

# **Karara Mining Limited**

## **Scope of Work TK035 Design, Fabrication and Supply**

4-11-2025

## SYNOPSIS

### **Disclaimer**

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| NNNN-DD-TYP-NNNN – PROJECT TITLE |                            |                      |               |               |           |
|----------------------------------|----------------------------|----------------------|---------------|---------------|-----------|
| REV                              | DESCRIPTION                | ORIG                 | REVIEW        | APPROVED      | DATE      |
| A                                | Issued for Internal Review | Zhenyang Hou<br>Name | JRONG<br>Name | JRONG<br>Name | 05-Nov-25 |
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|                                  |                            |                      |               |               |           |
|                                  |                            |                      |               |               |           |
|                                  |                            |                      |               |               |           |

## CONTENTS

|        |                                           |    |
|--------|-------------------------------------------|----|
| 1.     | INTRODUCTION .....                        | 5  |
| 2.     | GLOSSARY .....                            | 6  |
| 3.     | SCOPE OF WORK .....                       | 8  |
| 3.1    | Work Included .....                       | 8  |
| 3.1.1  | General .....                             | 8  |
| 3.1.2  | Free Issue and Preferred Equipment .....  | 9  |
| 3.1.3  | Mechanical .....                          | 9  |
| 3.1.4  | Electrical .....                          | 10 |
| 3.1.5  | Instrumentation and Controls System ..... | 10 |
| 3.1.6  | Civils .....                              | 10 |
| 3.1.7  | Structural .....                          | 10 |
| 3.1.8  | Utilities .....                           | 10 |
| 3.1.9  | Erection .....                            | 10 |
| 3.1.10 | Commissioning .....                       | 10 |
| 3.1.11 | Drawings and Documentation .....          | 11 |
| 3.2    | Work Excluded .....                       | 11 |
| 3.2.1  | General .....                             | 11 |
| 3.2.2  | Mechanical .....                          | 11 |
| 3.2.3  | Electrical .....                          | 11 |
| 3.2.4  | Instrumentation and Controls .....        | 12 |
| 3.2.5  | Civils .....                              | 12 |
| 3.2.6  | Structural .....                          | 12 |
| 3.2.7  | Utilities .....                           | 12 |
| 3.3    | Battery Limits .....                      | 12 |
| 3.3.1  | Process .....                             | 12 |
| 3.3.2  | Mechanical .....                          | 12 |
| 3.3.3  | Electrical .....                          | 12 |

|       |                                                |    |
|-------|------------------------------------------------|----|
| 3.3.4 | Instrumentation and Control Systems .....      | 12 |
| 3.3.5 | Civils .....                                   | 12 |
| 3.3.6 | Structural .....                               | 13 |
| 3.3.7 | Utilities .....                                | 13 |
| 4.    | HEALTH SAFETY AND ENVIRONMENT MANAGEMENT ..... | 14 |

## **APPENDICES**

|             |                               |    |
|-------------|-------------------------------|----|
| APPENDIX A. | REFERENCE DOCUMENT LIST ..... | 15 |
| APPENDIX B. | – SCOPE OF SUPPLY .....       | 16 |

## **1. INTRODUCTION**

In summary, this document covers the scope of work for the:

Design, supply, fabrication, works testing, corrosion protection, packaging, delivery to site, commissioning support.

## 2. GLOSSARY

Wherever the words “Company, Purchaser or Buyer” are used, it shall mean Karara Mining Limited,

Wherever the words “Contractor, Supplier” are used it shall mean the person so named in the Contract (and its successors and permitted assigns).

