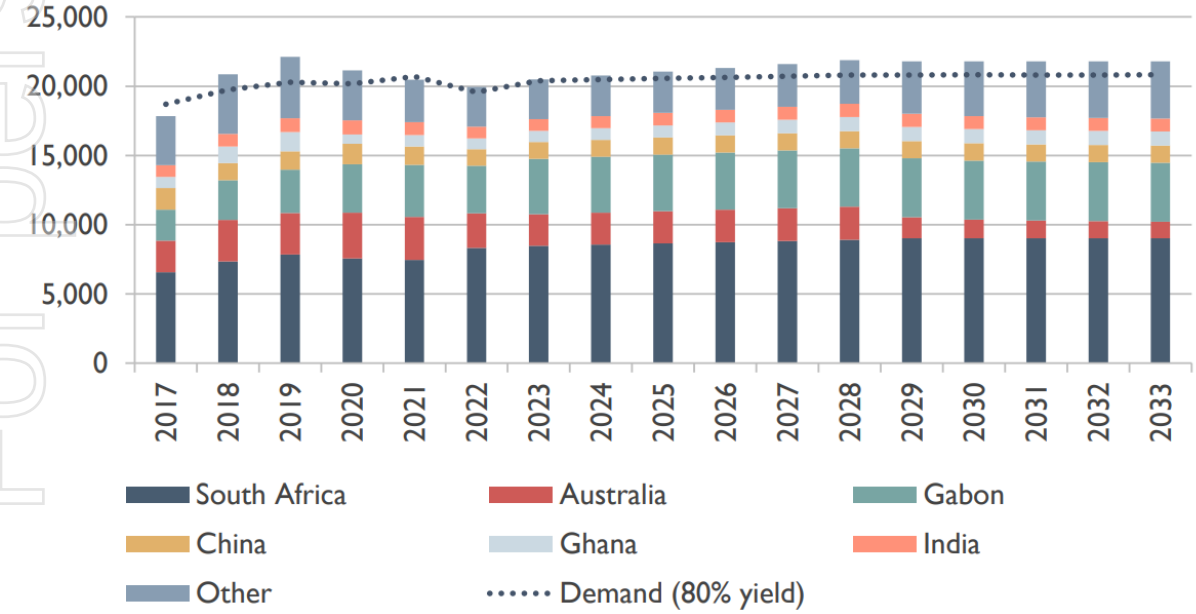


Figure 14. Manganese ore production 2017 to 2023 and Demand forecast to 2033[3]

[3] Reference: Project Blue Manganese Market Report

The latest data indicates that 2023 steel production should reach back over 1.9Bnt. However, with weak output globally, with India the notable exception, global steel production is only forecast to recover by 2025 back to its 2021 level. Project Blue believes that China's steel production has plateaued and will gradually decline over the second half of the 2020s, reflecting a less steel-intensive maturing economy combined with carbon emissions limitation. In the rest of world (ROW), output growth will primarily come from large emerging economies, India, Brazil, Iran, and Southeast Asia. Developed economies are forecast to post flat steel output with production increasing in the USA and declining in Japan. India was the only significant steel-producing country that saw strong growth in output in 2022 and in 2023 so far. Growth in India is expected to continue and outweigh the modest decline in China.

Forecast manganese requirements by sector are shown below:

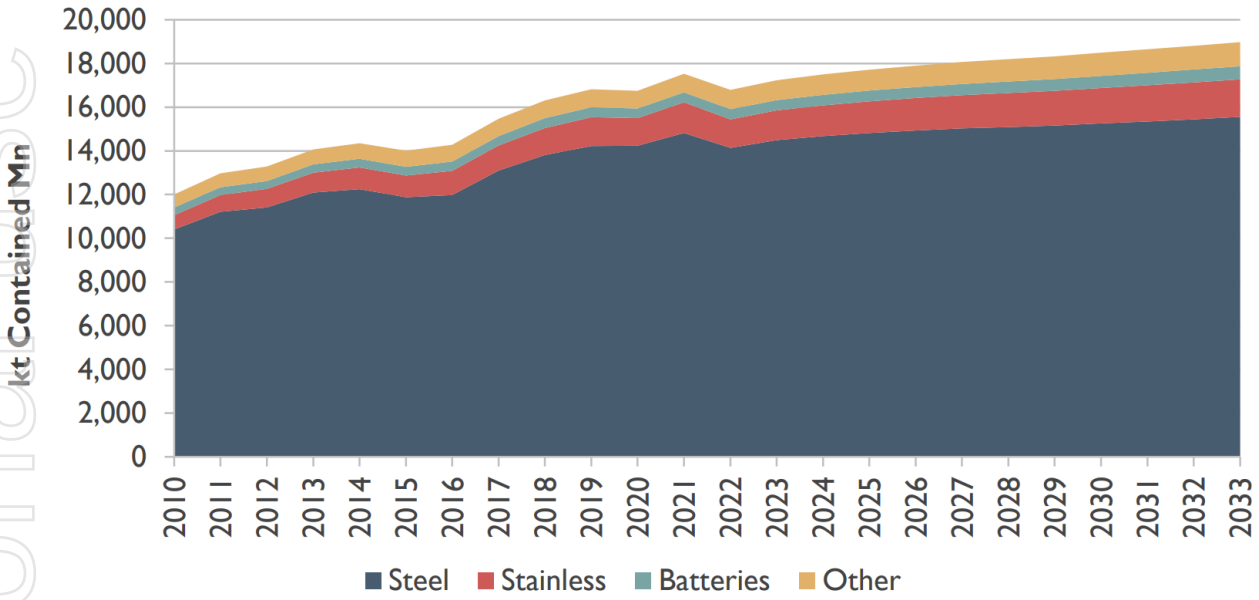


Figure 15. Global Manganese Ore Production Forecast, 2010-2033

7.1 Manganese Ore Price

Manganese ore pricing in recent years has changed from long term contracts to contracts being negotiated on a short-term basis. This has marked a step change in historical manganese ore price levels.

World-wide demand for Manganese in steel remains strong, and there is currently no known substitute material. Current longer-term forecasts place manganese ore in the USD5.00 to USD6.00/dmtu bracket for high grade, 44% Mn, ores.

Project Blue has adjusted the forecast for manganese demand in steel in line with current market conditions. Manganese ore demand in steel is now 0.8% less than the last update, as global steel production contracted in April 2023 and May 2023. The steel industry is expected to experience a recovery in 2024, leading to an increased demand for manganese ore. Additionally, the demand for manganese in stainless steel is projected to continue growing in 2024 and beyond. Longer term, stainless is expected to track a stronger upside compared to steel, while steel will see regional variations begin to impact the international trade flows.

Element 25 has incorporated Project Blue's forecast into its future pricing strategy. However, recognising the need for current relevance, the Company has modified its price projections for 2024-2026 to better reflect the actual manganese market prices observed in the fourth quarter of 2023. The manganese price is shown below, targeting a reference price of USD5.75 44% CIF China in the longer term.

