



# Request for Quotation

For Filtration Equipment

23 November 2011

**Legend International Holdings Inc.**

Level 8, 580 St Kilda Road  
Melbourne, Vic 3004

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## **Confidentiality Statement**

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Thank you for your consideration, Legend International Holdings Inc.

Please respond to [tonyc@axisc.com.au](mailto:tonyc@axisc.com.au) with any questions or concerns.

Where no notice is given, all information contained herein is Copyright 2011 Legend International Holdings Inc.

## **Submission Details**

### **Submission Deadlines**

All paper submissions for responding to this request for quotation must be delivered to our office, as stated below, no later than:

**Friday, 23rd December, 2011**  
**No later than 5:00pm EST**

### **Submission Delivery Address**

The delivery address to be used for all submissions is:

**Dr Adam Teague**  
Metallurgy Manager  
Legend International Holdings Inc.  
Level 8, 580 St Kilda Road  
Melbourne, Victoria 3004  
Phone: +61 3 85322866  
Email: [adamt@axisc.com.au](mailto:adamt@axisc.com.au)

## Submission Questions and Clarifications

You may contact the following person if you have any questions or require clarification on any topics covered in this Request For Quotation:

**Mark Lollback**  
Metallurgist  
Phone: +61 3 85322866  
Email: markl@axisc.com.au

## Electronic Submissions

Electronic submissions in response to this Request for Proposal will be accepted as long as they meet the following criteria:

Sent via email to: adamt@axisc.com.au

Document standards:

- Must be in Microsoft Word 2003-97 format
- File name must end it “.doc”
- Must be sent encrypted to protect confidential information

## Introduction and Executive Summary

Legend International Holdings Inc. (Legend) is a Delaware Corporation listed on the OTC Bulletin Board in the United States of America. Legend is working to develop and mine its phosphate deposits northwest of Mount Isa, Queensland, Australia at its Georgina Basin Phosphate Project. Legend has a phased implementation plan to become one of the world’s leading suppliers of phosphate fertilizer. Legend intends to begin construction on the project during 2012 and be operational in 2013.

Legend intends to process an average 3.45 Mtpa of phosphate ore through a Beneficiation Plant to produce 1Mtpa of phosphate concentrate. Legend invites Suppliers to submit a response to this Request for Quotation for the supply of filtration equipment for the flotation feed (cyclone overflow) and final concentrate to their Beneficiation Plant. An overview of the project, Beneficiation Plant layout, specifications, assumptions and constraints, terms and conditions and selection criteria are outlined in this document.

## Project Location

Figure 1 outlines the Paradise South Beneficiation Plant location, approximately 120km northwest of Mt Isa. Access is gained via M<sup>c</sup>Namara Road, off the Barkly Highway. M<sup>c</sup>Namara Road is a well maintained gravel road for 48 km that currently facilitates all types of vehicles including road trains up to the CST Lady Annie mine site. From the Lady Annie mine site to the Paradise South Beneficiation Plant, a

distance of 20 km, the M<sup>c</sup>Namara Road is a dirt road which is currently used by power and water service vehicles. Legend expects this portion of the road to be upgraded to be able to facilitate a range of vehicles including trucks and road trains by the time construction is due to commence.

