TRINITY NYAKABINGO MINE

SUPPLY OF TAILINGS STORAGE FACILITY CONCEPTUAL DESIGN OPTIONS
COMMERCIAL AND TECHNICAL ADJUDICATION

7115-0000-NADJ-015.01

Rev	Date	Description	By	Check	Appr
01	2026/04/07	REVISED DUE TO REVISED RFQ ISSUED TO THE MARKET	LTJ	SJO	HAC
00	2026/01/21	APPROVED			WRE
P3	2026/01/16	COMMERCIAL EVALUATION	SJO	WRE	
P2	2026/01/16	TECHNICAL EVALUATION	LTJ		
P1	2026/01/09	FIRST REVISION	SJO		

APPROVAL			
NAME	SIGNATURE	DATE	COMMENTS

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Reg. No.: 2018/377412/07

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1. COMMERCIAL SUMMARY DETAILS

Client:	**Trinity Nyakabingo Mine**
Project No./ Name:	**7115 / Trinity Nyakabingo Mine**
Equipment Package:	**SUPPLY OF TAILINGS STORAGE FACILITY CONCEPTUAL DESIGN OPTIONS**
Enquiry No.:	**7115-0000-MSOW-015.01**
Consulting Companies:	**Epoch Resources (PTY) Ltd** **Jones & Wagner (PTY) Ltd**

2. SUMMARY OF TENDER

The summary of tenders received before negotiations can be summarized in **Table 1**

Table 1: Summary of Tenders

CRITERIA	Epoch Resources	Jones & Wagner
Total Tender Value	**R 1 256 720.00**	**R 2 459 190.00**
Duration	3 months	7 months
Payment Terms	Monthly Billing	Monthly, 30 days from invoice

3. COMMERCIAL CLARIFICATIONS

3.1 PAYMENT TERMS

All consulting companies operates on monthly payment terms. Jones & Wagner payment terms are monthly, though they may be open to negotiate. Payment will be based on actual hours spent with supporting timesheets.

A summary of payment terms is provided **Table 2**.

Table 2: Summary of Payment terms

Epoch Resources	Jones & Wagner
Monthly on hours	Monthly, 30 days from invoice

3.2 SCHEDULE EVALUATION

Epoch indicated a duration of 3 months, while Jones and Wagner proposed 7 months.

A summary of the project schedules is provided in **Table 3**.

Table 3: Summary of Project Schedule

Task Name	Epoch Resources (working days)	Jones & Wagner (working days)
Project initiation	7	15
Site visit	3	4
Deposition methodologies (assess & select)	14	22
Conceptual layouts & designs	31	90
Workshop preparation	Included	5
Report	12	10
Total Project Duration	**66 (3 months)**	**142 (7 months)**

From Table 8 It is evident that Jones & Wagner have allowed more time for project initiation, assessment of the various deposition philosophies, and conceptual design; both Epoch and Jones & Wagner have similarly allowed time for the site visit and report.

Before adjudicating, it is essential to understand the exact work required to complete the project's core activities, which include the following: Deposition methodologies (assess & select) and Conceptual layouts & designs. The work required is summarised below:

- Footprint and geometry, including typical section through walls.
- Conceptual strategy for the management of water on and from the facility.
- Conceptual stormwater management details around the perimeter of the TSF.
- Constructability
- CAPEX
- OPEX
- Environmental and social impacts.

It is essential to assess the amount of time each tender has allocated to execute the work listed above for each of the four deposition philosophies. This will be done by determining the total time allowed for the following assessment and design and dividing it by four. This indicates that Epoch has allowed 11.25 days ($\frac{14+31}{4}$) to assess each deposition philosophy, and Jones & Wagner have allowed 28 days ($\frac{22+90}{4}$). It should be noted that this method of assessment is not exact, as either more or less time can be used to assess a deposition philosophy, but it does provide a good approximation.

Considering the challenging topography, high rainfall, and significant differences among the deposition philosophies, we do not believe the 11.25 days allowed by Epoch are sufficient to fully develop all deliverables at sufficient resolution to understand the operational impact of the various deposition philosophies.

Jones & Wagner, on the other hand, allowed a total of 28 days to assess each deposition philosophy; we believe this time frame is more realistic and will allow sufficient time to thoroughly evaluate each

philosophy. The longer time frame also allows for more client input during the process, ensuring the deliverables align with the client's requirements throughout the design.

4. TECHNICAL EVALUATION

Epoch proposes a literature review and evaluation of deposition/development methods (up to four), matching the SOW requirement to assess multiple feasible technologies. J&W explicitly allows for review of up to four deposition technologies/methods (including conventional slurry, thickened/paste, filtered/dry stacking), consistent with the SOW's stated methodology options.

Epoch includes the development of a design criteria document (life of mine, production, physical characteristics, lining, water management, local legislative requirements), aligning strongly with the SOW content. J&W includes preparation and approval of design criteria, including LoM tonnages, density, slopes, lining and water management requirements, and references GISTM as part of the criteria development, consistent with the SOW.

Epoch includes conceptual designs with layouts/sections, stage capacity considerations, water management strategy, and conceptual-level costing per option, which supports the SOW's requirement to rank options on technical and financial drivers during the workshop. J&W includes conceptual layouts covering geometry/sections, affected and clean water management concepts, and perimeter stormwater management, matching the SOW conceptual design deliverables.

Epoch proposes the development of a multi-criteria framework and a one-day workshop to assess options across safety/risk, environmental, constructability, costs and operational practicality, consistent with the SOW workshop requirement. J&W proposes development of a multi-criteria decision matrix circulated ahead of a one-day online workshop, scoring alternatives across technical, financial, environmental and social aspects, consistent with the SOW.

Technically, both tenders are acceptable and adhere to the requirements as set out by the SOW document.

5. COST EVALUATION

The table below shows a summary of the costing matrix provided by each tender. The total hours and costs spent on each section of the study can be compared. It should be noted that some sections of the submitted costing matrix were combined to create this table.

Table 4: Cost Evaluation

	Epoch		Jones & Wagner	
Description	**Hours**	**Cost (ZAR)**	**Hours**	**Cost (ZAR)**
Project initiation	**63**	**110 264**	**90**	**206 800**
Scoping	16	28 729	24	62 800
Kick-off meeting		Included	22	47 000
Collect and review available information	29	42 205	18	35 900

Contractual matters	9	19 665	12	38 200
Prepare and agree Project Schedule	9	19 665	14	22 900
Project management	**45**	**112 815**	**135**	**253 700**
General project admin & management	12	29 670	44	77 350
Bi-Weekly progress updates to project schedule	21	47 265	42	70 300
Attending bi-weekly progress meetings	12	35 880	49	106 050
				-
Site Visit	**48**	**165 798**	**112**	**294 200**
Site Visit	32	117 958	112	294 200
Site Inspection and Meeting	16	47 840	0	-
Assessment of deposition methods	**102**	**167 670**	**172**	**272 440**
Determine and assess deposition methods	102	167 670	144	214 800
Workshop and preparation			28	57 640
Design Criteria	**34**	**54 050**	**28**	**46 880**
Prepare and agree design criteria	34	54 050	28	46 880
Conceptual Layouts & Design	**232**	**351 153**	**671**	**925 570**
Site Selection to Identify Candidate Sites	49	71 102		Included
3D Volumetric models	34	54 050	128	189 440
Impoundment / Wall design	53	76 751	86	112 760
Stormwater management	36	62 100	113	162 610
Affected water management	31	44 944	94	167 500
Concept design figures	29	42 205	250	293 260
Multi-criteria decision matrix and workshop	**92**	**166 630**	**114**	**201 540**
Selection criteria	34	54 050	30	54 060
Populate Multi-Criteria Decision Matrix	34	54 050	42	66 420
Workshop and preparation	24	58 530	42	81 060
				-
Reporting	**84**	**128 340**	**140**	**200 440**
Final report	84	128 340	140	200 440
Total	**700**	**1 256 720**	**1462**	**2 401 570**

Project initiation
Jones and Wagner allowed for approximately 50% more hours compared to Epoch for project initiation, the main driver being the additional 22 hours allowed for the kick-off meeting

Project management
Jones and Wagner allowed approximately 3 times as many hours for project management as Epoch. This is a result of Jones and Wagner's longer project schedules and increased engineering hours allocated towards project management and the meeting.

Site Visit
Epoch permitted 2 engineers to attend the site visit, while Jones & Wagner permitted 3. Epoch allowed for a total of 3 travelling days, whereas Jones & Wagner permitted 5. These differences define the cost difference.

Assessment of deposition methods
Jones and Wagner allowed approximately 70% more hours than Epoch. Epoch thus budgeted for approximately 25 hours per deposition strategy, and Jones & Wagner budgeted for approximately 43 hours per deposition strategy.

Design Criteria
Both tenders budgeted a similar number of hours

Conceptual Layouts & Design
This section is the main factor behind the cost difference between the two tenders. Epoch allowed for 232 hours, which roughly corresponds to 58 hours per deposition strategy. In contrast, Jones & Wagner permitted a total of 671 hours, equating to approximately 167 hours per deposition strategy.

Multi-criteria decision matrix and workshop
Both tenders budgeted a similar number of hours

Reporting
Jones and Wagner allowed approximately 66% more hours than Epoch; this is likely due to more engineering work during the conceptual layouts and design phase.

Table 5 below shows the travelling costs supplied by each tender.

Table 5: Travelling Costs

Description	Jones & Wagner	Epoch
Nights in Rwanda	3	2
Attendees	3	2
Flights	30 000	20 000
Accommodation	9 600	578
Other (permits, traveling allowance etc)	9 600	1 700
Travelling		570
Handling Fee	4 920	
Total	**54 120**	**22 848**

Jones & Wagner allowed for three engineers to attend the site visit, compared to two engineers from Epoch. Jones and Wagner have provided for one night of accommodation in Kigali, which increased the cost. Jones and Wagner have also accounted for higher travel costs related to permits, immunisations, airtime, airport parking, etc.

6. EXPERIENCE

Table 6 shows a summary of the CVs submitted as well as the combined experience of the submitted CVs

Table 6: CVs

EPOCH		Jones & Wagner	
Name/Title/Degree	**Experience (years)**	**Name/Title/Degree**	**Experience (years)**
Mr. Guy John Wiid Pr.Eng, CEng	35	Pierre van der Berg DIRECTOR and CEO (Pr Eng)	30
Mr. Ruan Brink BEng (Hons) Geotechnical, PrEng	8	Rynier Shields Technical Director (Pr Eng) Head of Department	12
Mr. Lance Venter BTech Geotechnical, PrTech Eng	14	Gunther Hinrichs Civil Engineer (Pr Eng)	8
Mr. Jaco Swanepoel BEng (Hons) Geotechnical	5		
Mr. Jonty Freeman BEng (Hons) Geotechnica	4.5		
Total experience	**66.5**		**50**

Table 6 shows that both EPOCH and Jones & Wagner have experienced personnel. EPOCH included the CVs of two more junior engineers, thereby increasing their collective experience; however, excluding those junior engineers, the collective experience of both EPOCH and Jones & Wagner is similar.

7. SUMMARY OF EVALUTATION

Both consulting companies are technically compliant. The payment terms for both tenderers are commercially acceptable.

The evaluation, following clarifications and negotiations, is summarized in **Table 7**:

Table 7: Summary of Evaluation

CRITERIA	Epoch Resources	Jones & Wagner
Total Consulting Fees including discount	**R 1 256 720.00**	**R 2 459 190.00**
Lead Time	3 months	7 months
Payment Terms	**Monthly on hours**	**Monthly, 30 days from invoice**
Technically Compliant	Yes	Yes

8. RECOMMENDATION

Both Epoch and Jones and Wagner are technically acceptable; however, there is a clear difference in the schedule duration and the number of engineer hours allocated to this project. It is evident that Jones and Wagner's approach to the analysis is more quantitative than Epoch's, based on the greater number of engineering and design hours allocated to each section and the longer project duration.

Given the technically challenging environment in which the TSF is located, Jones and Wagner's more quantitative approach to assessing each deposition philosophy is preferred, as the assessment's outcome will be supported by a more in-depth evaluation of each deposition strategy. The longer project schedule provided by Jones & Wanger also allows for more client input during the process, ensuring the deliverables align with the client's requirements throughout the design process.

It is recommended that Jones and Wagner be selected as the preferred consulting company.

Table 8: Recommended Order Value

	Order Value
Total Consultation Fees	**R 2 459 190.00**

ANNEXURE A : EPOCH PROPOSAL

Attention:	Mr. H. Ackerman	**Date:**	March 2026
Company:	Obsideo Consulting		
Address:	Irene Corporate Corner		
	25 Via Latina Crescent		
	Irene		
	0157		

Multi Criteria Alternatives Analysis for Trinity Nyakabingo Tailings Storage Facility

Obsideo Consulting (Obsideo) ("*the Client"*) has requested Epoch Resources (Pty) Ltd (*"Epoch"*) submit a proposal to conduct a Multi Criteria Alternatives Analysis ("MCAA) to identify the preferred location, deposition method and development options for the Tailings Storage Facility ("TSF") associated with the Trinity Nyakabingo Mine located in Rwanda, as described in Section 2 of this proposal.

1 Letter of Offer

Based on our discussions and the information provided to us, Epoch's offer is set out in this Letter of Offer and consists of the following documents, collectively referred to as "The Agreement":

- Section 1: Letter of Offer;
- Section 2: Scope of Services;
- Section 3: Legislative Requirements, Guidelines and Standards for Design.
- Section 4: Remuneration and Payment;
- Section 5: Schedule; and
- Section 6: Personnel, Equipment, Facilities and Services.
- Section 0: The Particular Conditions of the Client/Consultant MSA;
- Section 8: The FIDIC General Conditions of the Client/Consultant MSA Fifth Edition 2017; and
- General Conditions Appendix 5 Rules for Adjudication.

If this Letter of Offer is accepted, Epoch will commence its Services in accordance with the Agreement, and complete the Works, and/or all Sections thereof within the relevant Times for Completion.