Wherever the words “Company’s Representative, Purchaser’s Representative or Buyer’s Representative” are used, it shall mean the person so named in the Contract (and its successors and permitted assigns).

| Term                               | Definition                                                                                                                                                         |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Authorities                        | Any statutory, public, municipal, governmental or administrative department, commission, authority, agency or entity with jurisdiction in connection with the WUC. |
| BoD                                | Basis of Design.                                                                                                                                                   |
| CCIWA                              | Chamber of Commerce and Industry Western Australia.                                                                                                                |
| CDRL                               | Contractor Data and Document Requirements List.                                                                                                                    |
| Company’s Project Requirements     | Has the meaning ascribed to it in the Contract                                                                                                                     |
| Company’s Representative’s nominee | Means an individual appointed in writing by the Company’s Representative under the Contract.                                                                       |
|                                    |                                                                                                                                                                    |
| Contract                           | The agreement between the Company and the Contractor to which this Scope of Work pertains.                                                                         |
| DSO                                | Direct Shipping Ore.                                                                                                                                               |
| Execution Date                     | Means the date on which the Formal Instrument of Agreement is signed by the Company.                                                                               |
| Equipment                          | Means the goods to be supplied or supplied by the Supplier.                                                                                                        |
| FAT                                | Factory Acceptance Testing.                                                                                                                                        |
| FEED                               | Front End Engineering Design.                                                                                                                                      |
| GPA                                | Geraldton Port Authority.                                                                                                                                          |
| HAZOP                              | Hazard and Operability Review.                                                                                                                                     |
| HME                                | Heavy Mining Equipment.                                                                                                                                            |
| HSEC                               | Health, Safety, Environment and Community.                                                                                                                         |
| HV                                 | High Voltage.                                                                                                                                                      |
| IFC                                | Issued For Construction.                                                                                                                                           |
| KIOP                               | Karara Iron Ore Project.                                                                                                                                           |

| <b>Term</b>                | <b>Definition</b>                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| kW                         | Kilowatt.                                                                                                                                                         |
| LV                         | Low Voltage.                                                                                                                                                      |
| MCC                        | Motor Control Centre                                                                                                                                              |
| Mine site                  | The location of the KIOP mine at Karara in the Mid-West Region of Western Australia, approximately 215 km East of Geraldton and 320 km North-North East of Perth. |
| MIS                        | Management Information Systems.                                                                                                                                   |
| MTOs                       | Material Take Offs.                                                                                                                                               |
| MV                         | Medium Voltage                                                                                                                                                    |
| P&IDs                      | Piping and Instrumentation Diagrams.                                                                                                                              |
| PCS                        | Process Control System                                                                                                                                            |
| PEP                        | Project Execution Plan.                                                                                                                                           |
| PFDs                       | Process Flow Diagrams.                                                                                                                                            |
| PMC                        | Project Management Contracting                                                                                                                                    |
| PLC                        | Programmable Logic Controller                                                                                                                                     |
| Port Site                  | Geraldton Port                                                                                                                                                    |
| SCADA                      | System Control and Data Acquisition.                                                                                                                              |
| SDRL                       | Supplier Data and Document Requirements List.                                                                                                                     |
| SoW                        | Scope of Work.                                                                                                                                                    |
| SWIN                       | South West Interconnected Networks.                                                                                                                               |
| Supplementary Requirements | Specifications, standards, regulations and codes of practice set out at Section 4 of this SoW.                                                                    |
| Tenderer                   | Means a person who lodges a tender for the Work.                                                                                                                  |
| Work                       | Includes the supply of Equipment.                                                                                                                                 |
| WUC                        | Means the whole of the Work to be carried out under the contract.                                                                                                 |

### **3. SCOPE OF WORK**

#### **3.1 Work Included**

##### **3.1.1 General**

The successful Contractor shall be required to:

- Design or provide the Equipment in accordance with this document and the Technical Specification 1300-ME-BOD-1002 Engineering Design Criteria (Mechanical).
- Supply the Equipment in accordance with this document and the Technical Specification 1300-ME-SPC-1049 Steel Tanks Specification.
- Supply special installation and commissioning spares.
- Supply spare parts sufficient for two years operation of The Equipment.
- Supply any required special installation and commissioning tools.
- Supply any required special maintenance tools.
- Supply any items, tools or equipment required for handling The Equipment during installation, commissioning or maintenance.
- Fabricate the Equipment in accordance with this document and the Technical Specification 1300-ST-SPC-1007 Technical Specification for Fabrication of Platework-Chinese Supply and 1300-ST-SPC-1008 Technical Specification for Structural Steelwork Fabrication-Chinese Supply
- Corrosion protect the Equipment in accordance with Specification CORP-GE-SPC-1004 Specification for Surface Treatment of Structural Steelwork and Pipework, system P4, Colour Light Box Grey.
- Package and deliver the Equipment in accordance with this document and the Technical Specification CORP-GE-SPC-1002 Specification for packing, marking and documentation requirements.
- Supervise the erection of the Equipment on site.
- Supply operation and maintenance manuals and other documentation as specified in Specification CORP-AD-SPC-1001 Supplier Data Instruction Specification.
- The Contractor must ensure that Equipment is suitable for the duty and fit for purpose as specified in the attached data sheet(s).
- The Contractor must ensure that the Equipment is supplied complete and operational, with all the necessary accessories and ancillary equipment except as specifically excluded in Section 3.2.