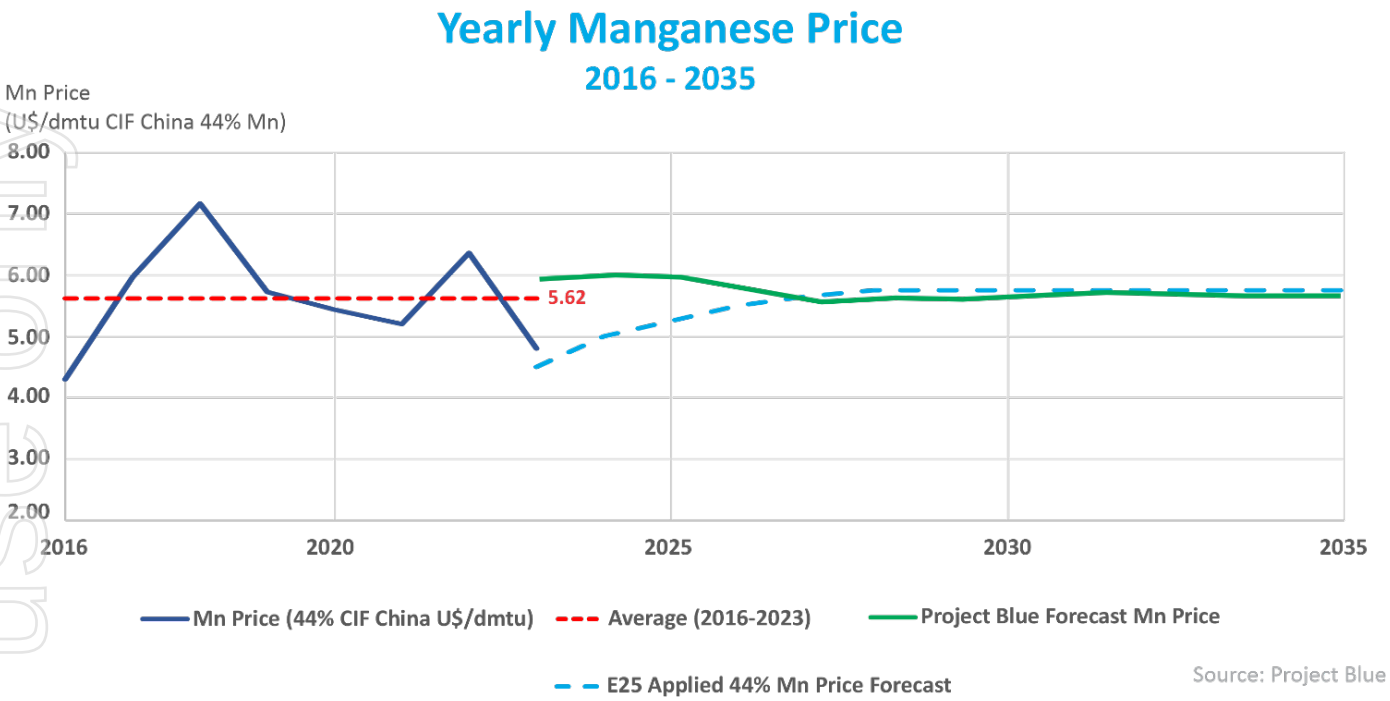


Figure 16. Monthly prices for manganese ore, nominal terms, January 2016 to September 2023 (USD/dmtu CIF China)

The Company's manganese concentrate is placed in a market typically termed "medium grade ore." Historically medium grade ores have traded at a manganese content-based discount to high grade ore.

Element 25 receives a small increase in prices due to the high silica content of the Manganese concentrate and its expected use in a Silica-Manganese smelter where silica is required as an additive.

7.2 Marketing Strategy

The Project enjoys a number of advantages over competitors including a low-cost base, high quality, proximity to market and the Company believes a new manganese producer in a stable well-regulated jurisdiction like Western Australia will be welcomed by existing consumers.

The Company has an offtake arrangement with OM Materials (S) Pte Ltd (OMS), a wholly owned subsidiary of ASX listed company OM Holdings Limited (ASX:OMH) (OMH) under a take-or-pay offtake arrangement[4].

Definitive agreements in relation to offtake for the expansion are at an advanced stage of drafting.

8. ECONOMIC ANALYSIS

Element 25 commissioned Model Answer, an independent Perth based financial modelling company, to develop a comprehensive financial model for its proposed manganese expansion case at Butcherbird. The financial model is based on capital and operating costs estimates described below. The model, including all cost assumptions and is calculated in Australian Dollars (AUD). Revenue assumptions are calculated in United States Dollars (USD) and converted to Australian Dollars using exchange rate assumptions. The model is shown in real dollar terms, no inflation, cost, or revenue escalation has been applied to the financial model. The

[4] Reference: Company ASX Release dated 12 October 2020.

model consists of 8 years of financial data modelled as 8 years of monthly data. The mine production has been scheduled outside of the financial model, but processing and intermediate stockpiles are handled within the model, this allows for variance of the production rate and hence production profile at different throughput rates.

The financial analysis of the Study shows that the project has the potential to return a positive NPV_8 of AUD 228.2M (Pre-Tax) AUD 150.6M (Post-tax), NPV_8 of USD 150.6M (Pre-Tax) USD 98.7M (Post-tax) with an annualized cash flow of AUD 57.3M (Years 1-5 average).

The Project requires a modest start-up capital investment of AUD 49.8 million and provides estimated returns supporting an internal rate of return of 113%.

8.1 Project Assumptions

The following assumptions have been made in the construction of the financial model for the Project and are relevant to the base and the two expansion options:

- AUD/USD exchange rate in 2024 of 0.66 increasing to 0.69 in 2027 and beyond.
- 20-year straight line depreciation for capex. Based on the ongoing potential of the Project.
- Discount Factor 8%.
- Project Capital costs totaling AUD 49.8m (USD 32.9M), which includes a contingency of AUD 3.97M (USD 2.62).
- Pre-Operational Expenditure of AUD 6.1M.
- State Royalties of 5%.
- Native Title Royalties, Farm Access payments and other varied government payments included.
- Manganese price forecasts sourced from Project Blue, July 2023.
- Expansion funding to be sourced from debt and equity.
- Independent mine schedules developed for the operating scenario.

8.2 Manganese Price

The manganese prices assumed for the project were sourced from a report written by Project Blue in July 2023. Project Blue presented 10 year forward estimates in Real values for manganese prices based on a standard 44%Mn CIF China benchmark price. The manganese price applied to the project is then adjusted from the benchmark pricing to allow for the manganese grade as well as silica present in the Butcherbird ore.

The manganese prices are then converted to an FOB Port Hedland manganese price by subtracting sea freight and insurance. Freight and insurances costs were sourced from industry sources. The pricing assumptions are supported by the pricing structure built into the offtake agreement, the terms of which are commercial in confidence. This discount equates to an approximately USD 1.19/dmtu for a 32%Mn product FOB Port Hedland manganese. The historical manganese pricing, benchmark manganese pricing and manganese pricing applied to the model are shown in the diagram below.