Where the Consultant is appointed as The Engineer in terms of a construction contract, to undertake the quality assurance and design on a Project, the Consultant is authorised by the Client to assess, audit, investigate and endorse that the work executed/undertaken by the appointed contractor complies with the quality standards required in the construction contract. Despite the Consultant's role as the engineer, the appointed contractor remains fully liable and responsible to the Client for achieving the quality standards and the construction of the works as set out in the construction contract. As the engineer, the Consultant has full authority to instruct the appointed contractor to comply with the quality standards required. Epoch's role during construction is of an audit nature and does not:

- Release the Contractor and/or the Client of their responsibilities in terms of the construction works and/or quality control/assurance requirements; and
- Provide any guarantees in terms of the construction work and/or quality control/assurance.

In the event that Epoch is appointed as the design engineer, Epoch requires that the materials used for construction comply with, as a minimum, SANS 1200 Specifications read together with the specifications of the Project. Any deviations from the specifications or drawings prepared by Epoch shall be instructed, approved, and remain the sole and absolute risk of the Client and/or the Client's Representative.

Epoch expressly exclude from its Services any obligation to act as the Client's representative in terms of any Occupational, Health and Safety Regulations. All Occupational, Health and Safety obligations arising from the Services remain the sole responsibility of the Client.

Should Epoch elect to subcontract certain parts of the Services, Epoch shall notify the Client of the portion of the Service being subcontracted.

Epoch agree to remain liable to the Client for all acts and omissions undertaken by subcontractors appointed by it for the Project. However, all other acts and omissions committed by contractors and subcontractors, appointed by the Client, remain the sole risk and responsibility of the Client.

In the event that the Client instructs the Consultant to appoint a nominated subcontractor, the Client shall remain solely responsible for all acts, omissions, default, and negligence of the nominated subcontractor appointed.

Epoch agree to abide by this offer as set in this Letter of Offer for a period not exceeding 60 days and it shall remain binding upon it and may be accepted at any time before that date.

Unless expressly excluded, any communication received from the Client to commence with the Work shall be deemed to be an acceptance by the Client of the terms and conditions set out in this Letter of Tender.

For and on behalf of Epoch		**For and on behalf of the Client**	
Signature:		**Signature:**	
Name:	Mr. Guy John Wiid	**Name:**	Mr. H. Ackerman
Designation:	Director (duly authorised)	**Designation:**	
Date:	March 2026	**Date:**	March 2026
Address:	Epoch Resources (Pty) Ltd Block B, 8 Viscount Road, Bedfordview, Germiston, 2008, South Africa	**Address:**	Obsideo Consulting Irene Corporate Corner 25 Via Latina Crescent Irene 0157

2 Scope of Services

Obsideo Consulting (Obsideo) ("*the Client"*) has completed a conceptual design on a cyclone deposition TSF for the Trinity Nyakabingo Mine.

Epoch have been requested to submit a proposal to assist in assessing a number of options with regards to deposition and development methods associated with the TSF, completing the conceptual designs associated with the options and present the findings in a Multi Criteria Decision Matrix to determine the best suited option.

The terms of reference, scope of work, battery limits and information requirements associated with the review and update of the project are described below.

2.1 Terms Of Reference

The terms of reference for the project are understood to call for a Multi Criteria Alternatives Assessment ("MCAA") to evaluate feasible alternatives associated with the TSF site location, construction methodology and tailings deposition approach.

2.2 Scope Of Work

The Scope of Work envisaged in addressing the terms of reference as defined above is expected to include:

- Project initiation, including:
  - Kick-off meeting and collection of available information
  - Project schedule development
  - Project contractual development
  - Review of available information
- Site visit
- Literature review of various deposition and development methods for the facility
- Develop Design Criteria Document in preparation of Conceptual Design, including:
  - Expected life of mine; and
  - Tailings production rate; and
  - Tailings material physical characteristics (e.g. specific Gravity and Dry Density); and
  - Lining requirements; and
  - GISTM requirements; and
  - Clean and Dirty Water management requirements; and
  - Limitations on borrowing construction materials outside the TSF footprint; and
  - In-Country local legislative requirements.
- Conceptual Designs associated with the identified options, including:
  - Confirmation of site location; and
  - Development of stage capacity curves associated with the various options; and
  - Development of water management strategy associated with the facilities (clean and dirty); and
  - Desktop level assessment of the likely Zone of Influence and associated consequence classification; and
  - Development of conceptual layouts and typical sections; and
  - Conceptual level costing associated with each option.
- Development of Multi Criteria Decision Matrix, including, but not limited to the evaluation of:
  - Safety and Riak; and

  - Environmental; and
  - Constructability; and
  - Costs (conceptual level); and
  - Operational Practicality.

- Assess options against agreed upon criteria; and
- Conduct 1 day workshop with internal and external parties; and
- Compile final report on outcomes of the Multi Criteria Alternatives Assessment. The report structure will include, but not limited to:

  - Introduction
  - Available information and Assumptions
  - Site overview and Key constraints
  - Design Criteria
  - Development and Deposition Alternatives (Literature Review)
  - Evaluation Methods
  - Multi Criteria Alternatives Assessment
  - Preferred development option
  - Recommended way forward / next phase
  - Conclusions and recommendations

- Project management and meetings, including:

  - Bi-weekly schedule updates and meetings; and
  - General project administration and management.

2.3 Battery Limits

The proposed battery limits for the design of the facility and its associated infrastructure would be defined by the outermost of:

- The outer edge of the surface water containment / diversion works.
- Outer edge of the return water / stormwater control dam outlet flange exiting the perimeter fence.
- The outer perimeter / perimeter fence to the facility.

It is understood that the design works associated with the return water pumping system, solid waste transport systems (Filter cake) and associated infrastructure will be completed by others.

2.4 Information Required

A summary of the information typically required to facilitate the assessment and design of a tailings management facility is presented in Table 1 together with summary descriptions of why the information is required. It is assumed that all the information listed would either be available or would become available as outputs from the investigations, laboratory testing and specialist inputs as listed. Wherever possible information used in the design of the existing and proposed facilities on the mine would be used e.g. design storm events, tailings characteristics.

Table 1: Information Required to Support the Design of Tailings Storage Facility

ITEM	DESCRIPTION	PURPOSE
1	Life of Mine Residue Production Plan: • Residue Production Rate. • Life of Mine. • Tailings Particle SG / Material Particle SG	Determine the required storage capacity and depositional area for the Facility.
2	Physical Characteristics of Residue: • Particle Size Distribution (PSD). • Particle Specific Gravity (SG).	Assists in determining the settling characteristics of the tailings and it's estimated in-situ density, which is used in calculating the volumetric storage requirements. Assists also in predicting the settlement and beaching characteristics of the tailings
3	Geochemical Characteristics of Residue: • Acid Mine Drainage (AMD) Potential. • Type and concentration of contaminants. • Leachability of contaminants and assessment of pollution potential.	Enables assessment of the pollution potential of the tailings material which in turn assists in defining the nature and extent of pollution control measures required e.g. • Lining of TSF footprint. • Lining of return and storm water dams. • Dewatering / interception boreholes.
4	Ground survey with a minimum contour interval of 1m and an accuracy of 0.1m of the Mine Lease Area and potential TSF sites to be provided electronically as: • ASCII – X,Y, Z and break lines; or • AutoCAD dwg files. Information provided to include details of: • Property Boundaries. • Layout of Mine Infrastructure.	Enables identification of potential sites for TMF and evaluation of their volumetric storage capacities Essential to ensure TSF is located on mine property and out of the way of other infrastructure e.g. open pit. Enables the development of site layouts, 3 dimensional models and stage capacity calculations
5	Geotechnical Investigation and Testing of soils and residue material	Confirm the foundation conditions underlying and adjacent to the TSF and related infrastructure. Used in assessing the overall stability of the TSF and potential seepage regimes. Assists in identifying sources and quantities of preferred construction materials.
6	Environmental specialists' reports on candidate sites e.g. Geohydrology, Heritage, Fauna and Flora, Surface Water Hydrology. Climatic Data • Monthly rainfall and evaporation data. • Expected maximum rainfall events for recurrence intervals up to 1 in 10 000 years. • Wind speeds and directions.	Assist in the selection of a preferred site for the TSF and in the formulation of measures to mitigate impacts associated with the facility. Enable development of site water balance and design of surface water containment and diversion works
7	Legislative requirements and corporate standards and guidelines	Define the standards to which the TSF and associated infrastructure would have to adhere.

2.5 Exclusions

The following are excluded from the scope of work as envisaged, unless specifically included in the terms of reference, scope of work and budgets as described:

- Travel from airport to site location and back to airport;
- Geotechnical site investigation;
- Laboratory testing to determine physical and geochemical properties;
- Additional testing to confirm tailings suitability with alternative deposition methods (e.g. Cyclone deposition, dry stacking and dewatering potential);

- Participation in meetings and / or consultations with Interested and Affected Public Parties;
- Costs associated with medical and induction process associated with site visit;
- Ground survey work;
- Evaluation/trade off studies for a number of production tonnage scenarios;
- Determination of flood lines along water courses;
- Stream diversions;
- Water supply studies;
- Generating of tender or enquiry documentation;
- Tender adjudication;
- The design and costing of mechanical, electrical, control and instrumentation or building works associated with the residue delivery or return water systems;
- Design and construction of the haul road;
- Geohydrological assessment of the preferred site, this is assumed to the completed as part of the Environmental Impact Assessment process;
- Additional trade off studies associates with water supply and treatment of excess slurry water.

Epoch is however able to assist in arranging for the some of the abovementioned work to be carried out if necessary.

3 Legislative Requirements, Guidelines and Standards for Design.

The design of the TSF would have to conform to the requirements of in-country legislation and permit conditions as well as the requirements of the Global Industry Standard for Tailings (GISTM) and associated technical guidelines defining what is considered accepted practice for the design of such facilities.

4 Remuneration and Payment

The estimated cost of professional services and disbursements associated with the execution of the scope of works as described is ZAR 1 256 720 as detailed in the breakdown of the scope of work and costs in Table 2. The following should be noted with respect to the estimate:

- The estimates are in ZAR and exclude VAT and all Local and Withholding taxes;
- The estimates include a levy on Professional Fees of 15% to cover Professional Indemnity Insurance and office related costs;
- The estimate includes costs, as supplied in “Supply of TSF Conceptual Design Options Addendum 01 – March 2026”, for accommodation and meals associated with the site visit for 2 people over a duration of 3 days;
- The budget includes Visa’s and Air Travel associated with the site visit;
- The budget includes provision for travel from Epoch office in Bedfordview, Johannesburg to Obsideo Offices located in Irene, Centurion for the one day workshop;
- It is expected that it will take approximately 3 months to complete the scope of works as defined

Table 2: Proposed Budget for Execution of Scope of Work as Defined.

Work Package	Professional Fees (ZAR)	Disbursement (ZAR)	Total (ZAR)
Project Initiation	R 95 882	R 14 382	R 110 264
Site Visit	R 124 800	R 40 998	R 165 798
Literature Review	R 145 800	R 21 871	R 167 670
Design Criteria Document	R 47 000	R 7050	R 54 050
Conceptual Design	R 305 350	R 45 803	R 351 153
Multi-Citeria Decision Matrix	R 144 400	R 22 230	R 166 630
Final Report	R 111 600	R 16 470	R 128 340
Project Management	R 98 100	R 14 715	R 112 815
Total	**R 1 072 932**	**R 183 788**	**R 1 256 720**

Table 3: Proposed Budget for Execution of Scope of Work as Defined - Detailed

Item	Description	Professional Fees	Project Expenses	Total
1	**Project Initiation and Review of Available Information**			
1.1	Project Initiation, Kick off Meeting and Collection of Available Information	R 24,982	R 3,747	R 28,729
1.2	Review of Available Information	R 36,700	R 5,505	R 42,205
	- Confirm of Design Criteria for Multi Criteria Alternative Assessment (e.g. Life of mine Production, Tailings Characteristics)			
1.3	Project Schedule Development	R 17,100	R 2,565	R 19,665
1.4	Project Contractual Finalisation	R 17,100	R 2,565	R 19,665
2	**Site Visit**			
2.1	Travel To and From Site	R 83,200	R 34,758	R 117,958
2.2	Site Inspection and Meeting	R 41,600	R 6,240	R 47,840
3	**Literature Review**			
3.1	Review Deposition and Development Methods (Up to 4)	R 76,400	R 11,460	R 87,860
3.2	Consideration, at Desktop / Qualitative Level, of Alternative methods of Construction / Operation e.g.:	R 69,400	R 10,410	R 79,810
	- Conventional vs Thickened vs Filter Cake Tailings Production			
	- Self Raised vs Containment vs Dry Stacking			
4	**Development of Design Criteria Document**			
4.1	Compilation of Design Criteria Document in preperation of Conceptual Design	R 47,000	R 7,050	R 54,050
5	**Conceptual Design Layouts**			
5.1	Site Selection to Identify Candidate Sites	R 61,828	R 9,274	R 71,102
5.2	Development of Stage Capacity Curves to Confirm Available Storage	R 47,000	R 7,050	R 54,050
5.3	Surface Water Management Strategy	R 54,000	R 8,100	R 62,100
	- Water Management on TSF (Decant System)			
	- Water Management Around TSF (Stormwater Diversion)			
5.4	Desktop Level Assessment of Likely Zone of Influence and Associated Consequence Classification	R 39,082	R 5,862	R 44,944
5.5	Conceptual Level Costing of Options	R 36,700	R 5,505	R 42,205
5.6	Conceptual Layout Drawings	R 66,740	R 10,011	R 76,751
6	**Multi Criteria Decision Matrix**			
6.1	Development of Multi-Criteria Decision Matrix Framework, Including Evaluation of:	R 47,000	R 7,050	R 54,050
	- Safety and Risk			
	- Environmental			
	- Constructability			
	- Cost (Conceptual)			
	- Operational Practicality			
6.2	Assessment of Options Against agreed upon Criteria	R 47,000	R 7,050	R 54,050
6.3	Workshop with Stakeholders To determine Preferred option	R 50,400	R 8,130	R 58,530
7	**Final Report**			
7.1	Compilation of Report on Outcomes of Multi Criteria Alternative Assessment	R 111,600	R 16,740	R 128,340
8	**Project Management and Meetings**			
8.1	Attendance of Bi-Weekly Meetings	R 31,200	R 4,680	R 35,880
8.2	Updating of Project Schedule on a Bi-Weekly Basis	R 41,100	R 6,165	R 47,265
8.3	General Project Administration and Management (Incl. Invoicing)	R 25,800	R 3,870	R 29,670
	TOTAL (Excl VAT)	**R 1,072,932**	**R 183,788**	**R 1,256,720**

