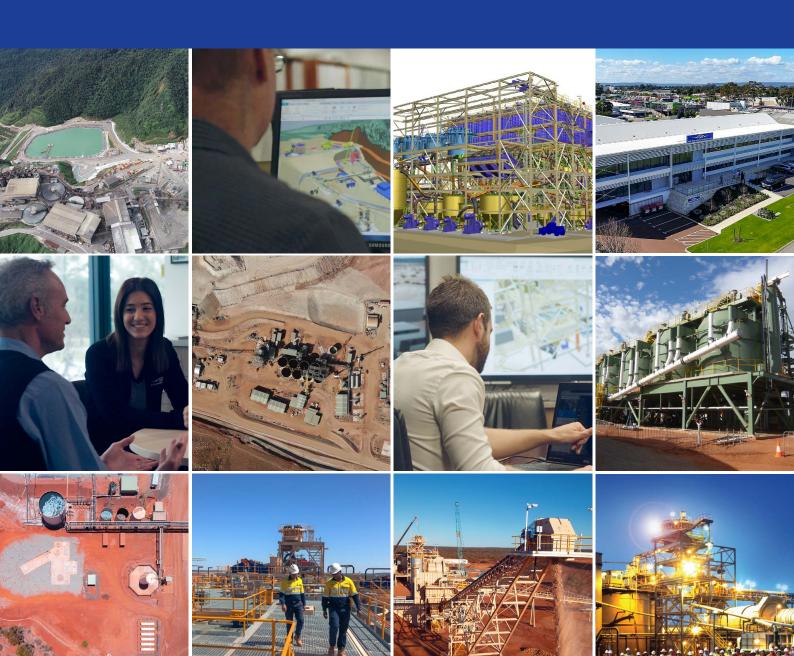


# CAPABILITY STATEMENT









# **Contents**

- 4 Company Overview and History
- GR Engineering at a Glance 5
- Our Values 6
- Management Systems 7
- 7 Financial
- 8 Management Team
- Value Engineering 10
- 10 **Project Capability**
- Engineering Capability 11
- 12
- Project Delivery Capability
  Project Delivery Track Record 14
- 16 Study Capability
- Project Study Track Record 18



GR Engineering is a process engineering, design and construction company providing high quality solutions to the global resources and mineral processing industry.





# GR Engineering has successfully delivered projects on time and on budget under both EPC and EPCM models.

# **Company Overview and History**

GR Engineering is a process engineering, design and construction organisation. We strive to provide workable, innovative and cost effective solutions and quality services to the global resources and mineral processing industries through integrated, efficient and practical designs whilst maintaining a high level of safety and operational performance.

GR Engineering personnel have the capability and proven track record to undertake projects from the initial evaluation and study phase through to design, construction, commissioning and operational support.

GR Engineering was formed in October 2006 under the direction of Joe Ricciardo, previously Managing Director of JR Engineering Services (JR) and General Manager of Roche.

Initially undertaking feasibility studies and project delivery services for the gold and base metals sectors in Australia, GR Engineering expanded and now deliver projects internationally for a broad range of metals and industrial minerals (including heavy minerals and mineral sands).

GR Engineering became an ASX public listed company in April 2011. The company's shares are majority owned by Executive and Senior Management thereby promoting a 'hands on' approach to company operations and management. Many of the staff employed by GR Engineering have worked together over a twenty year period, and form a strong, stable and reliable team. GR

Engineering believe that the company success is a direct result of employing experienced and loyal people having a professional work ethic.

The GR Engineering offices in Perth and Brisbane service clients in Australasia, Africa, Europe and the Americas.

In April 2014, GR Engineering acquired Upstream Production Solutions (UPS) which provides specialist operations and maintenance in the hydrocarbon and gas sectors under the brand GR Production Services (GRPS).

In February 2020, GR Engineering acquired Arizona based multi-disciplinary engineering firm Hanlon Engineering and Associates Inc. under the brand GR Engineering Services, Inc. (GRES Inc). The Americas head office is located in Tucson and has an experienced management team, solid technical and commercial base and longstanding relationships with major mining companies including Barrick, Freeport and Kinross.