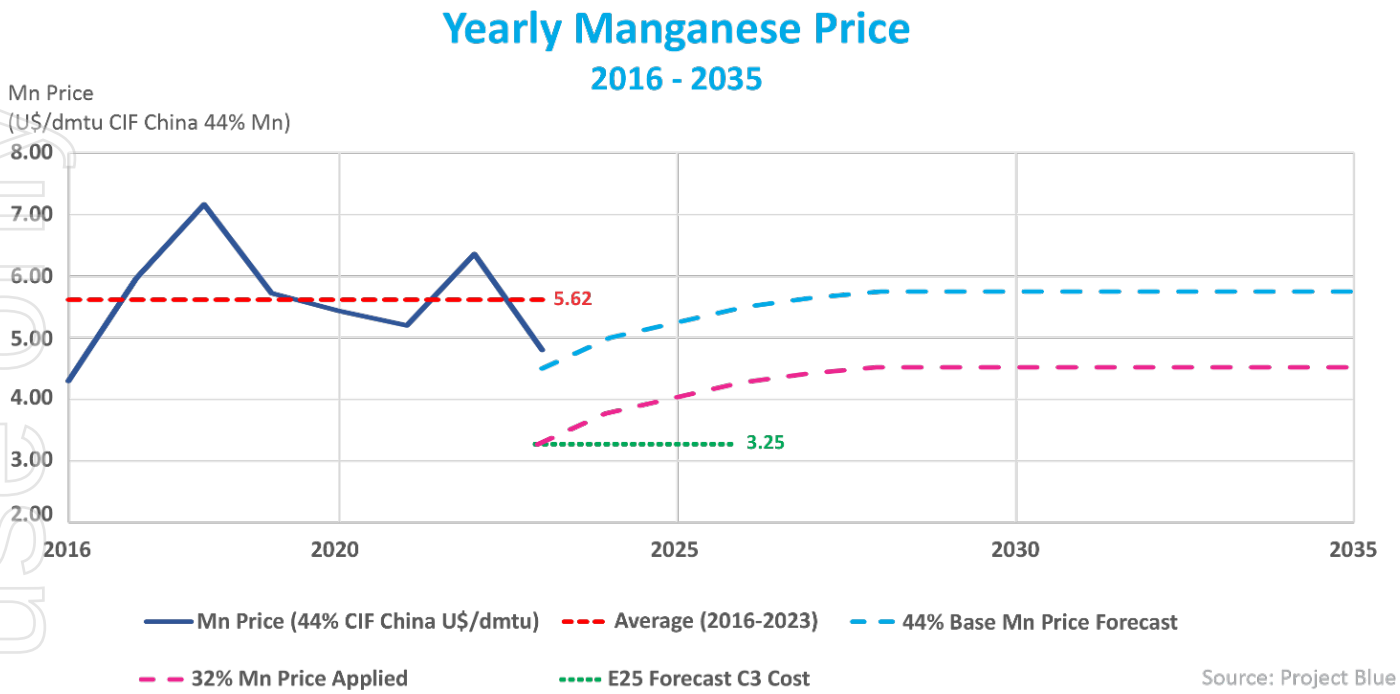


Figure 17. Historic and Forecast Mn Ore Prices (Project Blue 2023)

8.3 Key Financial Parameters

Table 3. Key Economic Metrics

Key Economic Metrics	Unit	1.1M tpa
Ore Mined	ktpa	5,800
Manganese Concentrate Produced	ktpa	1,100
Manganese Concentrate Grade	Mn%	32
Manganese Price	USD/dmtu 44% CIF China	5.00 – 5.75
Exchange Rate	AUD/USD	0.66 – 0.69
Undiscounted Cashflow	AUD M pa	56.3
Mine Life	Years	7.2
NPV_8 (Real) (Pre-Tax)	AUD M	228.2
	USD M	150.6
NPV_8 (Real) (Post-Tax)	AUD M	150.6
	USD M	99.4
IRR (pre-tax)	%	113
Operating Cost C1	AUD/dmtu 32% FOB Port Hedland	4.02
	USD/dmtu 32% FOB Port Hedland	2.76
Capital Cost	Project Capital AUD M	39.8
	Contingency AUD M	4.0
	Pre-Operational Expenditure AUD M	6.0
	Total Capital AUD M	49.8

8.4 Operating Costs Summary

For the expansion options all operating costs were reviewed according to the expense type. Fixed costs remained fixed or were adjusted where extra costs would be incurred, i.e.: Increased staffing. Where appropriate variable costs were checked to ensure suitability for use. In other cases variable costs where based on known usage of a cost component e.g. fuel, were calculated based on the increased power required for the plant for the expanded option. Due to the use of fixed costs in certain areas efficiencies of scale impacts were seen resulting in lower overall unit costs for the expansion cases. Unit operating costs for the expansion is shown below:

Table 4. Life of Mine Operating Costs C2, Projections

Operational Area	AUD /dt Product	AUD /dmtu produced	USD /dmtu produced
Site Cost	59.95	1.85	1.27
Logistics & Marketing	70.12	2.17	1.49
Royalties & Rehabilitation	12.41	0.39	0.27
Total Operating Cost	**146.28**	**4.52**	**3.03**

8.5 Project Sensitivity

The financial model was constructed so that the sensitivity or variance of model inputs could be evaluated. These sensitivities are shown graphically below:

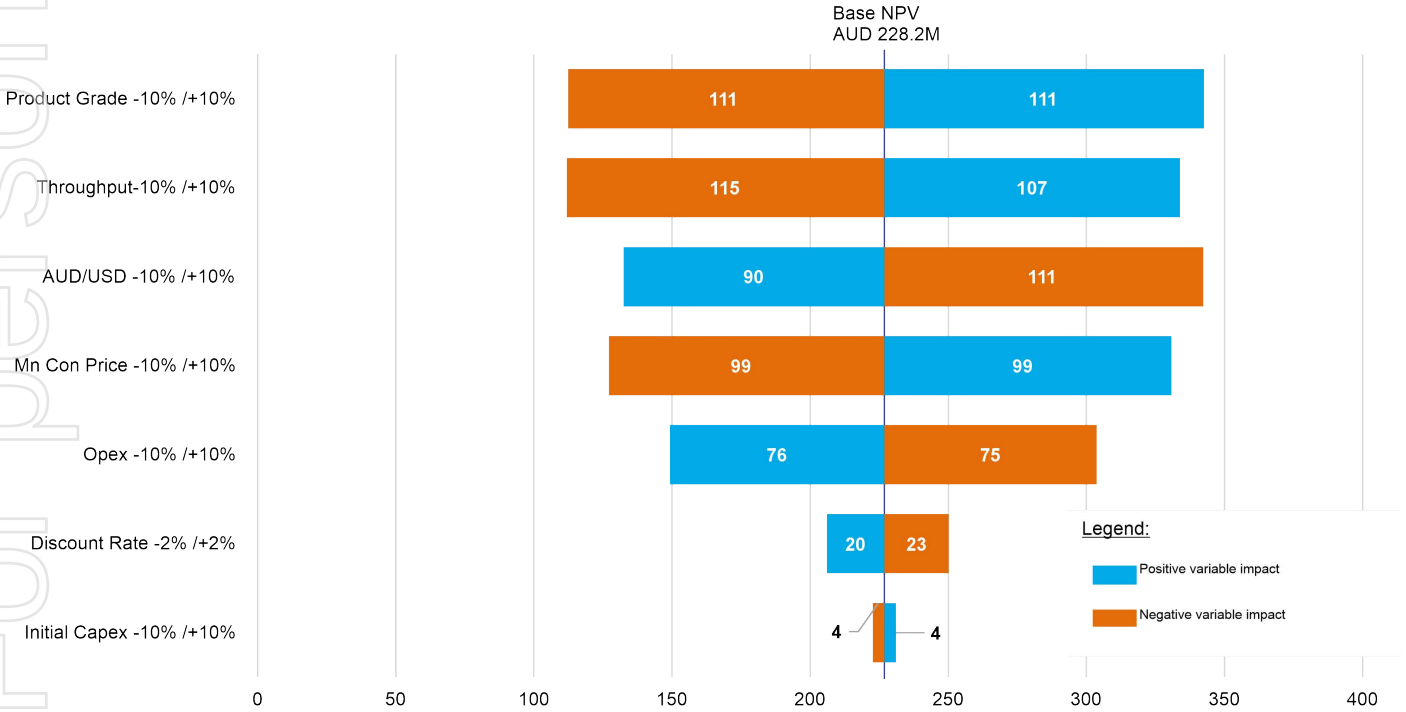


Figure 18. NPV Sensitivity Tornado Chart (note Mn Recovery variability is ±5%).

9. MATERIAL ASSUMPTIONS

The proposed base case operation at Butcherbird has been designed with future expansion in mind during the design and layout stages for all areas of the operation. This is shown in the plant layout shown below as Figure 19, where the expansion layout is pencilled into the east of the main plant design.

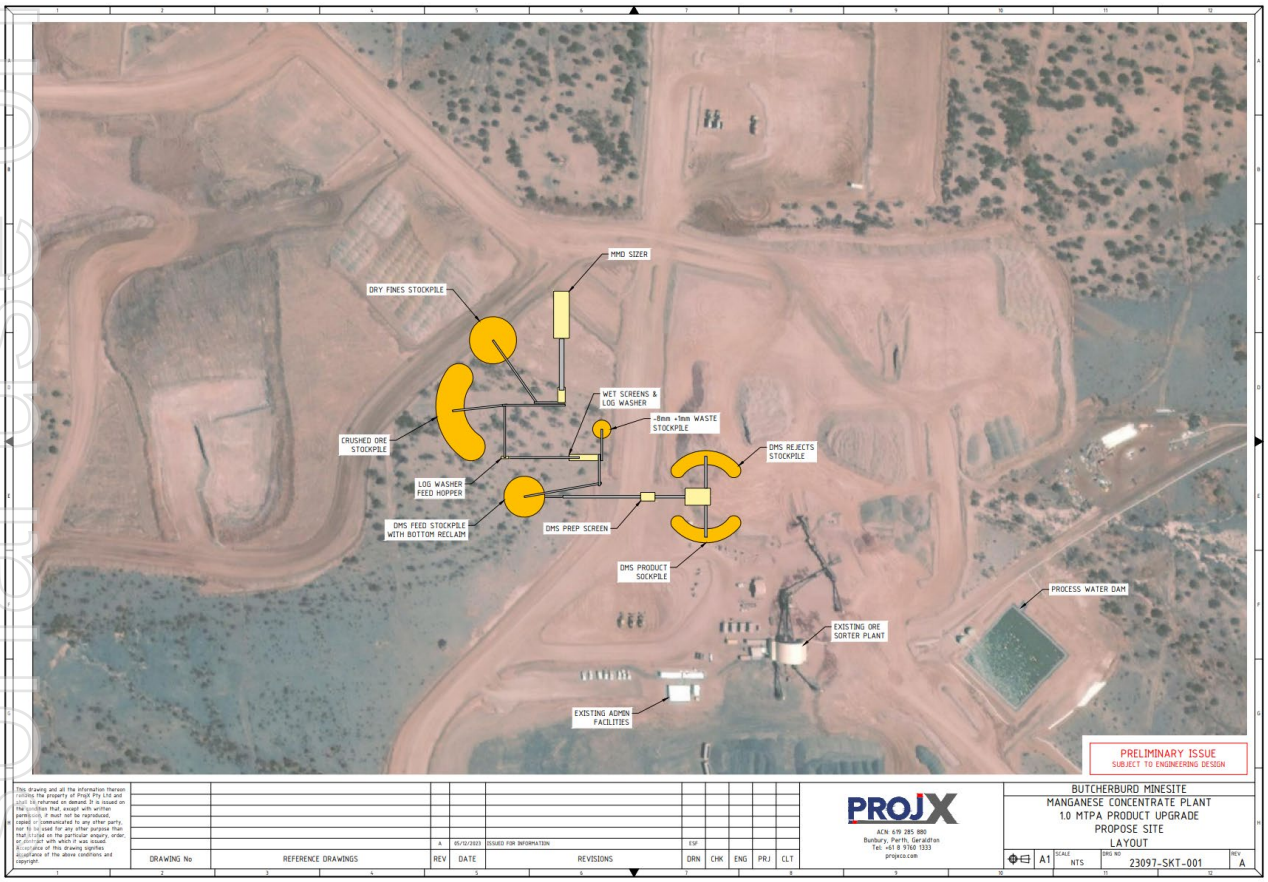


Figure 19. Proposed Plant Layout showing Expansion Proposal

Element 25 has a good understanding of the expected operational and capital costs for the expansion project. These costs have been used to update the capital assumptions and have been used.

The following table details the material assumptions taken within the analysis of the project expansion case.

MATERIAL ASSUMPTIONS

Mineral Resource Estimate - The most recent Mineral Resource estimate was declared on June 30 2023, in the Element 25 Annual Report for 2023. The estimate was prepared by a Competent Person in accordance with the JORC Code 2012.

The depleted Measured, Indicated and Inferred Mineral Resource estimate for the Butcherbird area is 260.9Mt at 9.9% Mn which includes 14.1Mt at 11.4% Mn in the Measured Resource category, 40.8Mt at 10.0% Mn in the Indicated Resource Category and 206Mt at 9.8% Mn in the Inferred Mineral Resource Category.

Approximately 26% of the total production target is in the Measured Resource category, 53% is Indicated Resource and 21% is Inferred Resources. Inferred Resources have not been used for the evaluation of the project.