In addition to the foregoing, the following specific requirements are included as part of the scope of work:

### **3.1.2 Free Issue and Preferred Equipment**

N/A

### **3.1.3 Mechanical**

The contractor/supplier shall supply the following:

- The existing tank is only connected to one pump. The redesigned tank must accommodate two pumps to increase the system contingency.
- The internal lining of the tank is often damaged, and the new design allows the liner to be replaced easily.
- The new design includes a drainage pipeline to facilitate material removal during maintenance.
- Provide full engineering design for TK35, including 3D modelling and design documentation.
- Finite element stress and deflection analysis of the Equipment under all loading conditions.
- Supply of wear resistant liner plates.
- Prepare and submit detailed fabrication and assembly drawings.
- Conduct on-site 3D scanning of the existing installation to ensure dimensional accuracy.
- Lifting lug calculation report
- Manufacture and supply the complete TK35 tank according to approved design and specifications.
- Provide all necessary accessories, fittings, and instrumentation required for full operation.
- Provide technical assistance during installation, including supervision and coordination with our site team.
- Match marking of the Equipment. Such match marking numbering will also appear on all detail drawings.
- Right of use of drawing for manufacture of spare parts.
- Full size templates for non-rectangular liner plates.
- 100% MPI on the lifting lug weld.

**3.1.4 Electrical**

N/A

**3.1.5 Instrumentation and Controls System**

N/A

**3.1.6 Civils**

- Contractor shall review and redesign all the existing civil structures. Report and drawings must be sent to KML to seek the approval.

**3.1.7 Structural**

- Perform and provide structural calculations, including all relevant load and stress analyses.

**3.1.8 Utilities**

N/A

**3.1.9 Erection**

- The Equipment will be erected and installed by others. The Equipment Contractor shall provide suitably qualified erection supervision staff to oversee installation, and approve acceptability of installation.
- The Contractor shall provide detailed erection manuals to facilitate erection by others. Manuals shall include erection drawings, sequencing, handling, lifting and slinging precautions, torque, tension and all other erection data.
- Shop assembled modules, which were disassembled for shipping, shall be match marked and similar match marks shown on the erection documentation.

**3.1.10 Commissioning**

- The Equipment Contractor shall submit detailed commissioning procedures for approval by the Company's Representative.
- The Company's Representative will witness all stages of commissioning and reject results that do not comply with the approved procedures in accordance with the Contract.
- The Contractor shall be responsible for the hand-over of successfully commissioned Equipment.

### **3.1.11 Drawings and Documentation**

- The Contractor shall furnish all drawings and data as required by the SDRL and in accordance with the Contract requirements, including the requirements of CORP-AD-SPC-1001 Supplier Data Instruction Specification, CORP-QA-SPC-1001 Supplier Quality Requirements Specification, CORP-QA-SPC-1002 Requirements for Compilation of Manufacturers Data Report (MDR) by contractors.
- The general arrangement drawing requested in the SDRL shall include all main dimensions and shall indicate the total mass, required clearances around the Equipment for maintenance and repair, foundation requirements and holding down and/or connecting bolt details.
- The Company's Representative reserves the right to request any additional information necessary to clarify the installation, operation and maintenance of The Equipment.
- Full 3D design files and drawings (in native format and PDF).
- Calculation reports for structure and tank design.
- Lifting lug calculation report.
- WPS, PQR and welder qualification certificate.
- Material certificates and quality documentation.
- Installation and commissioning procedures.
- IOM and MDR

## **3.2 Work Excluded**

The above is a general outline of the requirements, but it is the Contractor's responsibility to provide all equipment and services required to obtain a mill ready to operate, except for specific exclusions detailed below.