Notes to estimate of costs

1 **Estimated Duration of Project**

1.1 Estimated Duration

Months		3
	Commencement of Project	May-26
	Completion of Project	Jul-26

2 Budget **includes** provisions for:

2.1 Levy on Professional Fees equal to 15% included to cover Professional Indemnity Insurance and Office Related Costs

2.2	Visa Fees	2 @	**R**	**1 700**	**Provisional Sum**
2.3	Air Travel (Site Visit)	2 @	**R**	**20 000**	**Provisional Sum**
2.4	Food and Accommodation	2 @	**R**	**578**	**Daily Rates Supplied by Client, Exchange Rate @R17/USD**

2.5 Mutli Criteria Decision Matrix Workshop assumed to be Conducted in Person at EPCM (Obsideo) Offices or online at Epoch Resou

2.6	Travel to Obsideo Offices (Round Trip - x Km)	114 @	**per km**	**R570.00**

3 Budget **excludes** provisions for :

3.1 Travel from Airport to site and back

3.2 Geotechnical Site investigations

3.3 Laboratory Testing to Determine Tailings Physical and Geochemical Properties (Assumed this will be supplied)

3.4 Additional Testing to Confirm Tailings Suitability Associated with Alternative Deposition Methods (e.g. Cyclone Deposition, Dry stack

3.5 Public participation meetings with affected parties

3.6 Costs associated with medical and induction process to gain access to site

3.7 Survey of the Site

3.8 Additonal Trade-off Studies associated with Water Supply and Treatment of Excess Slurry Water

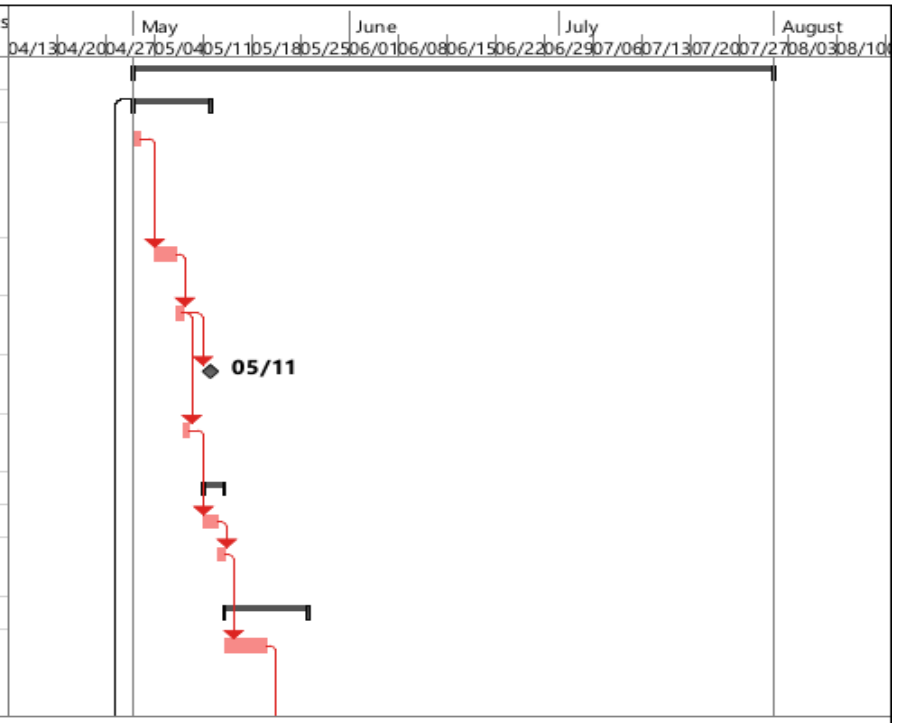
3.9 Design of Return Water Systems

5 Schedule

It is anticipated that the duration for completing the scope of work associated with the scope of work as described would be 3 months, depending on the availability of information. The proposed project schedule is illustrated in

Figure 1: Proposed Project Schedule

ID	Task Name	Duration	Start	Finish	Predeces
1	**Trinity Nyakabingo Mine**	**66 days**	**Fri 26/05/01**	**Fri 26/07/31**	
2	**Project Initiation**	**7 days**	**Fri 26/05/01**	**Mon 26/05/11**	
3	Project Initiation, Kick off Meeting and Collection of Available Information	1 day	Fri 26/05/01	Fri 26/05/01	
4	Review of Available Information	3 days	Mon 26/05/04	Wed 26/05/06	3
5	Project Schedule Development	1 day	Thu 26/05/07	Thu 26/05/07	4
6	Project Schedule Submission / Approval	2 days	Fri 26/05/08	Mon 26/05/11	5
7	Project Contractual Finalisation	1 day	Fri 26/05/08	Fri 26/05/08	5
8	**Site Visit**	**3 days**	**Mon 26/05/11**	**Wed 26/05/13**	
9	Travel To and From Site	2 days	Mon 26/05/11	Tue 26/05/12	7
10	Site Inspection and Meeting	1 day	Wed 26/05/13	Wed 26/05/13	9
11	**Litirature Review**	**8 days**	**Thu 26/05/14**	**Mon 26/05/25**	
12	Review Deposition and Development Methods (Up to 4)	4 days	Thu 26/05/14	Tue 26/05/19	10

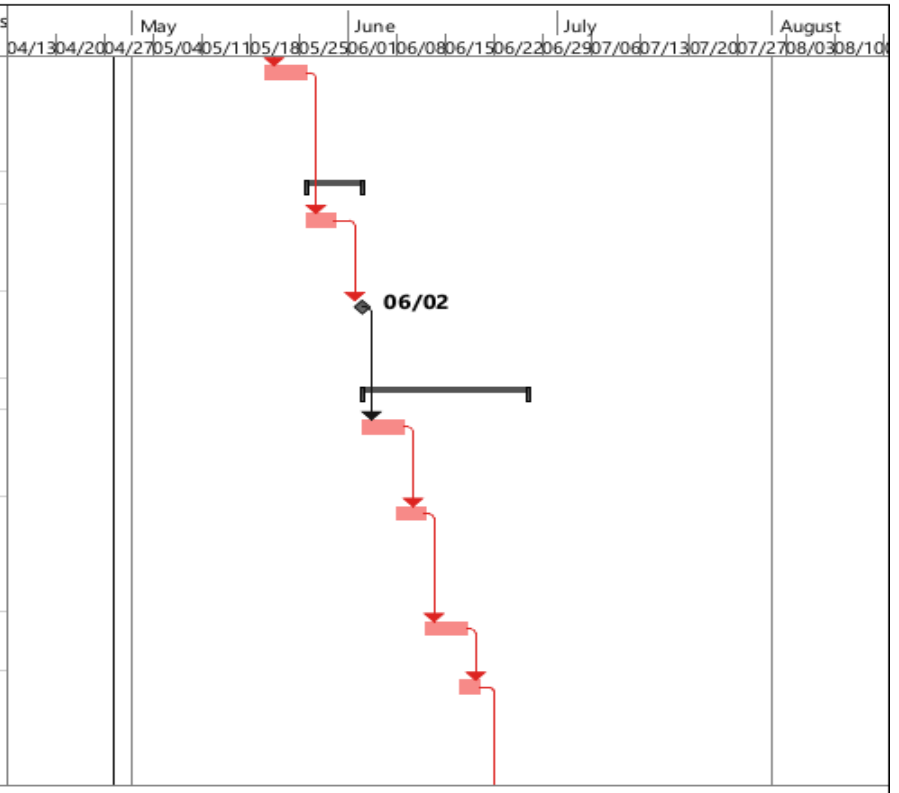


Project: 20260316_Trinity Sched
Date: Wed 26/03/18

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Critical
Project Summary	Manual Summary	Critical Split
Inactive Task	Start-only	Progress
Inactive Milestone	Finish-only	Manual Progress

Page 1

ID	Task Name	Duration	Start	Finish	Predeces
13	Desktop Review of Alternative Construction / Operation Methods	4 days	Wed 26/05/20	Mon 26/05/25	12
14	**Design Criteria**	**6 days**	**Tue 26/05/26**	**Tue 26/06/02**	
15	Compilation of Design Criteria Document for Preferred Option	4 days	Tue 26/05/26	Fri 26/05/29	13
16	Submission / Approval of Design Criteria Document	2 days	Mon 26/06/01	Tue 26/06/02	15
17	**Conceptual Design**	**18 days**	**Wed 26/06/03**	**Fri 26/06/26**	
18	Site Selection to Identify Candidate Sites	4 days	Wed 26/06/03	Mon 26/06/08	16
19	Development of Stage Capacity Curves to Confirm Available Storage	4 days	Mon 26/06/08	Thu 26/06/11	18FS-1 day
20	Surface Water Management Strategy	4 days	Fri 26/06/12	Wed 26/06/17	19
21	Desktop Assessment of Zone of Influence and Consequence Classification	3 days	Wed 26/06/17	Fri 26/06/19	20FS-1 day



Project: 20260316_Trinity Sched
Date: Wed 26/03/18

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Critical
Project Summary	Manual Summary	Critical Split
Inactive Task	Start-only	Progress
Inactive Milestone	Finish-only	Manual Progress

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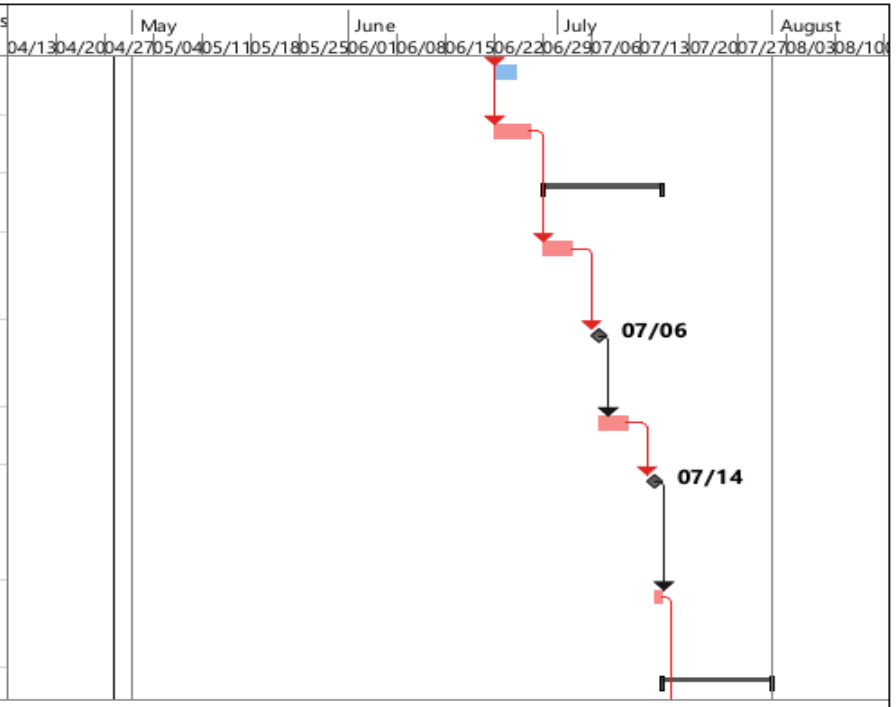
ID	Task Name	Duration	Start	Finish	Predeces
22	Conceptual Level Costing of Options	3 days	Mon 26/06/22	Wed 26/06/24	21
23	Conceptual Layout Drawings	5 days	Mon 26/06/22	Fri 26/06/26	21
24	**Multi Criteria Decision Matrix**	**13 days**	**Mon 26/06/29**	**Wed 26/07/15**	
25	Development of Multi-Criteria Decision Matrix Framework	4 days	Mon 26/06/29	Thu 26/07/02	23
26	Submission and Approval of Framework	2 days	Fri 26/07/03	Mon 26/07/06	25
27	Assessment of Options Against Agreed Criteria	4 days	Tue 26/07/07	Fri 26/07/10	26
28	Submission of Assessment Results and Approval for Workshop	2 days	Mon 26/07/13	Tue 26/07/14	27
29	Stakeholder Workshop to Determine Preferred Option	1 day	Wed 26/07/15	Wed 26/07/15	28
30	**Final Report**	**12 days**	**Thu 26/07/16**	**Fri 26/07/31**	



Project: 20260316_Trinity Sched
Date: Wed 26/03/18

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Critical
Project Summary	Manual Summary	Critical Split
Inactive Task	Start-only	Progress
Inactive Milestone	Finish-only	Manual Progress

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ID	Task Name	Duration	Start	Finish	Predeces
31	Compilation of Final Multi-Criteria Alternative Assessment Report	10 days	Thu 26/07/16	Wed 26/07/29	29
32	Submission/ Approval of Final Desing Report	2 days	Thu 26/07/30	Fri 26/07/31	31
33	**Project Management and Meetings**	**65 days**	**Fri 26/05/01**	**Thu 26/07/30**	
34	Attendance of Bi-Weekly Meetings	65 days	Fri 26/05/01	Thu 26/07/30	2SS
35	Updating Project Schedule (Bi-Weekly)	65 days	Fri 26/05/01	Thu 26/07/30	2SS
36	General Project Administration and Management	65 days	Fri 26/05/01	Thu 26/07/30	2SS

Project: 20260316_Trinity Sched
Date: Wed 26/03/18

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Critical
Project Summary	Manual Summary	Critical Split
Inactive Task	Start-only	Progress
Inactive Milestone	Finish-only	Manual Progress

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6 Personnel, Equipment, Facilities and Services

The scope of services is to be carried out under the direct supervision of one of the Directors of Epoch who would liaise with the project team and specialist sub-contractors as necessary. The design and engineering work will be undertaken by one or more of Epoch's professional staff, with assistance and input from specialists as required. It is proposed that project team would draw on the resources listed in Table 4. Key Personnel associated with the project are as follows:

- Mr. GJ Wiid Pr Eng– Director, Competent Person, Principal Engineer.
- Mr. R Brink Pr Eng– Director, Internal Review, Senior Engineer.
- Mr. L Venter Pr Tech Eng – Project Lead, Senior Tailings Technologist.

The compilation of drawings may be contracted out depending on the availability of internal resources. Specialist consultants will be appointed to carry out specific investigations or assignments or to review specific aspects of designs and/or information supplied as deemed necessary.