The mine plan comprises 86% of current global Measured resources, 61% of current global Indicated resources.

A magnetite bearing gabbro sequence hosting the mineralisation strikes 80°-110° and dips at 2 to 7° to the north for 5km on 100% Element 25 controlled tenements.

The mineral resource has been subdivided into three oxidisation states; oxide, transition and fresh. Each zone exhibits different material characteristics including density, magnetic recovery, and hardness.

Mining Assumptions and Factors - The production target is 1,100,000t manganese lump concentrate per annum. Mining will consist of 4.8 million tonnes of ore and 720 thousand tonnes of waste per annum.

The mining design has been developed assuming conventional open pit mining methods using a hydraulic excavator, off-highway truck haulage to the ROM pad and loading ore directly into a crusher.

Mining costs were sourced from quotations received from the Company's mining contractor, who has sufficient experience to manage this style of operation.

Mining productivities and costs do vary marginally by bench as the mining faces advance. This has been included in the operational cost assumptions.

Mining factors for pit optimisation include 95% ore recovery and 5% dilution. Recovery factors were applied to all material types in the pit optimisation.

Pit slope angles of 40 degrees in all directions and rock types were used for pit design.

For the purpose of modelling and financial evaluation Inferred Resources has been included as ore and the impact of this has been included in the evaluation of the project.

Cut-off Grades - Cut-off grades have been calculated as 7% Mn based on work completed during the Study.

Low grade domains, basal shales are not considered for processing as ore in the base case.

It is considered that the cut-off grades used for all cases are suitable as the optimisation selects the majority approximately 98% of all mineralisation within the base case.

Lower cut-off grades for higher throughputs will only marginally increase mineralisation conversion.

Open Pit Optimisation - Optimisation parameters used from the May 2020 PFS and adjusted for Q4 2023 costs are considered suitable for optimisation purposes.

Mine Design - Mine Designs based on optimised pit shells are considered suitable for all cases.

Mine Schedule - The mining has been scheduled to allow for 1.1M tpa plant production.

Mining Costs - Sourced from the companies Mining Contractor in September 2023.
The mining fleet will consist of the following equipment;

- Excavator PC 1250.
- Dump Truck HJ85 x 3-5, varies by haul distance.
- Dozer D10.
- Grader 140M.
- Moxy Water Cart.
- WA500 Loader (982) x 2.
- Moxy Dump truck A60 x 2.
- Service Truck.

The mining Fleet will operate on a day and night shift basis on a continuous basis to meet production requirements. Extra trucks will be brought in in future years to allow for longer haulage distances. Mining Costs are commercial in confidence.

Organisation Chart - Staffing numbers as per organisation chart developed for this scenario.

Mining Staff costs sourced from mining labour hire companies and Industry salary surveys.

BUTCHERBIRD EXPANSION FEASIBILITY STUDY

Proposed Expansion Organisation Structure

Position	No.	Position	No.	Position	No.	Position	No.
GMO	1	**Mining Manager**	1	**Snr. Geologist**	1	**Plant Manager**	1
		Planning Eng	1	Mine Geo	2	**Process Metallurgist**	1
Admin Clerk	2			Pit Tech	2	**Production Manager**	1
				Lab Super	1	**Production Supervisor**	3
OHSE	2	**Mining Contractor**		Lab Tech	2	CRO	3
		Manager	1			Plant Operators	3
		Supervisor	1			**Maint. Manager**	1
		Maint Sup	2			Maint. Planner	2
		Clerk	2			**Maint. Supervisor**	3
		Operators	44			Fitter	6
						Boilermaker	3
						Electrician	3
						Stores	
						Purchasing Officer	2
						Stores	2
Total	5		52		8		34
						Total	99

Miscellaneous Mining Costs - Miscellaneous costs including Geology and Survey consumables sourced from Element 25 database costs.

Process Design Criteria - A conventional crushing and beneficiation process has been designed to produce manganese concentrate as described in the body text above.

The designs are based on preliminary annual average mine schedule data and metallurgical test-work and benchmark information where required.

Process detail design has been undertaken by Projx engineering consultants.

Major Mechanical Equipment -

Item	Supplier	Model	Nominal Throughout
			(t/Hr)
Apron Feeder	MMD	D4 MMD Apron Feeder	735
Wobbler Feeder	Mclanahan / MEKA	MEKA MWF 1860	1060
Mineral Sizer	MMD	MEKA MWF 1860	95.2
Dry Screen	Dabmar	SS2200 G X 8.7m (7' X 24')	1060
Log Washer	Kisa	SWLX500/3500/10000/2	292
HMD Drum	Malvern		245
Thickener	McLanahan		1120
Dust Suppression	Wet Earth	Nesco system.	-

Processing Costs - Plant equipment consumables and repair costs sourced from Supplier estimates.

Plant power usage sourced from Supplier estimates.

Power supply designed for this operating scenario.

Diesel costs sourced from supplier quotation. Fuel price was assumed to be $2.00/ltr less the primary producer of $0.49/ltr.

Plant labour allocated as per the Organisation chart developed for this scenario. Labour efficiencies achieved through plant layout design. Plant staff costs sourced from Labour Hire companies and Industry Salary Surveys.

Plant mobile plant & loaders pricing included in the Mining Tender completed in Sept 2020. Costs are commercial in confidence.

Metallurgical Factors - A comminution and beneficiation process using a combination of conventional techniques including crushing, scrubbing, screening, and dense media separation has been proposed to produce a manganese concentrate. Metallurgical test-work supports these processes which are well proven and in operation across the mining industry. The metallurgical recoveries adopted for the base case of 83% metallurgical recovery were based on metallurgical assessment of the orebody since the commencement of operations in 2021.

Capital Costs - Capital Costs are based on process design criteria, material balances, electrical load schedule and a selected equipment list. The main equipment pricing is sourced from vendor quotes. Quotes and estimates were utilised for infrastructure and mine support facilities. All costs are estimated in Australian dollars as at Q4 2023 and are calculated to have an overall project accuracy of +/-10%.

The capital costs summary is tabulated below:

Section	AUD M	Comments
Crushing Station	8.7	Suppliers sourced quotes based on engineering designs and scopes of work TSF Includes 2 year expansion of existing TSF and then costs including in Sustaining capital
Screening & Washing Station	4.4	
DMS Circuit	10.8	
Additional	3.8	
Camp & Ancillaries	5.2	
Tails Storage Facility	0.9	
ROM Pad	0.7	
Decant Pond	0.6	
Borefield Upgrade	0.9	
Office Move & Expansion	0.4	
Services & Systems	0.8	
Fuel Bay	0.3	
Washdown Bay	0.2	
Air Strip	2.2	
Sub Total	**39.7**	
Contingency	4.0	10% allowance
Pre-Operational Expenditure	6.1	
Building Construction Training Fund	0.1	
Total	**49.8**	

Table 7: Material Assumptions

Tails Storage - Tails storage costs derived from water balance requirements designed for the operating scenario. Pumping and power designed for this scenario and costs sourced from Supplier quotes based on detailed designs.