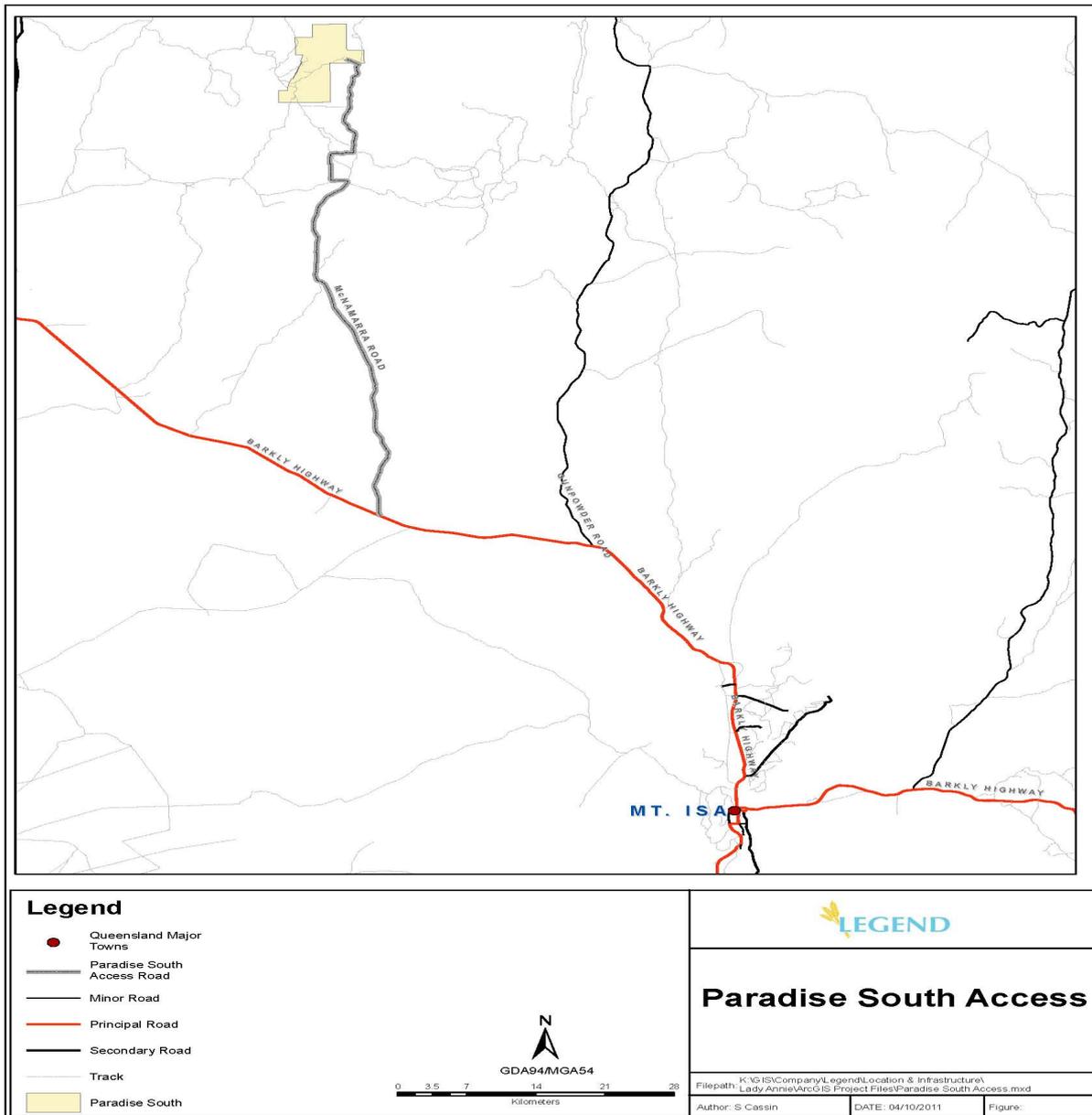
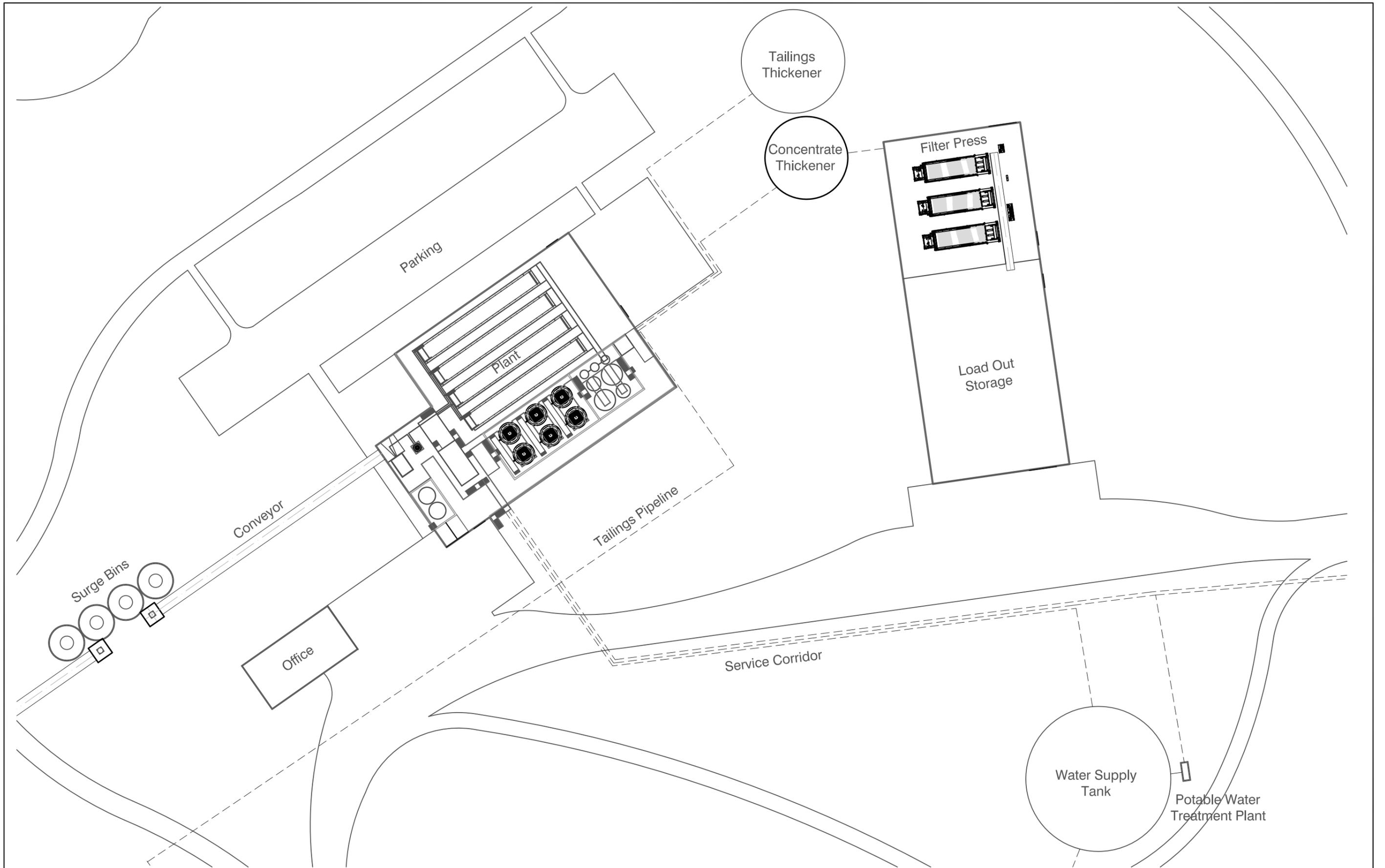