Table 4: Resources and Abbreviation

RESOURCE	ABBREVIATION	RATE (R/HOUR)
Principal Engineer	PE	R 3500
Senior Engineer / Technologist	SE	R 1700
Intermediate Engineer	IE	R 1100
Draughter	NS	R 1191

The pool of resources available for the project is presented in Table 5. The final project team will be confirmed at the time of contract award, based on staff availability and workload considerations.

Table 5: Available Resources

RESOURCE	DESCRIPTION
GJ Wiid Pr.Eng, CEng	Director, Competent Person, Principal Tailings Engineer
R Brink Pr Eng	Director, Senior Tailings Engineer (Internal Review)
L Venter Pr Tech Eng	Senior Tailings Technologist - (Project Lead)
R Miller	Senior Tailings Engineer
A Allen	Senior Tailings Engineer
V Henning	Senior Tailings Engineer
J Swanepoel	Senior Tailings Engineer
J Freeman	Senior Tailings Engineer
G Rohde	Senior Tailings Engineer
Z Mhlanga	Intermediate Tailings Engineer
A Gubede	Intermediate Tailings Engineer
G Masombuka	Intermediate Tailings Engineer
TM Kamuriwo	Intermediate Tailings Engineer

RESOURCE	DESCRIPTION
MC Fredericks	Intermediate Tailings Engineer
A De Lange	Graduate Tailings Engineer in Training
R Arlow	Graduate Tailings Engineer in Training
EJ Low	Graduate Tailings Engineer in Training
E Ilonga	Graduate Tailings Engineer in Training
N Mahlangu	Graduate Tailings Engineer in Training
SPECIALIST SUB-CONSULTANTS (AS NECESSARY)	**DESCRIPTION**
N Scheepers	Specialist Tailings Draughtsman and Civil Technician
T A'Bear	Senior Engineering Geologist
L Richer	Engineering Geologist
H Peens	Specialist Hydrologist
JJP Viviers	Specialist Hydrogeologist

The organogram associated with the project is illustrated in Figure 2.

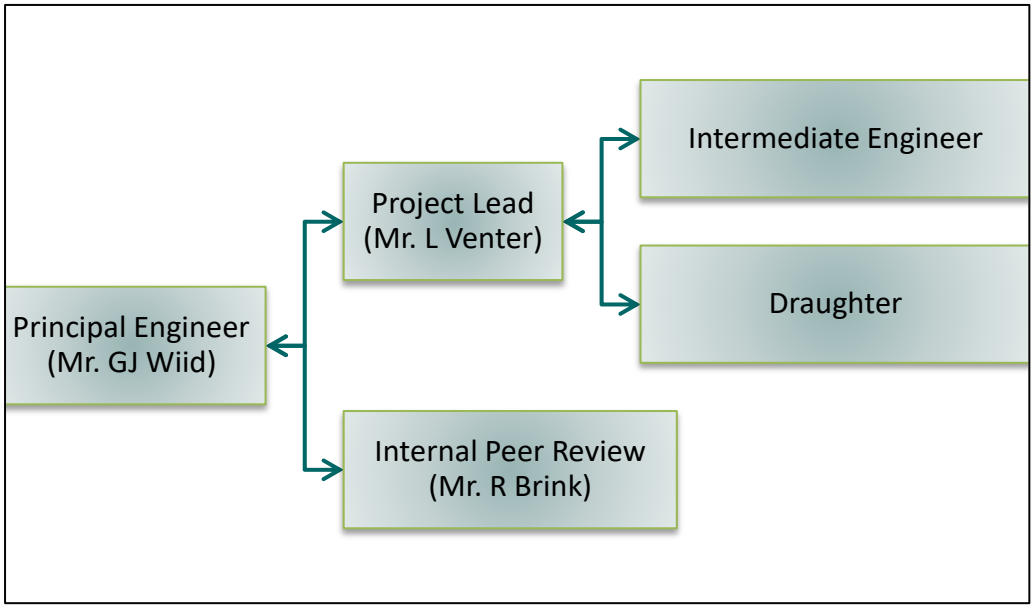


Figure 2: Project Organogram

7 Terms and Conditions

References from Clauses in the General Conditions (as amended by these Particular Conditions)

Clause Number	Clause heading	Content
1.1	Definitions	
1.1.4	Client's Representative	Mr. H. Ackerman
1.1.5	Commencement Date	May 2026
1.1.8	Consultant's Representative	Mr. Lance Venter
1.1.9	Country	South Africa
1.1.22	Project	Multi Criteria Alternatives Analysis for Trinity Nyakabingo Tailings Storage Facility
1.1.24	Time for Completion	3 months
1.3	Notices and other Communications	
1.3.1 (c)	Communication	Email, Telephonic & In-person (if required)
1.3.1 (d)	Address for communications	hein@obsideo-consulting.com
	Client's address:	Irene Corporate Corner 25 Via Latina Crescent , Irene, 0157
	Telephone number:	+27 82 551 3592
	Consultant's address:	Building B, Viscount Office Park 08 Viscount Road Bedfordview 2008
	Telephone number:	+27 (11) 802 3657 +27 (11) 656 0380/1
	Facsimile number:	+27 (11) 802 3654 +27 (11) 507 5730
1.4	Law and Language	
1.4.1	Law governing Agreement	South African Law
1.4.2	Ruling language of Agreement	English
1.4.3	Language for communications	English
1.8	Confidentiality	
1.8.3	Period for expiry of confidentiality	Confidentiality obligations will expire 10 (ten) years from the earlier of the time for completion or date of termination of this Agreement
1.9	Publication	
1.9.1	Publication restrictions	Subject to confidentiality requirements and otherwise as set out in Sub-Clause 1.8.3
3.9	Construction Administration	
	Not included in the services mentioned above	
7.4	Third Party Charges on Consultant	
	15% withholding taxes for in country works	

Clause Number	Clause heading	Content
8.2	Duration of Liability	
8.2.1	Period of Liability	1 year from the Time of Completion Date.
8.3	Limit of Liability	
8.3.1	Limit of Liability	The Consultants liability to the Client for indirect of consequential loss is Zero. The maximum amount of liability payable by the Consultant to the Client, in respect of liability under the Agreement, is limited to the total amount of the Professional Indemnity Insurance (Sub-Clause 9.1.1) below. The Parties agree to waive all claims against one another insofar as the aggregate of compensation which might otherwise be payable exceeds the aforesaid maximum amount payable.
9	Insurance	
9.1.1	Insurances to be taken out by Consultant:	
	Professional Indemnity Insurance	The Consultant's total professional liability for the Services is limited to One (1) million USD$ (United States Dollars) being the Consultant's maximum standard cover; and For a duration of 1 year from the Time for Completion.
	Public Liability Insurance	One (1) million USD$ (United States Dollars)
10	Disputes and Arbitration	
10.2.1	Adjudication	Association of Arbitrators (Southern Africa)
10.4.1	Arbitration rules	The Arbitration Foundation of Southern Africa
10.4.1	Language of arbitration	English

8 Additional or Amended Clauses

The Parties agree to the following additions/amendments to the General Conditions.

1. Definitions

1.1. Delete Sub-Clause 1.1.1 and replace with:

"**Agreement**" means the Letter of Tender together with the:

- Client/Consultant Model Services Agreement (General Conditions and Particular Conditions);
- Section 2 [Scope of Services];
- Section 3 [Legislative Requirements, Guidelines and Standards for Design.]
- Section 4 [Remuneration and Payment];
- Section 5 [Schedule];
- Section 6 [Personnel, Equipment, Facilities and Services];
- Section 7 [Terms and Conditions];
- General Conditions Appendix 5 Rules for Adjudication; and
- Any letters of offer and acceptance attached to any of the above."

1.2. Delete Sub-Clause 1.1.12 and replace with:

"1.1.12 "**Exceptional Costs**" means the costs, not otherwise compensated under the Agreement, reasonably incurred, and arising out of any necessary work, cost expense or delay, not caused by an act or omission of the Consultant that are additional to the Services under the Agreement."

1.3. Amend Sub-Clause 1.1.13 as follows:

1.3.1. Delete subparagraph 1.1.13(v) and insert:

"(v) natural catastrophes such as earthquake, hurricane, typhoon or volcanic activity; and"

1.3.2. Add a new subparagraph 1.1.13 (vi) as follows:

"(vi) epidemic, pandemic or any other national or international event that impacts the Country, Project or Services."

1.4. Delete Sub-Clause 1.1.25 and insert:

"**Variation**" or "**Variation to the Services**" means any change to the Services or approved as Variation under Clause 5.1[Variations] and valued under Clause 5.2[Agreement of Variation Value and Impact].

2. Clause 1.6 Adjustments and Sub-Contracts

2.1. Delete the first sentence of Sub-Clause 1.6.3 and insert:

"The Consultant shall not sub-contract performance of all or part of the Services without the written consent of the Client, which consent will not be unreasonably withheld or delayed."

2.2. Insert a new Sub-Clause 1.6.5:

"If the Client appoints a sub-contractor, the Client shall remain responsible and liable to the Contractor for the acts, omissions and defaults of the sub-contractor in relation to the Agreement as if they were acts, omissions and defaults of the Client."

3. Clause 1.7 Intellectual Property

3.1. Delete Sub-Clause 1.7.5 and insert the following:

"1.7.5 In the event that the Client is in default of payment of any amounts due under the Agreement then the Consultant may upon twenty-eight (28) days' Notice revoke any licence granted."

4. Clause 1.9 Publication

4.1. Delete Sub-Clause 1.9.2 and insert the following:

"1.9.2 The Consultant may use material and information relating to the Services and the Project for commercial tendering purposes with the prior written approval of the Client, which approval shall not be unreasonably withheld or delayed."

5. Clause 1.10 Anti-Corruption

5.1. Delete the first sentence in Sub-Clause 1.10.1 and insert:

"In the performance of their obligations under the Agreement, the Consultant and the Client, their agents and employees shall comply with the Law governing the Agreement, rules, regulations and orders including those relating to corruption and bribery."

5.2. Delete the last sentence in Sub-Clause 1.10.3.

6. Delete Sub-Clause 1.15.1 and insert the following:

6.1. The documents forming the Agreement are to be taken as mutually explanatory of one another. If there is a conflict between these documents then the documents shall be interpreted and construed in accordance with the order of precedence of documents given in the Letter of Tender. If the conflict cannot be so resolved then the Client shall issue an instruction or Variation to the Services under Clause 5.1 [Variations] as the case may require, in order to resolve the conflict.

7. Clause 2.1 Information

7.1. Delete Sub-Clause 2.1.1 and insert the following:

"2.1.1 In order not to delay the Consultant in the performance of the Services, the Client shall within 7 days of the Consultants request and with due regard to the Programme, provide to the Consultant, free of cost, all information, and any further information reasonably requested by the Consultant, which may pertain to the Services and which the Client is able to obtain."

7.2. Delete Sub-Clause 2.1.3 and insert the following:

"2.1.3 In the event of any error, omission, or ambiguity (for the avoidance of doubt, including a manifest error, omission or ambiguity) in the information provided to the Consultant, the Client may rectify such matter by Notice and where necessary issue an instruction or a Variation to the Services as the case may require."

8. Clause 2.3 Assistance

8.1. Delete the first sentence of Sub-Clause 2.3.1 and insert the following:

"2.3.1 In the Country and in respect of the Consultant, its personal and dependants, as well as sub-consultants, if any, the Client shall use reasonable endeavours to assist in:"

9. Clause 3.2 Function and Purpose of Services

9.1. Delete Sub-Clause 3.2.1 and insert the following:

"3.2.1 The Client shall describe the function and purpose of the Services as explicitly stated in Appendix 1 [Scope of Services]."

10. Clause 3.3 Standard of Care

10.1. Delete Sub-Clause 3.3.1 and insert the following:

"3.3.1 Notwithstanding any term or condition to the contrary in the Agreement or any related document or any legal requirement of the Country or Law governing the Agreement (including, for the avoidance of doubt, the jurisdiction of the place of establishment of the Consultant), in the performance of the Services the Consultant shall exercise the reasonable skill, care and diligence to be expected from a consultant experienced in the provision of such services for projects or similar size, nature and complexity."

11. Clause 5.1 Variations

11.1. Delete Sub-Clause 5.1.3 and insert:

"The Consultant shall give Notice to the Client as soon as reasonably practicable where the Consultant considers that any instruction or direction from the Client or any other circumstance constitutes a Variation to the Services. The Consultant shall include in the Notice details of the estimated impact upon the Programme and cost of the Services for such matters. Within fourteen (14) days of receipt of the Notice the Client shall either accept and issue a Variation Notice or cancel the instruction or direction. If the Parties cannot agree on the Variation, either Party may refer the matter as a dispute under Clause 10 [Disputes and Arbitration] within seven (7) days of receipt of such further Notice."

11.2. Delete the last hanging paragraph in Sub-Clause 5.1.4 and insert:

"… the Consultant shall be bound by each Variation that has been accepted by the Client as per Sub-Clause 5.1.3."

12. Clause 6.3 Effects of Suspension of the Services

12.1. At the end of Sub-Clause 6.3.2 insert:

"If the Consultant incurs Exceptional Costs in the security, maintenance, and custody of the Services, during the suspension period, the Consultant shall be paid in accordance with Sub-Clause 6.3.3. (a)."

13. Clause 7.5 Disputed Invoices

13.1. Delete Clause 7.5 and all references to this Clause in the Agreement.

14. Clause 8 Liabilities

14.1. Delete subparagraph 8.1.3(a) and insert:

"(a) such damages shall be limited to the reasonable amount of loss or damage incurred as a direct result of such breach;"

14.2. Delete the first sentence in Sub-Clause 8.2.1 and insert:

"Notwithstanding any term or condition to the contrary in the Agreement or any related document or any legal requirement of the Country or Law governing the Agreement (including, for the avoidance of doubt, the jurisdiction of the place of establishment of the Consultant), neither the Client nor the Consultant shall be considered liable for any loss or damage resulting from any occurrence unless a claim is formally made on one Party by the Other Party before the expiry of the relevant period in the Particular Conditions, such period to commence upon completion of the Services or termination (whichever is earlier).."

Appendix A: Agreement and POPIA Form

Please complete the form below and return to Epoch representative.

In accordance with the Protection of Personal Information Act (POPIA), by authorising the below, your consent is granted to collect and retain your Company Data for the purpose of maintaining Epoch's project and financial records for a period of 7 years, as stipulated by South African Revenue Service (SARS).