Tails storage facility wall lifts will be included in the Mining Contractors Scope of work.

Pricing used in the study was sourced from works completed in April 2023. Costs are commercial in confidence.

Power Supply - Power will be derived from Hire Diesel Generators designed to suit the plant power usage for this scenario.

Hire costs sourced from supplier quotations.

Diesel usage as per supplier guidelines.

Diesel costs sourced from supplier quotations.

Element 25 will review the use of Solar renewable power to supplement diesel power once operational.

Water Supply - The borefield operation has been reviewed as part of the expansion planning. The borefield will be upgraded to meet the expansion water requirements.

Extra bores will be equipped to supply water for the expansion, and duplicate piping will be required to maintain water flow volumes.

Pump hire and operating costs were sourced from suppliers. Gensets for the borefield will be sized for the power required for each scenario.

Genset hire and diesel costs were sourced from supplier quotations.

Administration - Site administration staffing numbers as per an Organisation chart developed for this expansion.

Site administration miscellaneous costs have been derived from Database costs and are in-line with similar operations of this scale.

Ore Haulage - Ore haulage costs from Butcherbird to Utah Point at Port Hedland have been sourced from supplier quotations.

Haulage for the base case involves the use of 21 quad roadtrains of 132t each per day. Haulage costs including fuel are approximately 9.5c/tkm.

Port Charges - Utah Port handling and ship loading charges are based on quotations from Pilbara Ports and Qube contractors.

There are no economies of scale available as charges are throughput based.

Perth Office - The BB expansion project is a project level feasibility study and only includes costs and revenues associated directly with the expansion of BB. Other costs i.e. Perth office and HPMSM costs have not been used in this study.

Royalties - Three Royalties have been allowed for, for the project.

- State Royalties have been based on 5% of the value of each monthly shipment based on a schedule of rates from the Mining Act. These are payable quarterly.
- Native Title Payments are based on Mining Agreements with the 2 Native Title Parties. The details of these payments are commercial in confidence.
- Pastoral Access Agreements have been included as per agreements with the two Pastoral Stations which the project sits on. The details of these payments are commercial in confidence.

Environmental - Base case environmental surveys have been completed and no environmental issues have been found

Approvals - The company has lodged and received approval for the Native Vegetation Clearing Permit.

The Mining Proposal and Works Approval will be lodged in Q4 2023 and expect to be approved within 12-16 weeks.

No issues of significance were encountered during the various surveys or applications.

The driveway access to the great northern highway has been granted. The Old Great Northern Highway has been de-gazetted.

Market Assessment - Manganese market information and forward-looking manganese prices have been sourced from the commissioned "Manganese Medium Term Outlook" dated July 2023, by Project Blue.

The current price of manganese at the time of writing is approximately USD 4.50/dmtu 44% CIF China. The long-term average manganese price utilised is USD 5.75/dmtu 44% Mn CIF China.

Social - Element 25 has signed mining agreements, which include heritage agreements, with the Karlka Nyiyaparli and Ngarlawanga Native Title Claimant Groups.

Element 25 has conducted three aboriginal heritage clearance programs coinciding with previous drilling activities at Butcherbird.

The company has a mining agreement with the Bulloo Downs and Kumarina Pastoral station to enable mining and other development activities on lands impacted by mining or required for development of the project.

Site personnel will be mostly contractor based overseen by a small Element 25 management team.

The site will operate on a Fly In/Fly Out (FIFO) basis, utilizing Newman as a transport hub. Finalised site rosters are yet to be determined.

The company will move to a new local Butcherbird Airstrip early in the expansion.

10. BUSINESS PLAN RISKS

Element 25 has undertaken a comprehensive risk management review, which identified key business and operational risks and have developed strategies to mitigate and control these risks.

10.1 Operating Costs

The top four cost areas are manganese ore transport, processing, mining and royalties. Manganese ore transport is minimised by establishment of long-term relationships with haulage contractors utilising maximum payloads available on the roads. Fuel pricing needs to be managed through appropriate rise and fall clauses in all contracts as well as long term arrangements with fuel providers.

Processing costs are mitigated by establishing fit for purpose maintenance systems focusing on reliability with a multi-skilled flexible workforce. The balance between owned/operated equipment and contract services will be optimised to minimise operating costs. Plant utilisation and availability has been conservatively modelled and there is a natural opportunity available by improved plant performance.

Mining costs are minimised by minimising equipment hours by application of suitable mining planning systems. Ultimately, the Company should review the opportunity to convert to an owner-mining cost model at the appropriate time.

Royalties and other state charges are fixed via State Regulations. Land Access Agreements with native title and pastoral property holders are also fixed or tied to production volumes.

Operating cost areas which may have savings are in the construction of an airstrip to allow flights into and out of site, this minimises plant downtime during shift changes. The option to add a solar or wind farm into the power supply for the site should also be considered.

Further review may allow operational cost savings in these areas which have been excluded from capital costs at start up.

10.2 Revenue

The Project will always be a price taker regarding what manganese prices can be achieved.

The opportunity exists to establish long term relationships with potential offtake partners, traders, and manganese smelters wherein the properties of the Project manganese including impurity levels can be used as a marketing tool. Credits may be available for some impurities and these opportunities will always be explored. The opportunity to sell screened or sorted by waste streams may add value if local disposal can be achieved.

10.3 Social Licence

Although the Project has minimal interaction with local pastoralists, native title groups and local communities, all efforts must always be taken to ensure that these stakeholders and other statutory requirements and concerns are met and that all agreements are complied with.

The Company will develop a schedule of statutory and other reporting requirements to actively manage all stakeholder requirements.

11. ENVIRONMENTAL, HERITAGE AND APPROVALS

11.1 Environment

All environmental baseline studies have been completed for the Project, including flora and vegetation, fauna, short range endemics (SRE), groundwater, surface water, subterranean stygofauna, groundwater, waste rock characterisation, tailings characterisation, landform and soils and tailings characterisation have been completed.

Statutory approvals including a Mining Proposal including Mine Closure Plan and Native Vegetation Clearing Permit, Works Approval, Project Management Plan, and water Abstraction Licence have also been developed and submitted for the relevant departmental approval.

The Native Vegetation Clearing Permit has been updated and approved for the Butcherbird stage 2 expansion. The Project Management Plan and Works Approvals are due for completion in Q1 2024. It is anticipated that it will be approved by the end of Q2 2024.

11.2 Flora, Fauna, and Communities

No threatened flora, vertebrate fauna or ecological communities listed at Federal or State levels or Groundwater Dependent Ecosystems (GDEs) are present within the Project area. Four priority flora species and one priority fauna species were identified in baseline surveys, although these are to be expected in the sub-region. Priority species are listed by the State's Department of Biodiversity, Conservation and Attractions (DBCA) generally in the regard of being poorly known taxa, but as areas are surveyed the understanding of listed species are increased.