In May 2021, GR Engineering acquired Mipac which is a global leader in operational technology, control systems and engineering services. Mipac provide expert services to mining, minerals, chemicals and manufacturing businesses. In February 2024, Mipac acquired Paradigm Engineers (Paradigm). Paradigm provides control systems and electrical engineering, automation and technology services and expands Mipac's existing footprint in Western Australia.



# GR Engineering at a Glance

# An experienced multi-disciplinary team

GR Engineering employs personnel who generally have 10 to 20 years industry, design and project delivery experience with a strong operations implementation background. management and Most of our personnel have worked together in project teams to successfully deliver feasibility studies and projects in the mineral processing Engineering currently industry. GR employs over 350 professional engineering and support personnel in addition to a directly employed multidiscipline site construction workforce consisting of Structural, Mechanical, Piping and (SMPE) trades. Combined with GRPS, GRES Inc, Mipac and Paradigm, the GR Engineering Company employs in excess of 1000 professional and trades personnel.

# Long term relationships driving value for our clients

GR Engineering personnel have an intimate appreciation of the company's culture, ethics and values. Our most significant asset is the quality of our people together with our ability to develop and mentor new personnel.

GR Engineering has an excellent reputation with financing institutions, providing confidence in completed feasibility studies prepared by GR Engineering, our successful and proven industry record in executing project design and construction on time and on budget is a hallmark of GR Engineering.

# Successful track record of 'company-making' projects

GR Engineering has delivered 'company making' projects for mining companies recognising the critical importance of cost, time and performance to all stakeholders. Inaugural company making projects delivered by GR Engineering include:

- AIC Mines Limited (Eloise Expansion Project)
- Greenstone Resources (WA) Pty Ltd (King of the Hills Upgrade Project)
- Evolution Mining Limited (Mungari Future Growth Project)
- LRL (Aust) Pty Ltd (Kathleen Valley Lithium Backfill Project)
- BHP Limited (West Mustgrave Project)
- Kimberley Mineral Sands Ltd (Thunderbird Mineral Sands Project)
- Golden Spur Resources Pty Ltd (Bellevue Gold Project)
- Aurenne Mt Ida Pty Ltd (Mt Ida Gold Project)
- Abra Mining Pty Ltd (Abra Base Metals Project)
- Northern Star Resources (Thunderbox Expansion Project and Paste Plant)
- Pantoro Ltd (Norseman Plant Replacement Project)
- Calidus Resources Ltd (Warrawoona Gold Project)
- Saracen Gold Mines Pty Ltd (Carosue Dam Project)
- Salt Lake Potash (Lake Way Potash Project)
- Tellus Holdings (Sandy Ridge Geological Waste Repository Project)
- Kirkland Lake Gold (Fosterville Gold Project Paste Fill Project)
- OK Tedi Mining (Crushing Plant Replacement Project)



# **Our Values**

GR Engineering is founded on a strong belief in our Core Values. These Core Values drive our people and underpin our corporate goals. Our values are:

- Provision of a safe, healthy and hazard free workplace
- Our clients are our focus
- A commitment to innovation and quality
- Our people are our most significant asset
- We will always act with honesty and integrity
- Respect for the community and the environment

Our Values support our Vision, "to be a market leader in safe, quality, cost competitive and timely engineering solutions to the global mineral processing market".

Success achieved through visible and stable leadership, continuous education and a commitment to our values and policies.

# Management Systems

### Workplace Health and Safety Management

GR Engineering is founded on a strong belief in our core values. These values drive us to constantly improve our working environment. Our commitment to work health and safety of all our employees and subcontractors is managed to ensure a safe working environment where no-one works in an unsafe manner. We are committed to the target of "zero harm".



GR Engineering has an excellent safety record and we are proud of our safety performance. GR Engineering OHS Systems are accredited through Bureau Veritas. GR Engineering is also Federal Safety Council accredited and permitted to design and deliver projects with NAIF participation.