Epoch values your privacy and ensures that your Company Data will be securely stored in compliance with POPIA. Should you have any questions regarding this, please contact the Proposal Author – lance.venter@epochresources.co.za.

Project Title	Multi Criteria Alternatives Analysis for Trinity Nyakabingo Tailings Storage Facility
Company Name	Obsideo Consulting
Company Address	Irene Corporate Corner 25 Via Latina Crescent Irene 0157
VAT Reg. No.	
Contact Person	Mr. H. Ackerman
Email Address	hein@obsideo-consulting.com
Telephone Number	+27 82 551 3592
Mobile Number	+27 82 551 3592
Agreed Contract Value	R 1 256 720 excl VAT
Invoicing Method	☒ Monthly Billing ☐ Deliverable Billing

Obsideo Consulting hereby authorise Epoch Resources (Pty) Ltd to perform the Scope of Work detailed in this proposal and accept the Terms and Conditions set out in Section 0 and 8.

Name of Signatory

Position within the Company

Signature

Date March 2026

ANNEXURE B : JONES & WAGNER PROPOSAL

Jones & Wagener
Engineering & Environmental Consultants
59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
tel: 00 27 11 519 0200 www.jaws.co.za email: post@jaws.co.za

Obsideo Consulting
25 Via Latina Cresent
Irene Corporate Corner
Irene
0157

20 March 2026

Our Ref: L484-LET-002
Your Ref: 7115-0000-MSOW-015.01_REV01
L484-00_LET_002_rA_Proposal

Attention: Mr Hein Ackerman **email: *hein@obsideo-consulting.com***

Dear Sir

PROJECT: L484 – TRINITY NYAKABINGO MINE
TAILINGS STORAGE FACILITY CONCEPTUAL DESIGN OPTIONS

Thank you for inviting us to submit a tender for the conceptual design options for a Tailings Storage Facility (TSF) for Trinity Metals' Nyakabingo Mine, Rwanda.

We have pleasure in providing the following proposal for professional services for your consideration, comprising this covering letter and a detailed breakdown of the costs. Please note that this submission replaces the previous proposal reference L484-LET-001 dated 17 July 2025.

1. INTRODUCTION

1.1 Terms of reference

Jones & Wagener (J&W) submitted a proposal for the conceptual design and selection of the preferred tailings storage facility at Nyakabingo Mine in July 2025. The submission was discussed at a meeting held at Obsideo's office in Pretoria on 5 March 2026. After the meeting, J&W received a RFQ on 10 March 2026, which included some clarifications discussed at the meeting, inviting J&W to submit a tender. This letter covers the revised J&W proposal for the scope of work as presented in 7115-0000-MSOW-015.01_Rev01 and 7115-0000-JADD-001.01_Rev00.

1.2 Purpose

The purpose of the study is to:

- Identify and assess the advantages and disadvantages of different development and deposition methodologies that can be employed for the development of the TSF. Based on the assessment the preferred tailings deposition methodology will be selected.
- Based on the selected tailings deposition methodology, develop conceptual layouts for the development of the TSF on the identified site.
- Select the preferred option (layout), based on selection criteria to be developed, during a workshop with key stakeholders.
- Complete the conceptual design of the selected TSF on the identified site.

On completion of this phase of the study, the preferred tailings deposition methodology will have been identified, and a conceptual design of the TSF will have been developed.

2. SCOPE OF WORK

2.1 Information Provided

The following information was provided for review:

- Paterson and Cooke Consulting Engineers' report titled *Nyakabingo Mine: Dewatering and Strength Test Work*.
- Civilab TSF foundation test results which foundation indicator, oedometer and triaxial text results.
- TSF concept drawings *ETS TM NKB TSF 001 R0* and *ETS TM NKB TSF 002 R0*.
- *Summary of TSF concept 7 Feb 25* document.

2.2 Scope of Services

2.2.1 Project initiation

Allowance is made for the following as part of the project start up:

- Scoping of the work.
- Finalising the appointment, including agreeing the conditions of contract applicable to the appointment.
- An online kick-off meeting.
- Collect and review all available information, including processing of survey information.
- Compiling a project schedule on a high-level only describing the headings below as items in it. The schedule will be provided to Obsideo Consulting for review, following which it will be finalised and used to track progress.

2.2.2 Site Visit

Allowance is made for an initial site visit by the design team (3 people) that will include the following:

- A meeting with Obsideo Consulting, Trinity metals and relevant management teams.
- Interviews with key personnel including the management teams,
- A site inspection of the identified TSF site and surrounding areas.

This will allow us to get a better understanding of limitations such as topography, drainage, existing infrastructure, surrounding communities, LoM planning and plant restrictions on producing tailings at varying solids concentrations, etc. During the site visit as much as possible of the available documentation and information will be collected.

Our costing allows for the following, based on the information provided as part of the tender clarification:

- Fly to Kigali from Johannesburg late afternoon and overnight in Kigali.

- On the next day travel to the mine and spend the rest of the day and the following day on the mine. Allowance is made for accommodation in the mine Guest House for two nights at $17.00 per person per night.
- Travelling back to Kigali on the fourth day to catch a flight back to Johannesburg in the morning.

2.2.3 Assessment of Deposition Methods

Allowance is made for a brief literature review which will consider up to four available tailings deposition technologies / methods that would be feasible for this application. This will typically range from conventional slurry deposition through spigotting or cycloning, deposition of thickened / paste tailing and stacking of filtered tailings by means of conveyor or truck transport. In addition, the properties of the tailings (to be provided by the Mine) will be used to consult technology providers on the feasibility of using their technology for the development of the TSF. J&W will then compile a summary note listing the advantages and disadvantages of each option, specifically in the context of constraints and challenges pertaining to this site.

Based on the available information gathered, a workshop will be conducted with all relevant stakeholders to eliminate the alternatives that are clearly not viable. Allowance is made for attendance of a 3-hour workshop to be held online, as well as preparation and high-level evaluation of the deposition technologies. At the workshop the most suitable deposition methodology will be selected for which the conceptual layout(s) will be developed.

2.2.4 Design Criteria

Once the preferred tailings deposition methodology has been selected, J&W will compile design criteria for the conceptual layout(s) of possible TSF configurations on the available site. The design criteria will need to be reviewed and approved by the mine before the conceptual designs can commence. The design criteria will include the following as a minimum:

- LoM tailings tonnages.
- In situ dry density of the tailings to be stored.
- Outer wall slopes.
- Lining requirements.
- Limitations on borrowing construction materials outside the TSF footprint.
- Clean water management requirements.
- Affected water management requirements.

2.2.5 Conceptual Designs

Obsideo provided a drawing of a previous TSF design option in preparation of this proposal. The drawing indicated an area earmarked for the proposed TSF directly south of the mine and plant. The proposal is based on the assumption that this area will be used for the development of the TSF, but that there is opportunity to investigate various configurations of utilising this available space.

We have made allowance to develop a maximum of three possible configurations. An option of placing and compacting filtered tailings, for instance, may allow the possibility of constructing multiple smaller TSF dumps / compartments, as opposed to the likelihood of only being able to construct and operate a single compartment of conventional slurry

deposited tailings. Considering this example of one versus multiple compartments is therefore seen as two possible configurations.

We've allowed for the development of the conceptual TSF layout(s) which will include the following:

- Footprint and geometry, including typical section through walls.
- Conceptual strategy for the management of water on and from the facility. We have not allowed for the design of any return water dams or associated infrastructure.
- Conceptual stormwater management details around the perimeter of the TSF.

The aim of these conceptual layouts is only to evaluate the possibility of practically accommodating the LoM tailings in the available airspace. Although the inherent risk and consequence of failure will be considered as part of these layouts, no detail investigations or assessments (i.e. seismic loading on stability or design floods resulting in overtopping) will be done to quantify the risk at this stage. We will leverage in-house experience in tailings facility design and surveillance to not develop conceptual models that would ultimately be unpractical or high risk.

2.2.6 Multi Criteria Decision Matrix and Workshop

The next step would be to select the preferred TSF layout from the up to three alternative layouts that have been developed. The conceptual layouts will be presented to a multi-disciplinary audience (internal and external parties as guided by the client) to inform a one-day workshop (to be held online) ranking the various options in terms of technical, financial, environmental and social aspects, with pre-determined weightings assigned to each aspect. The technical and financial aspects will be based on J&W designs, while environmental and social aspects will need to be informed and guided by the relevant Trinity Metals personnel. It is important to note that, based on the details available at the time of the workshop, the assessment of the options will be on a comparative and not definitive basis. For example, the cost associated with each option will be assessed based on the identified cost drivers and no definitive cost estimate will be prepared for each alternative.

A selection spreadsheet, otherwise known as the Multi Criteria Decision Matrix, will be developed and circulated to the workshop forum prior to the meeting, for review and input on the various aspects and their perceived weightings for scoring. This will form the basis of the workshop where the scoring of each aspect for the three configurations will take place. We will not have any detailed studies available to inform these aspects and will rely on the Mine to provide inputs related to the environmental and social considerations.

2.2.7 Conceptual design of selected option

Allowance is made to refine the conceptual layout of the option selected during the workshop. This will include the following:

- The geometry of the TSF including the required starter wall (as applicable).
- The conceptual layout of the internal drainage system as required.
- The conceptual layout of the operational and affected storm water management infrastructure collecting water on and from the facility.
- The conceptual layout of the clean water diversion infrastructure as required.

The level of detail allowed for includes infrastructure layouts and typical cross sections. Sizing of infrastructure (for example canals) are not allowed for. The layout of the infrastructure will be optimised and refined during the next design phases.

2.2.8 Reporting

We will compile a report summarising the assessment of the different deposition methodologies, the conceptual layouts that were developed, the process and outcome of the final Multi Criteria Decision Matrix workshop and the development of the conceptual design of the selected option. The report will provide a detailed record of the work completed as part of the study and will also include the forward workplan and the assumptions that need to be verified as part of the next phases.

2.2.9 Project Administration and Management

The following project management activities have been allowed for based on a 7-month project duration:

- Attendance of bi-weekly (once every two weeks) progress meetings with Obsideo Consulting and/or Trinity Metals.
- Updating progress on the baseline schedule on a bi-weekly basis.
- General project admin and management.

2.3 Deliverables

The following deliverables are allowed for:

- Design criteria technical note.
- Report including the assessment of the different deposition methodologies, the conceptual layouts that was developed and the process and outcome of the final Multi Criteria Decision Matrix workshop.
- Conceptual design drawings of the selected TSF development.

3. ASSUMPTIONS & EXCLUSIONS

Our proposal is conditional on the following assumptions, exclusions and client input.

3.1 Assumptions

In addition to the assumptions noted in the scope of work, the offer is based on the following assumptions:

- No allowance is made for any survey work. It is assumed that all required survey information, including detailed field topographical survey of sufficient accuracy, will be provided in electronic, georeferenced .dwg or .dxf format by the mine.
- The infrastructure allowed for in the scope is as noted in Section 2. Other infrastructure, such as power supply, tailings thickening or transport to site, diversion of affected infrastructure, a return water dam, etc. is not allowed for.
- This proposal makes allowance for flights from Johannesburg to Kigali and accommodation as per the tender clarification received. It is assumed that airport transfers from Kigali to site and all other local travel (to and from site) will be covered by the Client. It was advised that Visas and Work Permits are not necessary and therefore have not been allowed for.
- It is understood that J&W will be appointed by Obsideo and it will be a ZAR contract.

3.2 Exclusions

The following are excluded from the scope of work:

- Geotechnical investigations, and any test work, i.e. both laboratory and field testing.
- Dam breach assessments and determination of the zone of inundation.
- Stability assessments for the conceptual layouts.
- Design of slurry delivery or return water systems.
- Design of return water dams.
- Design of any pump and pipeline systems.
- Design of haul roads.
- Design of filter press solutions or conveyor transport systems from the plant to the TSF.
- Optimisation of the concept design is not allowed for.
- Closure related designs or closure concepts for the TSF options.
- No allowance is made for any environmental studies and environmental authorisations for the proposed infrastructure.
- No allowance is made for any considerations related to communities or community engagement.
- Site-specific mitigation and management measures are excluded.
- No allowance is made for specialist investigations, and it is assumed that any specialist studies, environmental considerations and investigations will form part of a later phase of the concept design or can be included in this proposal at request.
- Test work on slurry material to inform the review of deposition alternative options. It is, however, assumed that some basic properties of the tailings material will be available that can be used for the evaluation of different deposition methodologies.
- In-person workshops.
- Financial selection criteria will be based on high level comparative costs based on the identified cost drivers. No capital cost estimate is allowed for.
- Determination of operational costs for the various options.
- Water balance modelling.
- No allowance has been made for airport transfers, meals, work permits/visas and all other local travel (to and from site).

3.3 Health and Safety

No allowance has been made for any client specified health and safety requirements (lengthy safety inductions, medical examinations, etc.). It is assumed that a short visitor's induction will be done at the start of the site visit.

3.4 Client Input

The following input is to be provided by the client at no cost to J&W:

- Arranging access permissions for initial site visit.
- Topographical survey of the area.

- Satellite imagery of the area.
- Assistance with obtaining information that may be available from the client.
- Tailings properties to be used for the assessment of different deposition methodologies.
- Aspects not specifically discussed in the Scope of Services covered in this proposal for example community engagement, environmental aspects, policymaking for management and governance, operational health and safety, preparation of emergency preparedness plans and public disclosure.
- Arranging transport from Kigali airport to the mine and back.
- Arranging accommodation and meals for the duration of the site visit.

4. PROFESSIONAL FEES AND DISBURSEMENTS

4.1 Basis of Pricing

Professional fees for the agreed scope of work will be charged on a rate basis. Internal disbursements will be recovered on a cost and rates basis (re-measurable).

External disbursements will be charged at the actual cost (supplier invoice) plus a 10% handling fee.

All time and cost rates provided exclude VAT.

4.2 Cost Estimate

The cost estimate is summarised below and attached to the submission.