### **3.2.1 General**

- Site erection and installation of equipment.
- Unloading and storage on site.

### **3.2.2 Mechanical**

- Interconnecting pipe work and valves.

### **3.2.3 Electrical**

N/A

**3.2.4 Instrumentation and Controls**

N/A

**3.2.5 Civils**

- Foundations.
- Supply of cast in items.
- Grouting.

**3.2.6 Structural**

N/A

**3.2.7 Utilities**

N/A

**3.3 Battery Limits****3.3.1 Process**

N/A

**3.3.2 Mechanical**

N/A

**3.3.3 Electrical**

N/A

**3.3.4 Instrumentation and Control Systems**

N/A

**3.3.5 Civils**

Mounting bases with holes for locating on foundation bolts (by others).

**3.3.6 Structural**

N/A

**3.3.7 Utilities**

N/A

#### **4. HEALTH SAFETY AND ENVIRONMENT MANAGEMENT**

All work must comply with the requirements of document CORP-HS-PLN-1001 Occupational Health and Safety Plan and document CORP-EN-PLN-1001 Construction Environmental Management Plan.

The EP Contractor will be required to include in all site based tender documents the above documents and have all successful contractors prepare a Project Specific Health Safety and Environment Management Plan that aligns with project requirements prior to mobilization to site.

## Appendix A. Reference Document List

| Document Number  | Description                                                                    |
|------------------|--------------------------------------------------------------------------------|
| CORP-AD-FRM-1002 | Document & Revision Numbering System                                           |
| CORP-GE-PLN-1002 | Document & Data Management Plan                                                |
| CORP-GE-SPC-1002 | Specification for Packing, Marking and Documentation Specification             |
| CORP-HS-PLN-1001 | Occupational Health and Safety Management Plan                                 |
| CORP-EN-PLN-1020 | Operational Environmental Management Plan                                      |
| CORP-AD-SPC-1001 | Supplier Instruction Specification                                             |
| CORP-QA-SPC-1001 | Supplier Quality Requirements Specification                                    |
| CORP-QA-SPC-1002 | Requirements for Compilation of Manufacturers Data Report (MDR) by Contractors |
| 1300-ME-BOD-1002 | Engineering Design Criteria (Mechanical)                                       |
| 1300-ME-SPC-1049 | Steel Tank Specification                                                       |
| 1300-ST-SPC-1007 | Technical Specification for Fabrication of Platework-Chinese Supply            |
| 1300-ST-SPC-1008 | Technical Specification for Structural Steelwork Fabrication                   |
| CORP-GE-SPC-1004 | Specification for Surface Treatment of Structural Steelwork and Pipework       |
| CORP-GE-SPC-1002 | Specification for packing, marking and document requirement                    |
|                  |                                                                                |
|                  |                                                                                |

## **Appendix B. – Scope of Supply**



**KARARA MINING LIMITED****TK035 DESIGN, FABRICATION AND SUPPLY OF SCOPE OF WORK****Scope of Supply**

Purchaser

Karara Mining Limited

Purchaser

Order No: \_\_\_\_\_

Supplier

Rev: \_\_\_\_\_

| Item No. | Commodity/Tag | Size 1 | Size 2 | Description                  | Prev Qty | Rev Qty | Total Qty | UOM | Account Code |
|----------|---------------|--------|--------|------------------------------|----------|---------|-----------|-----|--------------|
|          |               |        |        |                              |          |         |           |     |              |
|          |               |        |        |                              |          |         |           |     |              |
|          |               |        |        |                              |          |         |           |     |              |
|          |               |        |        |                              |          |         |           |     |              |
|          |               |        |        |                              |          |         |           |     |              |
|          |               |        |        |                              |          |         |           |     |              |
|          |               |        |        | Insert more rows as required |          |         |           |     |              |