Figure 1. Location of Paradise South Beneficiation Plant.

## Business Overview & Background

Legend plans to mine and beneficiate 3.45 Mtpa Run of Mine Ore (ROM) at the Paradise South deposit from an average grade of 15.5%  $P_2O_5$ , producing 1Mtpa phosphate concentrate at a grade of 33%  $P_2O_5$  via flotation. Through innovative techniques in flotation process technology, Legend has made advances in recovering ultrafine phosphate particles (<20  $\mu\text{m}$ ) which has significantly increased the reserve size and reduced mining costs. This technology using reagent conditioning at high weight % solids, de-ionised water and Jameson flotation cells is currently under application for an international patent by Legend International Holdings. The process is designed to recover at least 80%  $P_2O_5$  at a concentrate grade of 32%  $P_2O_5$  or greater from ores with highly variable  $P_2O_5$  feed grade and a particle size distribution of up to 80 wt% passing 20  $\mu\text{m}$ . The diagrams TP001 and TP002 illustrate the layout of the milling, classification, filtration and flotation areas with respect to the overall site. The process flow after milling includes particle classification by hydrocyclone where the cyclone overflow at a pulp density of 50% solids becomes the feed to the filter and the cyclone underflow is returned to the mill for regrinding. The cyclone overflow will have an approximate  $P_{80}$  of 150 $\mu\text{m}$  with a significant weight % of ultrafine particles (<20 $\mu\text{m}$ ) ranging from 20% to 80%. These diagrams indicate that presently four belt filters and three pressure filters have been included in the concentrator design, based on initial test work and a mill throughput of approximately 2.95 Mtpa. Legend is willing to consider other types of filters including disc, pressure or membrane if there are significant cost and/or operational advantages compared with belt filters and if a minimum pulp density of 70% solids can still be maintained for the filter product. After flotation, the cleaner concentrate will be thickened to approximately 50% solids and this thickener underflow will become the feed to the concentrate filters. The filters are required to dewater the concentrate from 50% solids to approximately 85% solids at concentrate production rate of 1 Mtpa. The concentrate can be expected to have a similar particle size distribution as the cyclone overflow.