CONSULTING SERVICES:		**Amount**
PROFESSIONAL FEES	R	2 401 570.00
DISBURSEMENTS	R	3 500.00
EXTERNAL DISBURSEMENTS	R	54 120.00
CONSULTING SUB TOTAL	**R**	**2 459 190.00**
SAFETY, HEALTH & ENVIRONMENT	R	-
SUB TOTAL	**R**	**2 459 190.00**
TOTAL (excluding VAT)	**R**	**2 459 190.00**
VAT	R	368 878.50
TOTAL (including VAT)	**R**	**2 828 068.50**

The hours allocated to the various team members are only indicative and will vary during the execution of the works. Also, staff members (designations) that are not allowed for in the cost estimate may be utilised depending on the scope of work and the availability of staff with the understanding that the order value will not be exceeded without approval from the client. J&W will invoice the actual hours worked by the various staff members at their designated rates on a monthly basis.

External disbursements will be charged monthly or once off at the sums stated in the cost proposal plus 10% handling fee.

No escalation is currently allowed for in the cost estimate. The rates of our cost estimate are fixed and firm until the 31 December 2026. Our rates are however subject to escalation thereafter and will be negotiated with the Client at the time.

4.3 Validity of proposal

Our proposal cost/fee is valid for thirty days from 24 March 2026. If acceptance is received after this period has lapsed, the job may be required to be requoted.

5. PROGRAMME

5.1 Start Date

We will commence work once we receive an order based on this proposal with reference to this proposal *L484-00_LET_001_r0_Trinity_Nyakabingo_Prelim_Concept_Design* and a contract under which the work will be completed has been signed. The expected date of contract award is 13 April 2026.

5.2 Provisional Programme

Based on the allowance made in this proposal, a project kick-off meeting will be conducted within one week of appointment and contract finalisation, following which the site visit will be conducted, and desktop study will commence. A high-level schedule showing the anticipated 7 month project duration is attached to the proposal.

6. ABOUT JONES & WAGENER

6.1 Relevant Experience

J&W is well placed to take on this project and have conducted a number of similar studies. The following projects have direct relevance to the current proposal:

- Khoemacau Copper Mines Feasibility Study – Design of a Filtered tailings deposition design
- Dwarsrivier Chrome Mine, Khulu – Dry Tailings Storage Facility
- Thorncliffe Chrome Mine – Dry stack of co-disposal of waste materials
- Modikwa Platinum Mine – Site selection and Multi Criteria Alternatives Analysis for a new TSF

J&W company profile is available on request.

6.2 Staffing

The following key personnel will be responsible for the project:

- Design Lead — Rynier Shields (Pr. Eng)
- Tailings Specialist — Dr Pierre van der Berg (Pr. Eng)
- Senior Engineer — Gunther Hinrichs (Pr Eng)

CV's are attached.

6.3 Health & Safety

J&W is ISO 45001:2018 certified.

6.4 Quality

J&W is ISO 9001:2015 certified.

6.5 BBBEE

J&W is a proud Level 1 B-BBEE contributor with procurement recognition of 135 %. Our black women ownership is 16.59% with total black ownership at 29.43%.

7. TERMS AND CONDITIONS

The conditions of contract received with the RFQ was reviewed and is attached with comments and suggested changes that we request are negotiated.

We trust we have correctly addressed your requirements. Please contact us should you require any further information.

Yours faithfully

Dr Pierre van der Berg (Pr. Eng)
CEO

Rynier Shields (Pr. Eng)
Head of Department - Tailings

for Jones & Wagener

Attached:

1. Cost estimate
2. Schedule
3. Conditions of Contract with comments
4. CV's

Document source: L484-00_LET_001_rB_Trinity_Nyakabingo_Prelim_Concept_Design

Jones & Wagener
Engineering & Environmental Consultants
59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
tel: 0027 11 519 0200 www.jaws.co.za email: post@jaws.co.za

J&W Job no.: **L484-00**
2026/03/17

Our Reference
L484-00_QTE-002_r0_Proposal.xlsm

Trinity Metals
Nyakabingo TSF Design
BUDGET FEE ESTIMATE:
Nyakabingo Mine TSF Conceptual Design Options

Attention: **Mr Hein Ackerman**

FEE SUMMARY

CONSULTING SERVICES:	***Basis of Pricing.***		**Amount**
PROFESSIONAL FEES	***Rates***	R	2 401 570.00
DISBURSEMENTS	***Rates / Costs***	R	3 500.00
EXTERNAL DISBURSEMENTS	***Costs + Handling Fee***	R	54 120.00
CONSULTING SUB TOTAL	**excluding VAT**	**R**	**2 459 190.00**
SAFETY, HEALTH & ENVIRONMENT	***Rates/Costs + Handling Fee***	R	-
SUB TOTAL		**R**	**2 459 190.00**
TOTAL (excluding VAT)		**R**	**2 459 190.00**
VAT	15.0%	R	368 878.50
TOTAL (including VAT)		**R**	**2 828 068.50**

DETAILED FEE CALCULATIONS

PROFESSIONAL FEES ***Rates*** **R 2 401 570.00**

TIME BASED										**AMOUNT (R)**	**SUBTOTAL (R)**
Jones & Wagener Designation		**DIR02**	**SPE3**	**ENG02**	**ENG03**	**ENG05**	**DRA03**	**SUP01**			
Jones & Wagener Designation Description		**Director**	**Specialist**	**Engineer**	**Engineer**	**Engineer**	**Drafting**	**Support**			
Budget rate/hr		***R 2 850.00***	***R 3 850.00***	***R 1 500.00***	***R 1 400.00***	***R 1 030.00***	***R 940.00***	***R 650.00***			
Total hours		230	117	29	410	500	168	8	0		
		hours allocated									
Project initiation										-	**R 206 800.00**
Scoping		10	6		8					62 800.00	
Contractual matters		8	4							38 200.00	
Prepare and agree Project Schedule		2		4	8					22 900.00	
Kick-off meeting		4	4	6	8					47 000.00	
Collect and review available information		4	2		12					35 900.00	
										-	
Project management										-	**R 253 700.00**
General project admin & management	7	7	2	7	28					77 350.00	
Bi-Weekly progress updates to project schedule	14	4	2	8	28					70 300.00	
Attending bi-weekly progress meetings	14	14	7		28					106 050.00	
										-	
Site Visit										-	**R 294 200.00**
Site Visit (five days total)	1	36	36		36			4		294 200.00	
										-	
Assessment of depostion methods										-	**R 272 440.00**
Determine and assess deposition methods	4	16	8		40	80				214 800.00	
Workshop and preparation	1	8	4		8	8				57 640.00	
										-	
Design Criteria										-	**R 46 880.00**
Prepare and agree design criteria	1	6	2		4	16				46 880.00	
										-	
Conceptual layouts										-	**R 606 900.00**
3D Volumetric models	3	12	6		12	72				148 260.00	
Impoundment / Wall design	3	6			18	36				79 380.00	
Stormwater management	3	9	6			72				122 910.00	
Affected water management	3	12	3		48					112 950.00	
Concept design figures	6	12			12	24	72			143 400.00	
										-	
Multi criteria decision matrix and workshop										-	**R 201 540.00**
Selection criteria	1	8	2		8	12				54 060.00	
Populate Multi Criteria Decision Matrix	1	8	2		8	24				66 420.00	
Workshop and preparation	1	8	6	4	12	12				81 060.00	
										-	
Conceptual layouts										-	**R 318 670.00**
3D Volumetric models	1	4	2		4	16				41 180.00	
Impoundment / Wall design	1	2			8	16				33 380.00	
Stormwater management	1	4	2			20				39 700.00	
Affected water management	1	6	1		24					54 550.00	
Concept design figures	4	8	2		8	32	80			149 860.00	
										-	
Reporting										-	**R 200 440.00**
Final report	1	12	8		40	60	16	4		200 440.00	

Jones & Wagener
Engineering & Environmental Consultants
59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
tel: 0027 11 519 0200 www.jaws.co.za email: post@jaws.co.za

J&W Job no.: **L484-00**
2026/03/17

Our Reference
L484-00_QTE-002_r0_Proposal.xlsm

Trinity Metals
Nyakabingo TSF Design
BUDGET FEE ESTIMATE:
Nyakabingo Mine TSF Conceptual Design Options

DISBURSEMENTS *Rates / Costs* **R 3 500.00**

		Unit	Quantity	Rate	AMOUNT (R)	SUBTOTAL (R)
Printing & Production						**R 3 500.00**
Printing & Production		months	7	R 500.00	3 500.00	
Computer / Software Rental		sum		R 70.00	-	

EXTERNAL DISBURSEMENTS *Costs + Handling Fee* **R 54 120.00**

Item		Unit	Quantity	Rate	AMOUNT (R)	SUBTOTAL (R)
General External Disbursements						
Travel						**R 49 200.00**
Flights to Kigali - return		no	3	R 10 000.00	30 000.00	
Accomodation in Kigali		nights	3	R 2 500.00	7 500.00	
Accomodation at the Mine		nights	6	R 350.00	2 100.00	
Airport Transfers (Kigali)	Excluded	Trip			-	
Travel within Rwanda (to and from Site included)	Excluded	Day			-	
Work Permit	Excluded	no			-	
Other travel related expenses (Immunisations, airtime, airport parking etc.)		days	12	R 800.00	9 600.00	
Handling Fee						
External Disbursments		%	10%	R 49 200.00	4 920.00	**R 4 920.00**

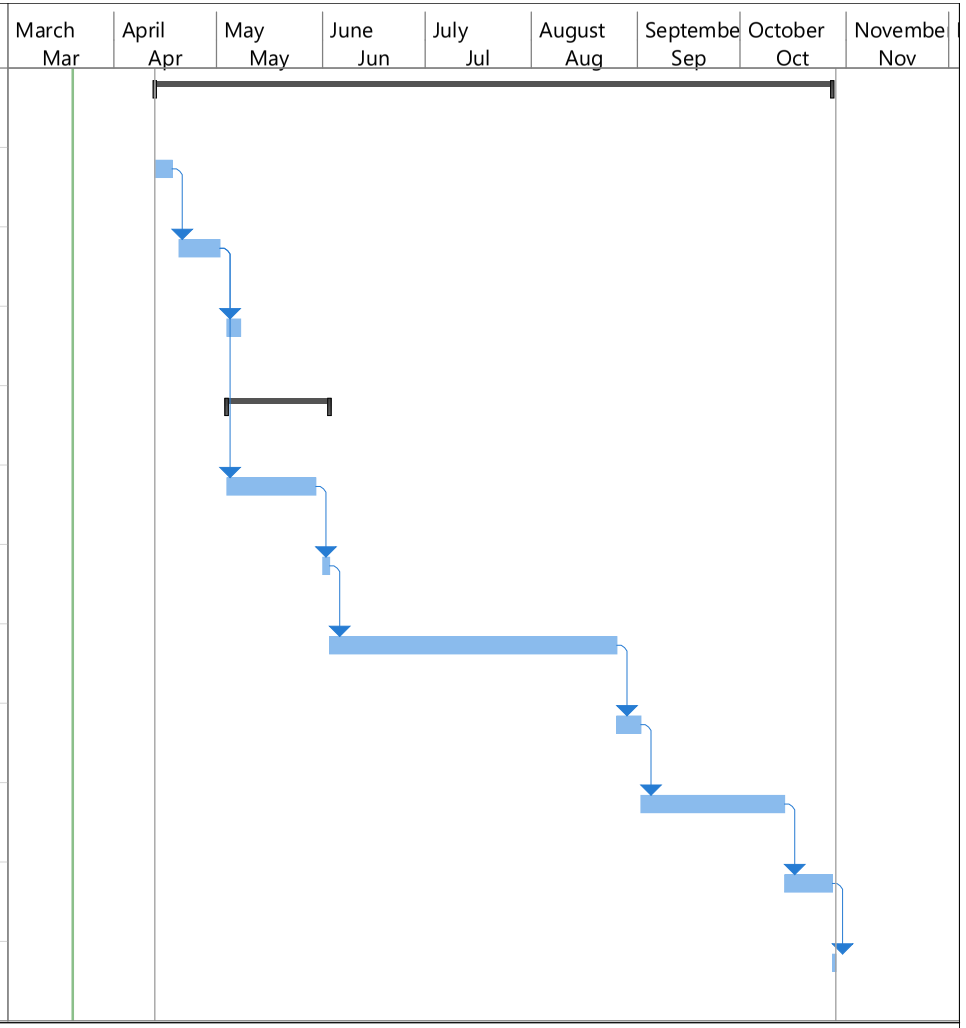
SUB-TOTAL (excl SHE & VAT) **R 2 459 190.00**

TOTAL (excl VAT)	**R 2 459 190.00**
VAT (15%)	R 368 878.50
GRAND TOTAL	**R 2 828 068.50**

PREPARED	REVIEWED	REVISED	APPROVED	
PvdB	RS	PvdB	RS	
17-Mar-26	18-Mar-26	20-Mar-26	20-Mar-26	*Template qteBudget_26r2*

https://joneswagener.sharepoint.com/sites/JonesWagenerProjects/L484TRI_NYA_TSF_DES/Shared Documents/ADM/COM/QTE/[L484-00_QTE-002_r0_Proposal.xlsm]QTE_JW

ID	Task Name	Duration	Start	Finish
1	**Nyakabingo TSF Concept design**	**142 days**	**Mon 13/04/26**	**Tue 27/10/26**
2	Project initiation	5 days	Mon 13/04/26	Fri 17/04/26
3	Preparation and arrangement	10 days	Mon 20/04/26	Fri 01/05/26
4	Site visit	4 days	Mon 04/05/26	Thu 07/05/26
5	**Deposition methodologies**	**22 days**	**Mon 04/05/26**	**Tue 02/06/26**
6	Assess different methodologies	20 days	Mon 04/05/26	Fri 29/05/26
7	Select preferred methodology	2 days	Mon 01/06/26	Tue 02/06/26
8	Conceptual layouts	60 days	Wed 03/06/26	Tue 25/08/26
9	Workshop preparation	5 days	Wed 26/08/26	Tue 01/09/26
10	Conceptual design	30 days	Wed 02/09/26	Tue 13/10/26
11	Report	10 days	Wed 14/10/26	Tue 27/10/26
12	Study completed	1 day?	Wed 28/10/26	Wed 28/10/26



Project: L484_ConceptDesginSc
Date: Fri 20/03/26

Task	Inactive Summary	External Tasks
Split	Manual Task	External Milestone
Milestone	Duration-only	Deadline
Summary	Manual Summary Rollup	Progress
Project Summary	Manual Summary	Manual Progress
Inactive Task	Start-only	
Inactive Milestone	Finish-only	

Company Logo

TITLE OF SERVICES ……

PROFESSIONAL SERVICES CONTRACT

CONTRACT NO.: ……..