### **Environmental Management**

GR Engineering understands the potentially sensitive nature of our client's business and project locations and the potential impacts and interfaces with the local environment and communities.

GR Engineering works with our clients and their stakeholders and strives to identify and reduce potential environmental impacts at the design stage with the aim of delivering projects with zero environmental incidents.

# **Quality Assurance**

GR Engineering operates a Quality Management System that is certified by Bureau Veritas AS/NZS ISO 9001.

GR Engineering also operates an Occupational Health and Safety Management System that is certified by Bureau Veritas AS/NZS ISO 45001.

GR Engineering holds Federal Safety Council (FSC) Accreditation under the Work Health and Safety Acceditation Scheme.



# **Financial**

The continued successful growth of GR Engineering in Australia and internationally is reflected in the increasing size of the company and it's ability to deliver strong financial outcomes over a long period of time.

In an industry where financial management and cost control is vital, GR Engineering utilises Greentree and other systems to manage project costs. The system is recognised as ideal for our industry and allows GR Engineering to accurately track and manage all financial aspects of our company and projects in real time.

# ASX listed company with an excellent record with financial lending institutions and a track record of successful project delivery.











# Management Team

# **Company Board**

Phil Lockyer Non-Executive Chairman
Tony Patrizi Managing Director
Peter Hood Non-Executive Director
Joe Totaro Non-Executive Director
Debbie Morrow Non-Executive Director
Omesh Motiwalla Company Secretary and CFO



Peter Allen

Adrian Federici

Dave Sala Tenna Chief Operating Officer
Antonio Cinanni Manager Projects
Aaron Dorai-Raj Manager Projects
Tom Marshall Manager Eastern Region
Matt Sala Tenna Manager Engineering
Steve Kendrick Manager Quality Systems
Brian Masters Manager Project Development

Ryan Hahn Manager Health, Safety and Environment Stephen Oliver Manager Commercial and Procurement

Manager Technical Services

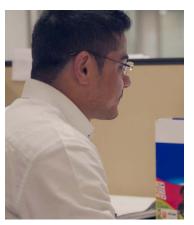
Manager Human Resources

Dan Gregory Manager Americas

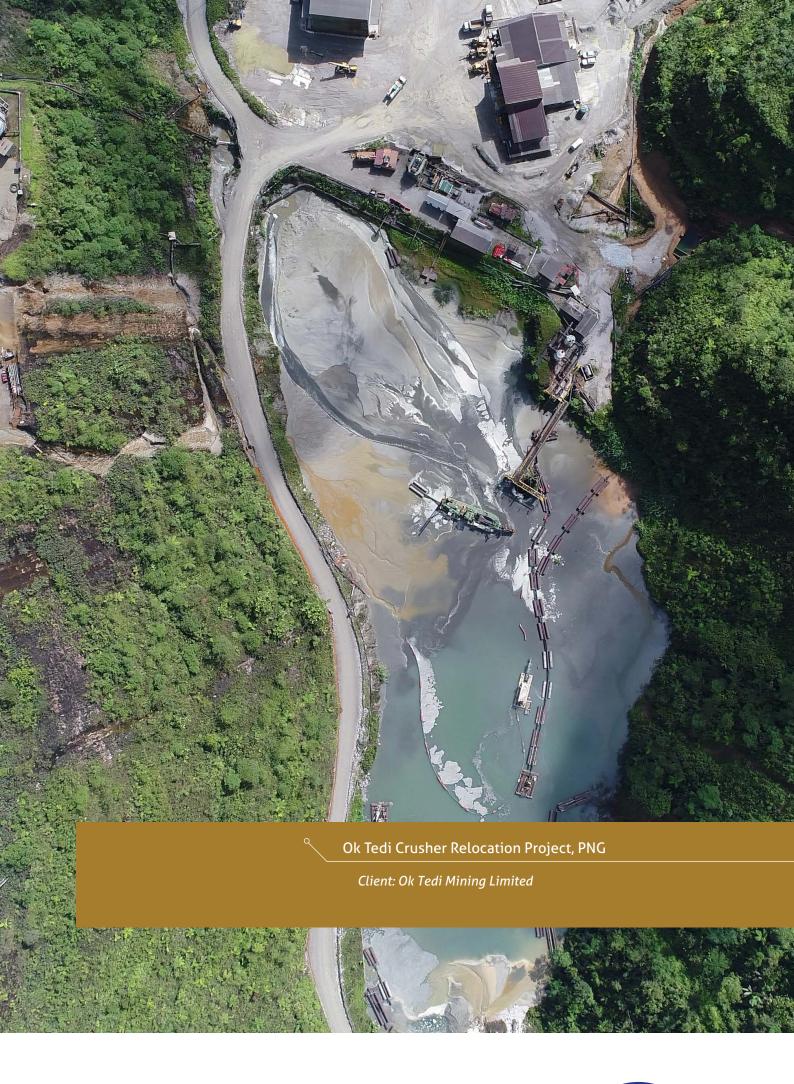
Well known and highly regarded Board and Executive Management Team.