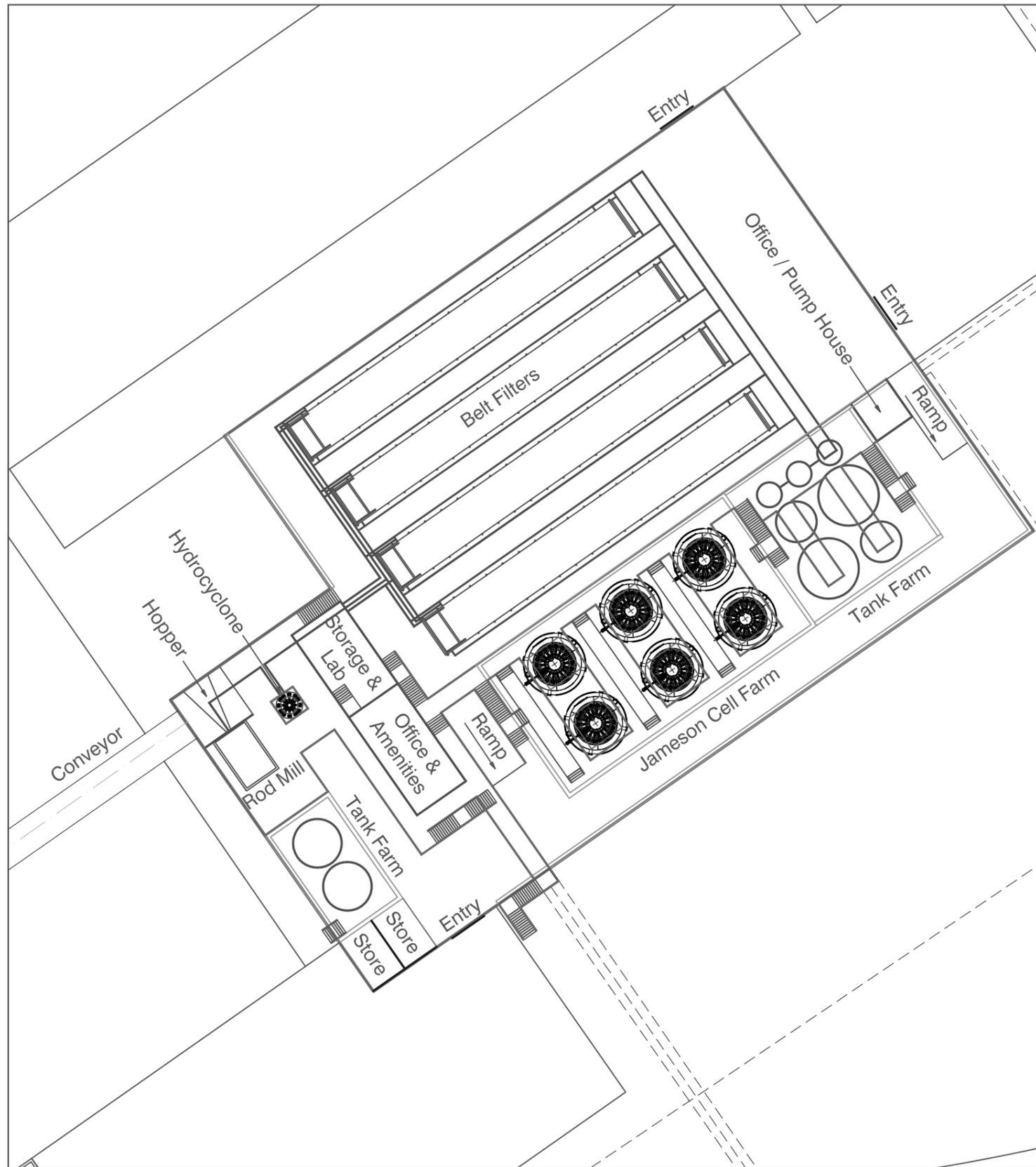
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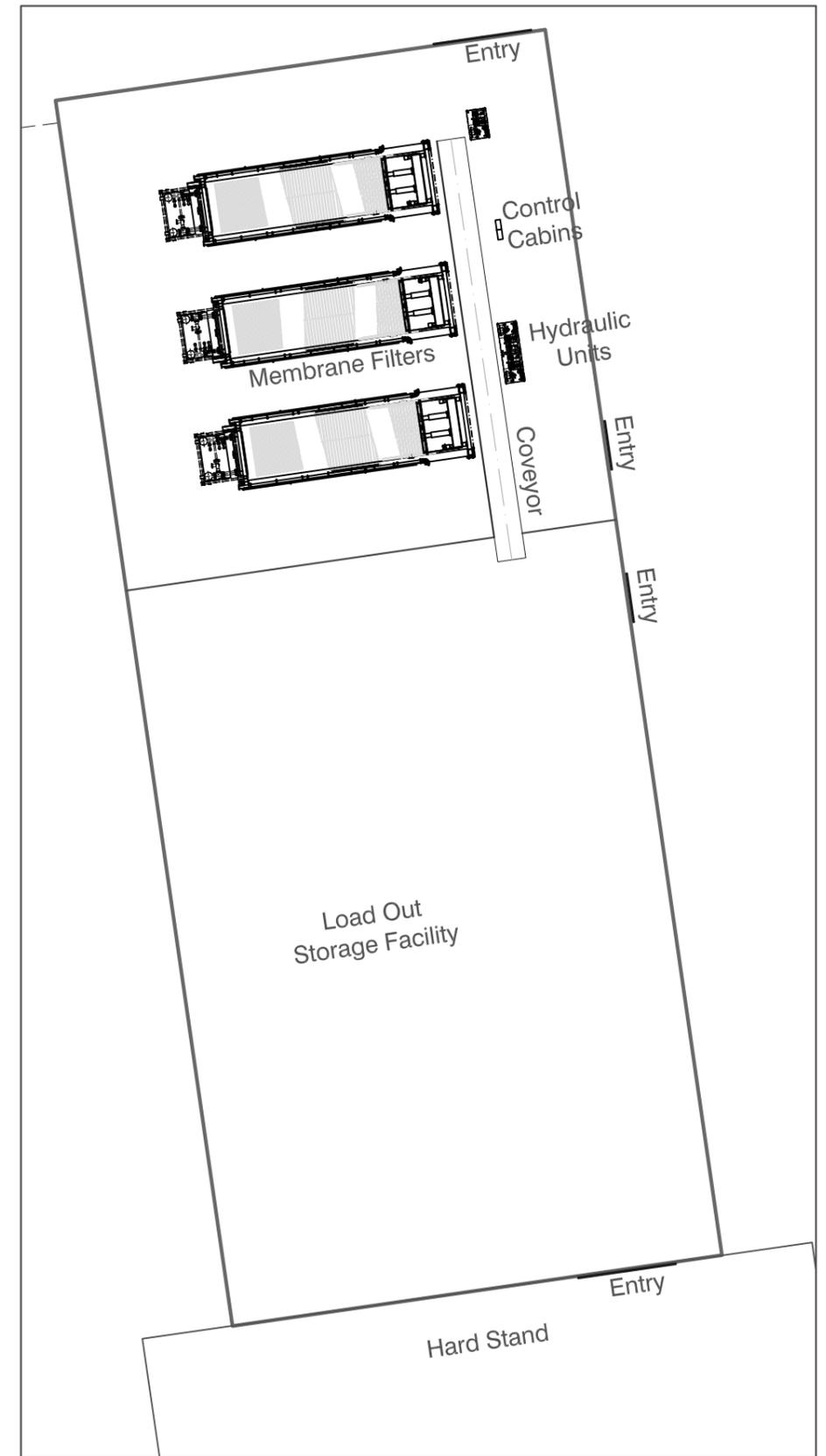
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DRAWN	R. Cullinan
CHECKED	A. Teague
DESIGNER	R. Cullinan
APPROVED	E. Walker
SCALE	1:1,000