Name and address of Mine**……**

……

……..

("the Company")

and

Name and Address of Contractor ……..

……..

……..

("the Contractor")

Commented [Pv1]: Could this be changed to Consultant?

1. Introduction and definitions

The Company wishes to employ the Contractor in accordance with the Scope of Services, Annexure "A", Annexure "B" Schedule of Rates and Cost, Annexure "C" Contract Programme and Milestone Payments hereto.

1.1 The Contractor has agreed to render such professional services to the Company.

1.2 The parties wish to record in writing the terms and conditions on which the professional services will be made available.

1.3 For purposes of this agreement –

1.3.1 words in the singular shall include the plural and one gender shall include the others;

1.3.2 unless the context indicates a contrary intention, "confidential information" means all information of whatsoever nature relating to the business, affairs and interests of the Company which comes into the possession of the Contractor, any of the employees of the Contractor or any of the Contractor's independent contractors (together, "the affected parties"), or becomes known to it by whatsoever means during the course of carrying out its work under this agreement, or the results of any research conducted by it during the course of carrying out its work under this agreement, other than information:

1.3.2.1 which at the time that it was disclosed to such affected party or came into its possession, was already known to it from other sources or was in the public domain, or thereafter comes into the public domain otherwise than through any default on the part of the affected party;
or

1.3.2.2 which becomes known to such affected party without restriction as to its use and disclosure from a third person with valid title to that information;
or

1.3.2.3 which was or is developed by or is known to such affected party either before or subsequent to such information being disclosed by the Company, such affected party having no knowledge of the content of such disclosure.

1.3.3 "Company" shall mean ……..

1.3.4 "Trinity" shall mean Trinity Metals Ltd acting for and on behalf of Trinity Nyakabingo Mine Ltd, Rutongo Mines Ltd and Trinity Musha Mines Ltd

1.3.5 The Company's representative shall be ……

2. Appointment

The Company appoints the Contractor to provide ……*Title of Services* and the Contractor accepts such appointment to the satisfaction of the Company's representative, in strict accordance with Scope of Services Annexure "A" , Schedule of Rates and Cost Annexure "B", Contract Programme and Milestone Payments Annexure "C" hereto.

3. Duration and Termination

The Contract shall commence on …… and terminate ……...

Extension of Contract term after …… will be subject to mutual written agreement by the Parties and confirmed before the above Termination Date by an official Amendment to this Contract.
Unless the extension involves a change in the scope of work, it will remain cost neutral.

Throughout the term of the Contract, termination notice may be given in writing one party to the other with thirty (30) calendar days' notice. Notwithstanding the foregoing, the Contractor shall not have the right to terminate this Contract unless and until the Contractor has fully completed the agreed scope of Work, as this is a contract for results.

Commented [Pv2]: There may be legitimate reasons for termination of the contract by the Consultant. Can this be reviewed?

Should the Contract be terminated in terms of this clause and by notice properly served and provided that all outstanding obligations and indebtedness between the Parties have been settled, then the Contractor shall not be entitled to any further or other payment.

4. Fees and Invoices

4.1 Fees excluding all Taxes:

4.1.1 The Company shall pay to the Contractor ……per day excluding all Taxes for ……days worked per calendar month. Equivalent to …… per calendar month.

4.1.2 The fees shall be payable 30 days after date of invoice receipt and such invoice shall be accompanied by the Management Report for the Services carried out in the month of invoice and a fully completed Work Completion Certificate (WCC), Annexure "D" hereto.

4.1.3 Flight tickets costs to and from Rwanda originating from the Contractor's home country are for the account of the Contractor and included in the Total Estimated Value hereunder.

4.1.4 Hotel Accommodation in Kigali is for the account of the Contractor and included in the Total Estimated Value hereunder.

or

Accommodation, food, refreshments and excluding alcohol, will be provided by the Company in the Company's Guest House at Rutongo and Nyakabingo at the costs detailed hereunder and included in the Total Estimated Value, clause 4.1.7 hereunder.
Accommodation $ 7.00 (seven) per day per person.
Food, Refreshments and excluding Alcohol $ 10.00 (ten) per day per person.
The Total shall be $ 17.00 (seventeen) per person per day and the cost thereof will be invoiced to the Contractor on a monthly basis.
The Company invoice will be deducted from any Contractor's invoice due for payment.

Accommodation, food, refreshments and excluding alcohol at Musha will be provided by the Company at a Rate of $ 55.00 (fifty five) per day.
The total cost will be invoiced to the Contractor on a monthly basis.
The costs detailed are included in the Total Estimated Value, clause 4.1.7 hereunder.

4.1.5 The Company shall make available road transport to and from Kigali airport and transport the Contractor on a daily basis to and from the Mine/Mines.

4.1.6 The Company shall pay all Rwanda Withholding Tax and Value Added Tax to the Rwanda Tax Authorities.
Tax certificates confirming the payment may be requested by the Contractor from the Group Financial Controller, Benon Kamugisha, benon.kamugisha@trinity-metals.com, tel + 250 788 72 9020..

Commented [Pv3]: Can this be revised to reflect what is in the proposal - hours and rates for professional time, cost and handling fee for disbursements.

Commented [Pv4]: We need to agree what supporting documentation will be required for the invoices. No allowance is made in the proposal for the requirements stated here.

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Commented [Pv5]: Allowance is made in the proposal as discussed at the tender clarification. Need to update this accordingly.

Commented [Pv6]: It is our understanding that the appointment will be by Obsideo and will be ZAR based?

4.1.7 The Total Estimated Value for ……months is ……. and excludes all Taxes

The Total Estimated Value as reflected herein is the total commitment in terms of the Contract and provided that invoices are within the scope of services and the Total Estimated Value, the Contract will not be amended to cover interim payments.

The Contract will only be amended to provide for the following:-

- change of scope,
- an increased commitment, or
- to reflect the final total price at the completion of the agreement or
- any other ground as may be agreed upon by both parties in writing.

4.2 Invoices and Statements

Invoices excluding all Taxes, reflecting the Contract Number, accompanied with the Management Report for Work Undertaken and the Work Completion Certificate, Annexure "D", must be addressed to:

Commented [Pv7]: Need to update once the requirements have been agreed.

Company Name and address
……..
……..
……..

For attention:
The Financial Manager :
Name ……
e-mail address ……..

and copied to the Company's Representative:……..

5. Professional Indemnity and Contractor's Indemnity

The Contractor has Professional Indemnity Insurance to the value of $ ……

Commented [Pv8]: Need to agree this value?

The Employer, their agents, representatives or employees are indemnified by the Contractor against all claims of whatsoever nature arising out of any loss, damage, death or injury persons or property resulting from act or omission ~~the carrying out~~ of the Contract by the Contractor or any of its Sub Contractors, agents, representatives or employees except where such loss,
damage, death or injury is caused by any act or omission of the Employers, its agents, representatives or employees.

Limit of Liability

Commented [Pv9]: Please include the limitation of liability clause as detailed below.

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The maximum amount of compensation payable by either party to the other in respect of liability under this agreement is an amount equal to a Specific Amount of R_____ OR twice the amount of fees payable to the Contractor under this agreement, excluding reimbursements and expenses unless otherwise stated. (SELECT ONE OPTION)

Each party agrees to waive all claims against the other in so far as the aggregate of compensation which might otherwise be payable exceeds the aforesaid maximum amount payable.

If either party makes a claim for compensation against the other party and this is not established, the claimant shall reimburse the other for his reasonable costs incurred as a result of the claim or if proceedings are initiated.

The liability of either the Contractor or the Companies shall not exceed the amounts stated in this clause.

Duration of Liability

Neither the Companies nor the Contractor shall be held liable for any loss or damage resulting from any occurrence unless a claim is made within a period of three years from the date of termination or completion of the Services.

Companies Indemnity

The Companies shall indemnify the Contractor against all claims by third parties which arise out of or in connection with the rendition of the services to the extent that such claims exceed the limit of compensation.

Copyright

In the event that the parties agree that the Intellectual Property Rights shall be ceded to the Companies then the Contractor shall not be liable in any way for the use of any of the information other than as originally intended for the project and the Companies hereby indemnifies the Contractor against any claim which may be made against it by any party arising from the use of such Intellectual Property for other purposes.

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6. Confidentiality and Confidentiality Agreement

6.1 The Contractor undertakes during this agreement and at all times thereafter, to hold in

trust and confidence all confidential information which comes into its possession or which becomes known to it in the course of the Contractor's services, and not to disclose or make use of that confidential information in any way whatsoever, or in any way whatsoever make the confidential information available to others, without the prior written consent of the Company.

6.2 The Contractor undertakes to ensure that every person who assists it in the performance of its services in terms of this agreement, whether that person is an employee of the Contractor, an independent contractor, or an employee of an independent contractor, shall acknowledge the matters referred to in 6.3 and agree to be bound by an undertaking in the form of that referred to in 6.1.

6.3 The Contractor acknowledges that the results of the research conducted by the Contractor, and every person who assists the Contractor in terms of this agreement, will belong to the Company absolutely, and that they will not be entitled to any payment for those results or for carrying out any research, whether in the form of a royalty of otherwise, other than the fees payable to the Contractor in terms of this agreement.

6.4 On termination of the Contractor's appointment, all documents of whatsoever nature which contain confidential information and which are then in the possession of the Contractor, its employees, independent contractors or their employees, shall be returned forthwith to the Company and the Contractor shall procure that such documents are so returned. The Contractor shall be entitled to retain for record purposes one copy of documents containing confidential information. For the purposes of this clause, "documents" include any method of reproducing information, whether in document form or stored in any electronic medium.

7. Intellectual Property Rights

7.1 The Contractor acknowledges and undertakes to ensure that the Contractor's employees and independent contractors acknowledge that the Company will become the owner of the intellectual property rights in any work which is eligible for intellectual property rights and which is created by the above parties in the course and scope of providing services in terms of this agreement.

7.2 Insofar as it may be necessary, the Contractor cedes and assigns to the Company all intellectual property rights in any work created or executed by it in the course and scope of this consultancy and undertakes to procure that the Contractor's employees and independent contractors likewise cede and assign such intellectual property rights.

7.3 The Contractor undertakes not to exercise any residuary rights and undertakes to procure that the affected parties shall not exercise any residuary rights in respect of any work created or executed by it or them in the course and scope of this agreement.

7.4 All work created or executed by the Contractor, in any fields in which it performs consulting services will, unless the Contractor establishes to the contrary, be deemed to have been created or executed by it in the course and scope of its agreement.

7.5 The Contractor undertakes to assist the Company to the best of its ability with any application which the Company may see fit to make for any form of intellectual property protection, whether in the form of a foreign or Rwandan patent or design right or otherwise, in respect of any concept, idea, process, method or technique which may

be discovered by any of the affected parties in the course of performing services in terms of this agreement.

7.6 For the purposes of this Contract, the term "intellectual property rights" shall include, but shall not be limited to, copyright and patent and design rights.

8. Breach

8.1 If any party breaches any provision of this agreement and remains in breach for 7 days after receipt of written notice from the other party requiring the defaulting party to rectify the breach, or if any party repudiates this agreement, the other party will be entitled to cancel this agreement.

8.2 The innocent party's remedies in terms of this clause are without prejudice to any other remedy to which the innocent party may be entitled in law.

8.3 Notwithstanding anything to the contrary herein contained, the Contractor shall not be liable for any indirect or consequential damages, which the Company may suffer as a consequence of the performance by the Contractor of its services hereunder but this does not exclude liability for gross negligence or wilful misconduct.

9. Force Majeure

9.1 Either party shall be relieved of liability for the non-performance or defective performance of any of its obligations under this agreement caused by an act of force majeure, including but not limited to storms, floods, fires, earthquakes, other natural disasters, power failures, unavailability of equipment, strikes, lockouts, boycotts, and actions of the civil and military authorities, changes in laws, rules, regulations or orders which relate to the control or export or re-export of commodities or technical data.

9.2 A party subject to force majeure shall as soon as possible notify the other party in writing of the circumstances amounting to force majeure and shall provide an estimate (which shall be updated in writing from time to time) of when those circumstances are expected to cease to apply.

9.3 In conditions of force majeure, each party shall take all reasonable steps by whatever lawful means are available to resume all performance of the parties' obligations under this agreement as soon as reasonably possible and shall discuss with the other party ways and means to overcome such conditions.

9.4 If conditions of force majeure persist continuously in respect of a party for a period in excess of six months and have a material adverse effect on the other party, and the parties are within such period unable to reach written agreement on amendments to the relevant provisions of this agreement to take into account such conditions, the other party may terminate this agreement with immediate effect on written notice.

10. Miscellaneous Matters

10.1 Any written notice in connection with this agreement may be addressed:

10.1.1 in the case of the Company to:
……..

……

……..

10.1.2 in the case of the Contractor to:

Contractor's Physical Address

……...

……..

10.1.3 The notice shall be deemed to have been duly given:

10.1.3.1 7 days after posting, if posted by registered post to the party's address in terms of this sub-clause;

10.1.3.2 on delivery, if delivered to the party's physical address in terms of either this sub-clause or the next sub-clause dealing with service of legal documents;

10.1.3.3 on despatch, if sent to the party's then telefax number and confirmed by registered letter posted no later than the next business day unless the addressor is aware, at the time the notice would otherwise be deemed to have been given, that the notice is unlikely to have been received by the addressee through no act or omission of the addressee.

10.1.4 A party may change that party's address for this purpose, by notice in writing to the other party.

10.2 Entire Contract

This Contract contains all the express provisions agreed on by the parties with regard to the subject matter of the agreement and the parties waive the right to rely on any alleged express provision not contained in the Contract.

10.3 No representations

No party may rely on any representation which allegedly induced that party to enter into this Contract, unless the representation is recorded in this Contract

10.4 Variation, cancellation and waiver

No contract varying, adding to, deleting from or cancelling this agreement, and no waiver of any right under this agreement, shall be effective unless reduced to writing and signed by or on behalf of the parties.

10.5 The terms and conditions of this Contract shall be interpreted and implemented in accordance with the laws of Rwanda

Commented [Pv10]: This will be an SA based appointment?