# Value Engineering

The earlier GR Engineering is involved, the greater the value-add to our clients. Strategically, we seek opportunities to become involved in projects at an early stage and offer the full suite of project studies which are conducted using in-house resources.

The earlier our involvement the greater our influence on the project design outcomes, offering our clients a wealth of knowledge from our operational and development experience.

GR Engineering utilises an in-house developed software system to assist value engineering, innovation and improve project outcomes.

Optimum project results are achieved through early assessment of issues such as:

- Process Design and Test Work Management
- Flowsheet Optimisation
- Layout and Infrastructure Development
- **Project Capability**

GR Engineering is recognised in the mining and minerals industry as a process engineering, design and construction organisation has the ability to deliver quality designs with on time, on budget and on performance project outcomes.

These services are provided to a broad client base primarily in the following market sectors and processes:

- Gold and Precious Metals
- Base Metals
- Industrial Minerals
- Iron Ore (including Magnetite)
- Battery Technology Metals
- Gravity Separation Processes
- Beneficiation Processes
- Paste Backfill Facilities for Underground
- Project Infrastructure

- Equipment Selection and Trade-off Studies
- Electrical and Control Systems Design
- Hazard, Risk and Operability Assessments using PHA Pro Scheduling and Constructability Planning
- Logistics Planning
- 3D Modelling
- Business Readiness and Commissioning
- Asset Management Development during Design
- Life of Project Planning and Closure Planning
- Technical and Operating Support

GR Engineering has excellent vendor relationships and technology partners supporting quality, value-add solutions and innovation.

GR Engineering has delivered a number of first or 'company making' projects for exploration companies transitioning to producers. GR Engineering has received repeat business from a broad range of our clients and take pride in the excellent reputation held in the industry.

GR Engineering Project Managers take full responsibility for the projects to which they are assigned from feasibility study to commissioning and are attentive to the client's requirements and requests. The Executive Management team is involved in the routine operations of the business and accessible to our clients.

GR Engineering is committed to providing innovative solutions with minimum delivery time, cost effectiveness, superior functionality, safety and reduced environmental impact.

# **Engineering Capability**

# Design

GR Engineering provides full detailed design and drafting services, including design, safety and constructability reviews, to identify value opportunities.

Our engineering staff are long standing industry experts with technical competence and operational experience who engage with our clients and technology partners to ensure innovative, fit for purpose solutions are identified and incorporated into our projects.

Many of our design engineers have more than 15 years' operational experience within the minerals industry and bring vast practical knowledge to the design table.

# 3D Design for enhanced constructability and operability

GR Engineering has invested heavily in the software systems that allow format and application adaptability. Designs are modelled in 3D to enhance constructability and operability. Significant capital and operating cost savings can result.