DWG No.	BENEFICIATION PLANT	
	CONTEXT PLAN	
	PARADISE SOUTH	
	DEE 16942 - TP001	REV



Beneficiation Plant Layout Plan



Filtration and Load Out Facility Layout Plan

DEE 16942 - TP001					DRAWN R. Cullinan		<b>BENEFICIATION PLANT LAYOUT PLANS PARADISE SOUTH</b>		
DOCUMENT NUMBER					CHECKED A. Teague				
REFERENCE DOCUMENTS				DESIGNER R. Cullinan		DWG No. DEE 16942 - TP002			
REV. DATE				APPROVED E. Walker		REV			
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## Detailed Filter Specifications

- Legend requires the flotation feed filter/s to be capable of treating 2.95 Mtpa of cyclone overflow to increase the solids content of the cyclone overflow slurry from approximately 50% to a minimum of 70%, and most preferably 75% (25% water). This high pulp density is required for flotation reagent conditioning and is an essential part of the process to achieve effective adsorption of flotation reagents onto the phosphate.
- Legend requires the concentrate filter/s to be capable of treating 1Mtpa of thickener underflow to increase the solids content of this slurry from approximately 50% solids to 85% solids. After filtration, the solids will be air dried so that the solids content increases further to 90% prior to product loading and dispatch.