The priority fauna species (Brush-tailed Mulgara) associated habitat is distributed outside of the mining lease area (not to be disturbed). Priority flora populations were found both within and external to the project tenements and proposed disturbance footprint. Project impacts to Priority flora species will be managed through avoidance as part of the project design. Project impacts on flora, vegetation and fauna are not considered as significant currently.

11.3 Subterranean Fauna

Mining in the Butcherbird Stage 2 development is planned to go into the water table. A stygofauna assessment of drill holes within the proposed mining footprint was conducted in 2022. This showed the absence of any stygofauna with the proposed mining area. This is consistent with the known geology of the Yanneri Ridge and Coodamudgi mineral resources, which are unlikely to host stygofauna.

Annual subterranean stygofauna surveys have been undertaken at the Butcherbird bore field, since 2020. These results have confirmed the existence and spread of existing and known stygofauna species across the borefield. The impact area for groundwater drawdown, within the bore field has been designed to ensure habitat availability remains at least 70% of pre mining habitat during the period of active abstraction. This is consistent with current industry practices for stygofauna impact minimisation.

11.4 Surface water

Surface water characteristics of the site include flow velocities generally less than 0.5 m/s with some higher velocities located adjacent the Great Northern Highway and Old Road. Modelling of 10, 50 and 100 year rainfall events indicates fairly stable water accumulation (ranging between 0 – 0.5 m deep across ARI events) throughout site, but with ponding likely to occur in heavy

downpours at particular locations near Old Road to the east and Great Northern Highway to the west. These conditions have been considered for project design.

11.5 Groundwater

Hydrogeological studies and test bores have found a silcrete aquifer approximately 6km Southeast of the project area[5]. This aquifer will be developed as part of the project development plan.

11.6 Heritage

Nine Aboriginal heritage surveys have been conducted for the Project. While artefacts were found, and several unregistered sites identified in the local vicinity, there are no registered heritage sites within the mining lease.

11.7 Cyclones

Newman is situated 350 kilometres inland and sits in Wind Region A4 in the Building Code of Australia (BCA). Of the major towns in the Pilbara, Newman is least at risk to tropical cyclones. However, whilst cyclones weaken as they move inland, the intensity of the winds can remain capable of causing damage.

11.8 Project Finance

Project specific funding of approximately $49.8m (excluding working capital and financing costs) is required to achieve the first production indicated by the FS. Subsequent to completion of the FS, the Company will explore and assess available options to fund the project. A combination of equity and debt financing options are being considered, with discussions with potential financing parties having commenced.

Market studies outlined in this FS indicate robust long-term demand for manganese both in existing markets and emerging HPMSM markets. Based on the strong financial metrics presented as part of the FS results, long term demand indicators for manganese, and the progress of various ongoing discussions, the Company considers there are reasonable grounds that the project outlined in this FS can be financed subject to prevailing market conditions.

There is no guarantee that the Project will be financed and continues to be subject to prevailing market conditions.

It is also possible that funding may be dilutive to existing shareholders which may affect the value of the Company's existing shares. It is also possible that the Company will pursue other strategies to provide alternative funding options including undertaking a corporate transaction.

The ultimate financing structure for the Project will be dependent on several factors but will be determined on the basis of delivering an optimal outcome for shareholders.

[5] Refer: ASX Announcement 3 Aug 2020.

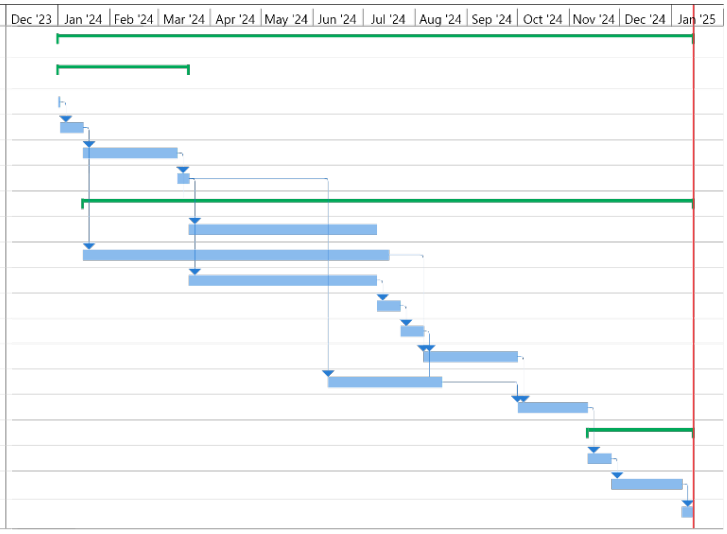
12. PROJECT EXECUTION

The Project is intended to be implemented using an engineering, procurement and construction (EPC) methodology. Under this methodology, E25 will enter into a head contract with a suitably experienced contractor to carry out the following works:

- Detailed final engineering;
- Procurement, fabrication and delivery to site of all plant, equipment and materials;
- Construction of the facilities;
- Pre, dry and wet commissioning of the facilities, where appropriate; and
- Ore commissioning assistance of the processing plant facilities by the contractor assisted by E25's owners and operations teams.

A project implementation plan and schedule has been developed based on forecast lead times for equipment procurement, permitting, project financing and construction. The total time required for project delivery is estimated at approximately 10 months from FID.

Task Name	Duration	Start	Finish
Butcherbird Operation	**371 days**	**Mon 1/01/24**	**Mon 13/01/25**
Design Phase	**77 days**	**Mon 1/01/24**	**Mon 18/03/24**
Project Kick-Off Meeting	1 day	Mon 1/01/24	Mon 1/01/24
Appointment of Contractors	2 wks	Tue 2/01/24	Mon 15/01/24
Detail Design	8 wks	Tue 16/01/24	Mon 11/03/24
Signoff	1 wk	Tue 12/03/24	Mon 18/03/24
Implimentation	**363 days**	**Tue 16/01/24**	**Mon 13/01/25**
Procure materials	16 wks	Tue 19/03/24	Mon 8/07/24
Order Long Lead Items	26 wks	Tue 16/01/24	Mon 15/07/24
Manufacturing	16 wks	Tue 19/03/24	Mon 8/07/24
Packing	2 wks	Tue 9/07/24	Mon 22/07/24
Import / Export Authorization	2 wks	Tue 23/07/24	Mon 5/08/24
Transport	8 wks	Tue 6/08/24	Mon 30/09/24
Civil Design and Construction	10 wks	Mon 10/06/24	Fri 16/08/24
On Site Construction	6 wks	Tue 1/10/24	Mon 11/11/24
Commisoning	**62 days**	**Tue 12/11/24**	**Mon 13/01/25**
Dry Commissioning	2 wks	Tue 12/11/24	Mon 25/11/24
Wet Commissioning	6 wks	Tue 26/11/24	Mon 6/01/25
Final Handover	1 wk	Tue 7/01/25	Mon 13/01/25



This will be overseen by an experienced E25 Manager, who will assume responsibility for the implementation of the plan.