- Solid Edge 3D Modelling
- Microstation V8
- AutoCAD
- STRAND 7
- MICROSTRAN
- Tekla Structures
- Bluebeam
- Fluid Flow 3
- JK Simmet
- Bruno (Metso)
- Plant Designer (Sandvik)
- SysCAD<sup>TM</sup>

Warrawoona Gold Project

Client: Calidus Resources Limited

# Attention to Quality for robust design

GR Engineering operate a Quality Assurance and Quality Control (QA/QC) system which is applied within the design environment as well as within project implementation.

Design, checking, authorisation and review processes are robust and deliver quality designs.

GR Engineering can design using a range of Standards depending upon project location, industry specific requirements and international codes.

GR Engineering has developed a series of internal Standards which, in many instances, surpass applicable country nominated standards.







# **Project Delivery Capability**

GR Engineering delivers its projects via various contracting models including EPC (turnkey fixed price project management, design and construction), EPCM (cost reimbursable) or Alliance based (shared risk and reward) arrangements and is focussed on delivering projects utilising in-house project management, design and construction resources.

GR Engineering employs quality, high calibre personnel with a strong operations management background. Our personnel have previously delivered successful feasibility studies and projects in the mineral processing industry.

GR Engineering currently employs approximately 350 professional engineering and support personnel in addition to a directly employed multi discipline site construction workforce consisting of SMPE trades and support employees.

GR Engineering works with a complete spectrum of clients ranging from junior mining/exploration companies undertaking their first project, through to well established major Australian and international mining houses.

GR Engineering personnel have the capability and proven track record to undertake projects from the initial evaluation and study phase through to design, construction, commissioning and operational support.

Project Services provided by GR Engineering include:

- Project studies (concept through to definitive feasibility)
- Engineering and procurement
- Construction and commissioning
- Asset management plans and system development
- Operations and technical support (audits, reviews and consulting)
- Infrastructure development

The ability to deliver on the full suite of services from feasibility study to commissioning gives our clients the benefit and certainty of one point of accountability for the entire project.

Over 350 professionals employed across the full range of engineering and construction disciplines.