Please provide response for each type of feed and concentrate filter using the following sub-headings as a guide:

- An overview of the Supplier's business.
- Technical specification sheet for the nominated filter/s including equipment weights, filter cake thickness and flow rates, pump types and sizes.
- Engineering drawings of the filters.
- Point of manufacture and summary of installation process.
- Detailed price summary for supply of filters to mine site.
- Lead time and schedule for manufacture and delivery to mine site.
- A summary of mine sites the filter/s have been supplied to previously.
- A summary of options for post-installation service and maintenance.

## Assumptions & Constraints

Legend assume that the feasibility study filtration test work carried out on the mill feed and concentrate samples from Paradise South and the information that work provided is suitable for suppliers to specify similar filtration equipment. Short listed Suppliers are welcome to contact Legend to arrange an ore sample to carry out confirmation filtration testing at the Supplier's expense.

## Terms and Conditions

### Supplier Standards

As a minimum Legend requires our suppliers to maintain policies that support fair competition and integrity, require adherence to applicable laws, standards and regulations, and prohibit giving or receiving bribes, with a process for assuring compliance. The extension of personal gifts and gratuities

by suppliers to Legend personnel and their families in a manner that could be interpreted as seeking preferential treatment is expressly prohibited.

Legend requires our suppliers to demonstrate strong organizational commitment to responsible health and safety management and the elimination of workplace injuries and illnesses, with a process for obtaining assurance on compliance with those policies, both internally and externally, by regular audits, reviews and reports. We value suppliers who actively manage and communicate product health and safety risks.

Suppliers must also demonstrate a strong organizational commitment to: responsible environmental management; the elimination of environmental incidents; waste minimization; responsible resource utilization; product stewardship; and greenhouse gas reduction. They must have a consistent record of compliance and remediation of damage caused by operations and incidents. We value a strong demonstrated organizational commitment to a precautionary approach to environmental challenges, promoting greater environmental responsibility and the development and diffusion of environmentally friendly technologies.

Legend has the expectation that all suppliers will:

- Be aligned with our business objectives (reducing costs, enhancing value, reducing and/or eliminating wastes, reducing variation, increasing operating or energy efficiency).
- Be financially secure.
- Be a direct manufacturer of goods, or an authorized agent/distributor thereof.
- Have technically capable and competent personnel to support the goods and/or services supplied.
- Maintain appropriate quality assurance systems and processes.
- Agree to supply on the basis of Legend's terms and conditions.
- Be able to transact business electronically, including internet compliance, purchase orders, invoices and payments in a form compatible with Legend.

### **Contract Terms**

Contractual terms will include (but are not limited to):

- Warranties by the Supplier as to performance standards of the Beneficiation Plant as outlined;
- Warranties by Legend as to rights over the construction site (e.g. Mining Lease and relevant regulatory authorizations);
- Bank Guarantees;

- Payment milestones and Retention monies;
- Indemnities regarding third party claims;
- Confidentiality and Intellectual Property;
- Insurance requirements;
- Delivery timetable, force majeure, liquidated damages for delay;
- Variation procedure;
- Passing of Title and risk;
- Termination rights;
- Dispute resolution.

Full terms and conditions of contract will be provided to short-listed Suppliers for discussion and negotiation.

### **Selection Criteria**

Award will be made to those suppliers who meet Legend's business needs, standards and who make the best offers considering all relevant factors including health, safety, environment, quality, service, competitive pricing, technical ability and consistency. The following specific criteria will be used to assess the supplier's submission of suitable filtration equipment for Legend's Beneficiation Plant.

- Metallurgical Performance: The Supplier must be able to guarantee that the flotation feed filter can produce a filtered product of at least 70% solids from a 50% solids Paradise South cyclone overflow. The Supplier must be able to guarantee that the concentrate filter can produce a filtered product of at least 85% solids from a 50% solids thickener underflow.
- Price: Legend will assess each submission using a cost comparison.
- Supply and Service: The beneficiation plant construction and commissioning schedule will be dependent on the lead time of major equipment items. Legend will take into account this lead time along with after sales service including maintenance and availability of ancillary equipment such as pumps, filter cloths and belts.