13. CONSULTANTS AND CONTRIBUTORS

The internal E25 team has unique expertise in process design, start-up, and operation of manganese operations throughout the world. E25 has partnered with a similar team of outstanding professionals across multiple disciplines to assure that the Butcherbird Project Study is of the highest quality. The external team includes input and services from:

Table 6. Butcherbird FS Major Consultants and Contributors

Group	Abbreviation	Function
4DG	4DG	Open Pit Excavatability assessment
ALS Laboratories	ALS	Metallurgical test-work
Civil Group Pty Ltd		Access Road and Pipeline engineering
DSI Solutions Int		Dust Suppression
HPS (WA) Pty Ltd	HPS	Mn Marketing, Offtake and Logistics support
IHC Robbins	IHC	Resource Modelling
Jenike & Johanson		Chute design and hold-up of material calculations
Karlka Nyiyaparli		Native Title Clearance and Approvals
MBS Environmental Pty Ltd	MBS	Environmental surveys Preparation of the environmental approval documents
Mine Planning Services	MPS	Open Pit Optimisation, Design and Scheduling
Mining Solutions Pty Ltd		Project management, Mine Engineering, Financial Modelling.
MMD		Crushing circuit design
Molycop		IOT system
MWES Pty Ltd	MWES	Water Resource Definition and assessment
PESCO		Ore Processing and DMS Testwork
Peter O'Bryan and Associates	POB	Open Pit Geotechnical Review and Waste Dump Stability assessment. GGPL safety assessment
Project Blue		Manganese market and pricing assessment
ProjX		Overall plant design and Project Management
Resource Engineering Consultants	REC	Tailings storage planning and design
VBKOM		DMS Process and Plant Design

14. COMPETENT PERSONS STATEMENT

14.1 Disclaimer

The Company confirms that in the case of estimates of Mineral Resource or Ore Reserves, all material assumptions and technical parameters underpinning the estimates in the market announcements dated 17 April 2019 and 19 May 2020 continue to apply and have not materially changed. The Company confirms that the form and context in which the competent person's findings are presented has not been materially modified from the original market announcements.

14.2 Competent Person Statement

The information in this statement that relates to Mining, Metallurgical and Financial Modelling is based on information compiled by independent consulting mining engineer Ian Huitson (B.Eng. Mining Eng, Fellow AusIMM, CP Min). Mr Huitson is a Fellow of The Australasian Institute of Mining and Metallurgy. Ian Huitson is employed by Mining Solutions Pty Ltd. Mr Huitson is a shareholder of Element 25 Limited. Mr Huitson has visited site on a number of occasions as part of the ongoing studies and the development and operation of the Butcherbird Project. Mr Huitson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Huitson consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which it appears.

This announcement is authorised for market release by Element 25 Limited's Board of Directors.

15. ACRONYMS & DEFINITIONS

Table 7: Acronyms & Definitions.

Abbreviation	Definition
ACN	Australian Company Number
ASX	Australian Securities Exchange
BOOT	Build Own Operate and Transfer
Butcherbird	Element 25's Butcherbird Manganese Mine, located in Western Australia
C	Celsius
CAPEX	Capital Expenditure
CCR	Central Control Room
CIF	Cargo Insurance and Freight
Concentrate	Bulk manganese oxide concentrate product from Butcherbird
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CWI	Crushing Work Index
D&C	Design and Construct
DCS	Distributed Control System
DD	Detailed Design
DID	Natural Resources and Environment Board
DMIRS	Department of Mine, Industry, Resources and Safety
dmtu	Dry Metric Tonne Unit
DOBM	Design One, Build Many
dwg	An Autocad™ drawing file format
dxf	An Autocad™ design file format
EDG	Emergency Diesel Generator

Abbreviation	Definition
Element 25 or E25	Element 25 Limited – The ASX listed Element 25 entity
EMP	Environmental Management Plan
EPC	Engineering, Procurement and Construction
EPCM	Engineering, Procurement and Construction Management
ESG	Environmental, Social, and Governance
EV	Electric Vehicle
F	Fahrenheit
FEED	Front End Engineering Design
FEL	Front End Loader
FID	Final Investment Decision
Fig	Figure
FS	Feasibility Study
FY	Future Year
GHG	Greenhouse Gas
GWh	Gigawatt hour
Ha	Hectare (equals approximately 2.47 acres)
HAZID	Hazard Identification Workshop
HAZOP	Hazard and Operability Workshop
HDPE	High Density Polyethylene
HPMSM	High Purity Manganese Sulphate Monohydrate with the chemical formula MnSO4.H2O
HR	Human Resources
HV	High Voltage
Hwy	Highway
I/O	Input/Output
IMnI	International Manganese Institute
IP	Intellectual Property
IRR	Internal Rate of Return
JORC	The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
k	Thousand
km	Kilometre / Kilometer (1,000 metres)
ktpa	Thousand tonnes per annum
kWh	Kilowatt hour
LCA	Life Cycle Assessment
LV	Low Voltage
M	Million
MACRS	Modified Accelerated Cost Recovery System

Abbreviation	Definition
MCC	Motor Control Centre
MEL	Mechanical Equipment List
MERV	Major Equipment Replacement Value
Mn	Manganese
MoC	Materials of Construction
MSL	Mean Sea Level
Mt	Million tonne
Mtpa	Million tonne per annum
NPI	Non-Process Infrastructure
NPV	Net Present Value
OEM	Original Equipment Manufacturer
OPEX	Operating Expenditure
P&ID	Piping and Instrument Diagram
P2P	Procure to Pay
PCS	Process Control System
PDC	Process Design Criteria
PFD	Process Flow Diagram
pH	pH is a measure of the hydrogen ion concentration (acidity scale between 1-14)
PLC	Process Logic Controller
PMC	Project Management Consultant
PPE	Personal Protective Equipment
Project Blue	Project Blue LLC. An independent manganese market analysis provider
Q1	First (1st) quarter of a nominated year
Q2	Second (2nd) quarter of a nominated calendar year
Q3	Third (3rd) quarter of a nominated calendar year
Q4	Fourth (4th) quarter of a nominated calendar year
QRA	Quantitative Risk Assessment
R&D	Research and Development
RO	Reverse Osmosis
SDC	Seismic Design Categories
SI	International System of Units
SLD	Single Line Drawing
Study (or FS)	This Feasibility Study
SysCAD	Process Plant Simulation Package for Minerals Processing
T	Tonne (metric), 1,000Kg
TBC	To be Confirmed

Abbreviation	Definition
TDS	Total Dissolved Solids
tpa	Tonne/s per annum
tph	Tonne/s per hour
UPS	Uninterruptable Power Supply
VOIP	Voice over Internet Protocol
WBS	Work Breakdown Structure

The future has always been electric...

Element 25

BUTCHERBIRD EXPANSION STUDY

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