Sunrise Dam UFG Project

Client: AngloGold Ashanti Australia Limited

Carosue Dam Paste Backfill Project

Client: Saracen Gold Mines Pty Ltd













Warrawoona Gold Project

Client: Calidus Resources Limited







Nova Nickel Project

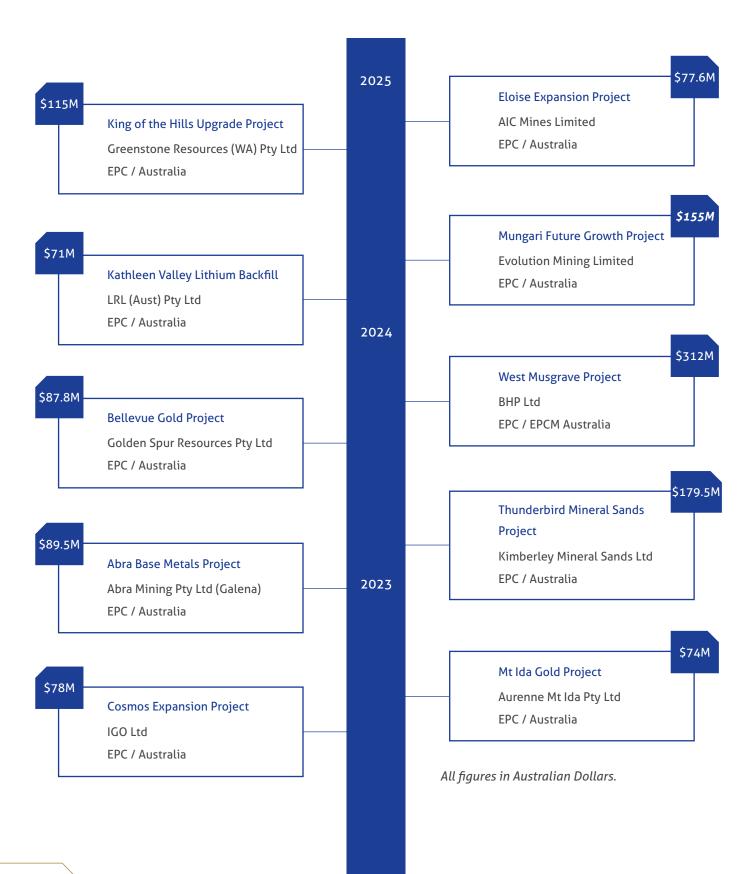
Client: IGO Ltd

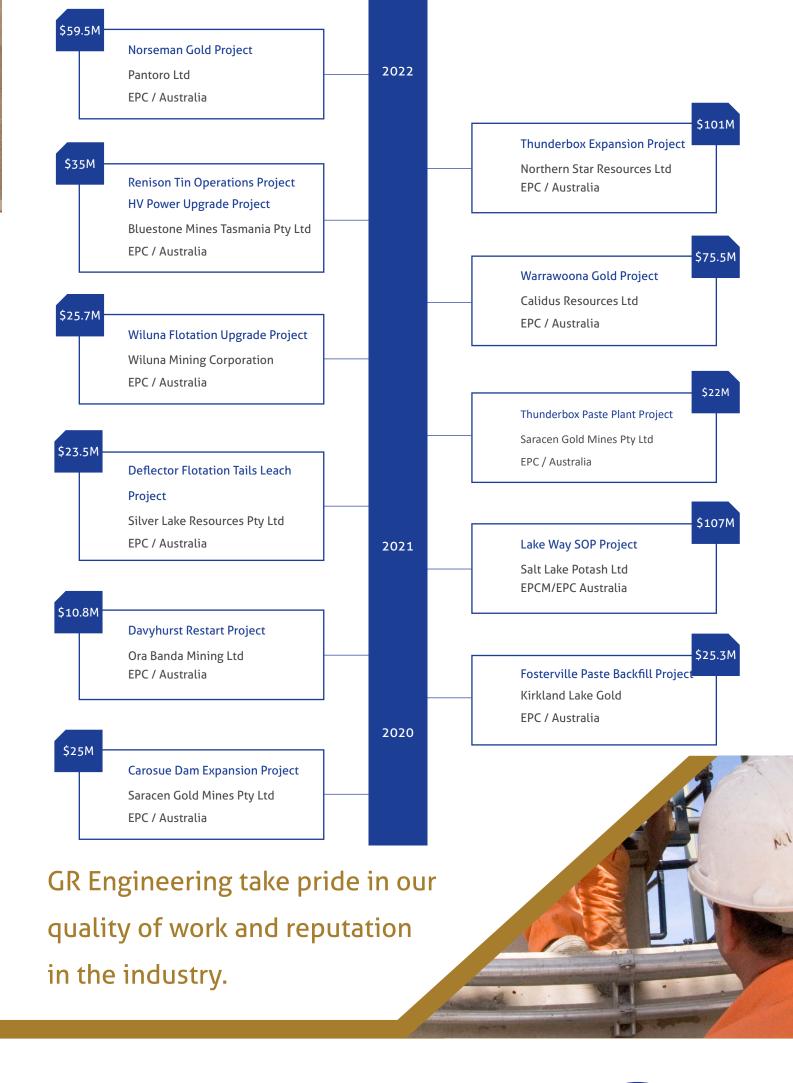


# **Project Delivery Track Record**

A summary of GR Engineering's recent projects.

Further details for references are available on request.





# Study Capability

# Feasibility Study Management

GR Engineering has a team of personnel focused on project development and the pipeline of potential projects.

GR Engineering has experience in undertaking all levels of study from scoping or Preliminary Economic Assessment (PEA) to Definitive (or bankable) Feasibility Studies and has extensive experience in delivering documentation under NI43-101.

GR Engineering believe that real value is generated for our clients by having an early involvement in project studies that go on to become project deliveries by our company. Key study team personnel stay with a project from feasibility study stage through to design, engineering, construction and commissioning, resulting in time efficient and seamless project delivery.

GR Engineering Study Managers generally have in excess of 20 years industry experience and personnel are tailored to the commodity under study. We have personnel available with experience in most mineral commodities and this depth and experience sets us apart from our competitors.

GR Engineering has an excellent track record for the successful completion of resource sector studies.

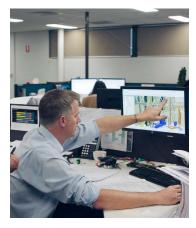


GR Engineering focuses on providing integrated, efficient and practical designs to achieve innovative and cost effective solutions.















# **Project Study Track Record**

A summary of GR Engineering recent studies.

### KCGM Kiln and Offgas Upgrade

Northern Star Resources Feasibility Study

### Dalgaranga Gold Project

Spartan Resources Limited
Definitive Feasibility Study

### McPhillamys Gold Project

Regis Resources Ltd Feasibility Study

### **Bowdens Silver Project**

Silver Mines Ltd
Definitive Feasibility Study

## **Katanning Gold Project**

Ausgold Ltd Feasibility Study

### Zos Uul Cu/Au Project (Mongolia)

Minelogix
Prefeasibility Study

### Wodgina Lithium Project

Mineral Resources Ltd Engineering Cost Study

# Ammaroo Phosphate Project

Verdant Minerals Pty Ltd

Definitive Feasibility Study

## **Katanning Gold Project**

Ausgold Limited
Definitive Feasibility Study

### Manna Lithium Project

2024

2023

Global Lithium Resources Ltd Definitive Feasibility Study

### **Siviour Graphite Project**

Renascor Resources Ltd
Definitive Feasibility Study

### Ravensthorpe Gold Project

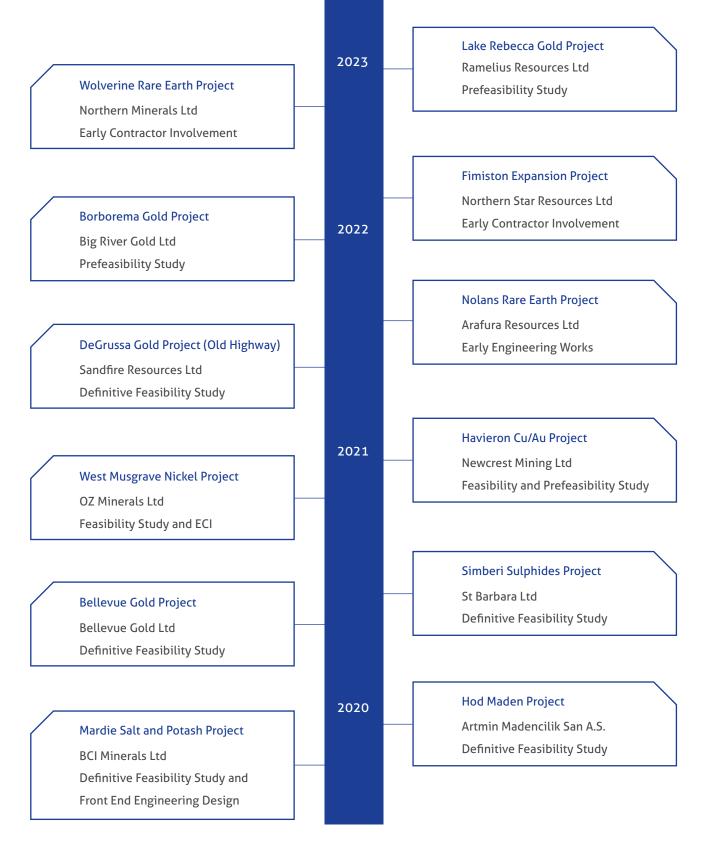
Medallion Metals Ltd Feasibility Study

### Mungari Future Growth Project

Evolution Mining Ltd
Early Contractor Involvement

### Black Swan Project

Poseidon Nickel Ltd Feasibility Studies



Study work performed by GR Engineering has enabled many of our clients to secure funded development.





# **Contact**

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