11. Resolution of Disputes

11.1 Any dispute between the parties shall be negotiated by the parties in a reasonable manner with a view to resolving the dispute.

11.2 If the procedures under 11.1 fail to resolve the dispute within 30 days, it shall be referred to senior executives of the parties who shall negotiate in a reasonable manner with a view to resolving the dispute.

11.3 Should parties fail to resolve the dispute in terms of clauses 11.1 and 11.2 above any party shall be entitled to require, by written notice to the other, that the dispute be submitted to a competent court of Rwanda.

Commented [Pv11]: SA based appointment?

Signed at for and on behalf of the Company on 2026

Name

Signature

Title
(Who warrants that they are duly authorised)
Name

Signature

Title
(Who warrants that they are duly authorised)

Signed at for and on behalf of the Contractor on 2026

Name

Signature

Company Logo

Title

(Who warrants that they are duly authorised)

ANNEXURE “A”

SCOPE OF SERVICES

Company Logo

ANNEXURE “B”

SCHEDULE OF RATES AND COST

ANNEXURE “C”

CONTRACT PROGRAMME AND MILESTONE PAYMENTS

Company Logo

ANNEXURE “D”

WORK COMPLETION CERTIFICATE (WCC)

Company Logo

TRINITY METALS

SITE WORKS & SERVICES WORK COMPLETION CERTIFICATE No: .....
MINE NAME: .....
DATE: .....

PROJECT TITLE	
PO/CONTRACT NO.	
NAME OF CONTRACTOR	
STATUS OF COMPLETION (%)	
AMOUNT PAYABLE (EXCLUDING VAT & WITHHOLDING TAXES)	
VAT	
WITHHOLDING TAX	
FINAL VALUATION DUE (VAT & WITHHOLDING TAX INCLUSIVE)	

Contract Value Excl. Taxes		Contract Balance (PO/Contract Value - Invoices)
Currency:	PO/Contract Value:	
Invoice No.	Amount:	
Invoice No.	Amount:	
Invoice No.	Amount:	
Invoice No.	Amount:	

APPROVAL

DOA	NAME	DESIGNATION	SIGNATURE	DATE
SUPPLIER				
MANDATORY: TRINITY PR HOD				
MANDATORY: MINE FINANCIAL MANAGER				
CEO as per DOA				
MINE FINANCIAL MANAGER PAYMENT/TELEGRAPHIC TRANSFER	DATE PAID/BANK INSTRUCTED:	DATE TELEGRAPHIC TRANSFER:		AMOUNT:

Pierre van der Berg

DIRECTOR and CEO (Pr Eng)

Pierre joined Jones & Wagener in 1994. In 1996 he left for the UK and obtained his PhD in 1999. He returned to J&W and was promoted to Director in 2004.Since 2014 he has fulfilled the role of CEO. Pierre's technical expertise is in geotechnical engineering and infrastructure design, including dams and tailings facilities and is an APP in terms of the dam safety legislation.Email address vdberg@jaws.co.za

KEY SKILLS

Geotechnical / Tailings engineering

Mine infrastructure design

Project and construction management

EDUCATION

PhD, Univ. of Surrey, 1999

MIng with distinction, UP, 1994

BIng Hons with distinction, UP, 1992

BIng (Civ) with distinction, UP, 1988

PROF. REGISTRATION STATUS

Pr Eng (940263)

EMPLOYMENT HISTORY

Jones & Wagener (1999 to date)

University of Surrey, UK (1996 - 1999)

Jones & Wagener (1994 - 1996)

Van Wyk & Louw Inc (1990 - 1994)

INDUSTRY INVOLVEMENT

SAICE

Fellow (A0123456)

SANCOLD Member

TUKS Advisory Board Member

Relevant Experience

Geotechnical / Talings Engineering

Pierre's experience in geotechnical engineering started in 1990 when he joined the then Van Wyk & Louw geotechnical department. Since then he has gained significant experience with all aspects related to geotechnical engineering as summarised below.

- Geotechnical field investigations
- Geotechnical design including numerical modeling and soil-structure interaction modelling
- Geotechnical instrumentation and monitoring
- Earth dam design and dam safety assessments
- Tailings dam design and surveillance

Infrastructure Design

Pierre has extensive experience in the planning and design of mining related infrastructure. This includes the design of water management infrastructure (canals, stream diversions, clean and polluted storage and attenuation dams), haul roads and dragline walkways, ROM Tips and stockpile areas, mine infrastructure areas and mine waste disposal facilities (fine and coarse residue facilities). Some of the projects include:

- BHP Billiton. Middelburg Mine - Boschmanskrans Section, SA - 2001
- BHP Billiton, Optimum Colliery - Kwagga Section, SA - 2002
- BHP Billiton, Middelburg Mine - DMO Project, SA - 2006
- Xstrata Coal SA, Atcom East Extension Project, SA - 2009
- Xstrata Coal SA, Tweefontein Optimisation Project, SA - 2011

Construction management

Pierre's involvement on mine development projects also includes the management of the project during construction. He has been involved on a number of projects where he took responsibility for the infrastructure design and the management of the construction thereof. The following list of major projects in Pierre's professional career included his involvement during construction:

- BHP Billiton, Optimum Colliery - Kwagga Section, SA - 2002
- BHP Billiton, Middelburg Mine - DMO Project, SA - 2009
- Xstrata Coal SA, Atcom East Extension Project, SA - 2010
- Anglo Coal, Isibonelo water diversion scheme, SA - 2013
- Anglo Gold Ashanti, Obuasi Redevelopment project, Ghana - 2020

Signature

13/02/2025

Date

Pierre van der Berg

DIRECTOR and CEO (Pr Eng)

Jones & Wagener
Engineering & Environmental Consultants
59 Bevan Road PO Box 1434 Rivonia 2128 South Africa
tel: 0027 11 519 0200 www.jaws.co.za email: post@jaws.co.za

Relevant Experience

Pierre has more than 30 years experience in the dam and tailings dam field. This includes the following:
Geotechnical investigations for various water dams and mine residue facilities.
Detailed design of various water dams and mine residue facilities as the Approved Professional Person.
Overseeing the construction of various water dams and mine residue facilities as the Approved Professional Person.
Dam Safety Evaluations of various water dams as the Approved Professional Person.
Surveillance and EoR of various tailings facilities, including coal, gold, iron ore and kimberlite.

Comprehensive List of Relevant Projects

SOME RELEVANT PROJECTS INCLUDE THE FOLLOWING:

WATER DAMS:

AngloCoal, Approved Profession Person for the design and construction of the 1 500 Mℓ Category II Isibonelo Dirty Water dam, Isibonelo Colliery, 2004.

AngloCoal, Approved Professional Person for the design and construction of the 26 000 Mℓ Category II Isibonelo Attenuation dam, Isibonelo Colliery, 2004.

South32, Approved Professional Person for the design and construction of the 1 800 Mℓ Category II Goedehoop Pollution Control dam, Middelburg Mine, 2006.

BECSA, Approved Professional Person for the design and construction of the 120 Mℓ Category II Plant Make-up Water dam at Wolvekrans Colliery, 2008.

BECSA, Approved Professional Person for the design and construction of the 140 Mℓ Category II Attenuation dam at Douglas Colliery, 2008.

BECSA, Approved Professional Person for the design and construction of the 600 Mℓ Category II Vandyksdrift Pollution Control dam at Douglas Colliery, 2008.

AngloCoal, Approved Professional Person for the design and construction of the 650 Mℓ Category II Isibonelo Diversion dam at Isibonelo Colliery, 2011.

BECSA, Approved Professional Person for the design and construction of the 80 Mℓ Category II Portion 16 Block A Attenuation dam at Khutala Colliery, 2012.

BECSA, Approved Professional Person for the design and construction of the 1 500 Mℓ Category II Boschmanskrans Balancing dam at Wolvekrans Colliery, 2015.

DeBeers, Approved Professional Person for the design and construction of the 1 050 Mℓ Category II Venetia PCD3 dam at Venetia Mine, 2022.

Various clients, Dam Safety Evaluations for Category II dams, 2016 to 2024.

Pierre van der Berg

DIRECTOR and CEO (Pr Eng)

Jones & Wagener
Engineering & Environmental Consultants
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Comprehensive List of Relevant Projects

MINE RESIDUE FACILITIES:

Anglo American, Surveillance of various gold tailings dams for the Vaal River Operations, 2000 to 2005.

BHP Billiton, Design and construction of a discard dump extension, Koornfontein Mines, 2003

BHP Billiton, Design and construction of a coal slurry reclamation facility, Middelburg Mine, 2006.

GCSA, Overseeing surveillance of Goedgevonden co-disposal facility, since 2016.

Kumba, Initially the responsible professional engineer and then overseeing the surveillance of Sishen TSF, since 2016.

Glencore, Design of a co-disposal (fine and coarse waste), Thorncliffe Mine, 2017.

DeBeers, Overseeing the surveillance of the Venetia Mine residue facilities, since 2019.

AngloGold Ashanti, Overseeing the design and construction of the new Biox TSF Phase 1 at Obuasi Mine, Ghana, 2019.

Tronox, Approved Professional Person for the design and construction of the new Category III RSF 6 mine residue facility at the Namaqua Sands operation, 2021.

AngloGold Ashanti, Overseeing EoR appointments for two mines in Ghana (Iduapriem and Obuasi), Geita Mine (Tanzania) and Siguiri Mine (Guinea), since 2022.

AngloGold Ashanti, Overseeing the design and construction of the new tailings facility (BTSF Phase 1 and Phase 2) at Iduapriem Mine, Ghana, 2023.

Petra, EoR for the Category III No.7 Tailings Dam at Cullinan Diamond Mine, since 2023.

Petra, Investigation of the TSF failure at Williamson Diamond Mine, Tanzania, 2023.

Sibanye Stillwater, member of the ITRB, 2025.

Rynier Shields

Technical Director (Pr Eng) - Head of Department

Rynier has 12 years of experience in design, construction quality assurance and performance monitoring of TSFs and supporting infrastructure. He serves as the Engineer of Record (EoR) of various high risk TSFs and currently serves as the Head of the Tailings department at Jones & Wagener. He also has extensive experience in hydrology and hydraulics of clean and dirty water separation systems. He is a member of SAICE and is currently serving on its Geotechnical Division's Tailings Sub-committee.
Email address: shields@jaws.co.za

KEY SKILLS

Engineer of Record (TSFs)

Tailings Storage Facility Design

In-situ Testing and Application

EDUCATION

BEng (Civil Engineering), UP, 2012

BEng (Hons) (Geotechnical), UP, 2018

PROF. REGISTRATION STATUS

PrEng (Reg No. 20180512)

EMPLOYMENT HISTORY

Jones & Wagener (2013 to date)

INDUSTRY INVOLVEMENT

SAICE

Member (2011548)

ECSA

Member (20180512)

SAICE Tailings Sub-committee

Member (Feb 22 to date)

Career Overview

TSF Surveillance and EoR Services

Rynier has gained significant experience with TSF performance monitoring through continuous surveillance where he is currently appointed as the EoR for TSFs with varying consequence of failure classifications. This work has often required various supplementary designs ranging from stabilizing buttresses and elevated penstocks to recommissioning of old TSFs from concept phase to construction implementation. The following list of major projects reflects Rynier's experience in this regard:

- Harmony Gold Mining, TSF surveillance, Free State, Vaal Reefs and Wes Wits operations, RSA (2018 to 2023)
- Petra Diamonds, Finsch Diamond Mine Engineer of Record and surveillance, Northern Cape, RSA (2023 to current)
- Engineer of Record and surveillance – AngloGold Ashanti, Siguiri Gold Mine, Kankan Province, Guinea (2023 to current)

TSF Design

Rynier has led three major TSF related design projects to date, together with various smaller design projects to support continued operation of TSF deposition in line with relevant guidelines, standards and legislation. The three major projects are all complex but varies in nature, giving Rynier a good range of experience in TSF related design projects. These projects are:

- Harmony Gold Mining, St Helena 4 TSF recommissioning, Free State, RSA – 2019 - 2021
- Glencore Alloys, Rhovan Mine In-Pit deposition design, Northwest, RSA – 2023 - 2024
- AngloGold Ashanti Ghana, DTSF detailed design and geotechnical investigation, Obuasi, Ghana – 2023 - Current

In-situ Testing and Application

Rynier's experience in in-situ geotechnical testing and more specifically Cone Penetrometer Testing with pore pressure measurement (CPTu) on TSFs started in 2018. Since then, he has gained significant experience with analysis of the field testing results in assessment of liquefaction potential of contractive tailings and its application in limit equilibrium slope stability assessments through the published work of authors such as Dr Peter Robertson, Ken Been and Mike Jefferies.

Signature **Date** 17/03/2025

Rynier Shields
Technical Director

Jones & Wagener
Engineering & Environmental Consultants
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tel: 0027 11 519 0200 www.jaws.co.za email: post@jaws.co.za

Relevant Experience

Rynier has gained experience in the complete engineering life cycle of TSF and appurtenant infrastructure related projects. His first five years at Jones & Wagener mostly entailed concept, preliminary and detail design of projects varying in complexity and site-specific demands. In 2017, Rynier formed part of a resident engineering team, representing a client in supervising the construction of a large scale TSF project. This has provided a good basis, together with his leadership capability, to enable him to manage most of the TSF projects he has been involved in in the last six years. He has a good understanding of the various guidelines, regulations, standards and legislation applicable to TSF management across multiple jurisdictions. Rynier has been registered as a professional engineer with the Engineering Council of South Africa (ECSA) since 2018 and was promoted to Head of the Tailings Department of Jones & Wagener in 2025.

Comprehensive List of Relevant Projects

- Harmony Gold Mining, Surveillance/monitoring of the Mispah TSF complex at the Moab Khotsong gold operations, RSA, 2018 to 2023
- Harmony Gold Mining, Geotechnical investigation into the crack formation and plausible mechanism for a gold tailings storage facility at the Moab Khotsong gold operations, RSA, 2018
- Harmony Gold Mining, Pre-feasibility (conceptual) design of a new lined gold tailings storage facility (Mispah Dam 3) at the Moab Khotsong gold operations, RSA, 2018
- Harmony Gold Mining, Detailed design and construction monitoring of an elevated penstock and relevant earthworks to re-commission the Mispah Dam 1 gold tailings storage facility, RSA, 2018
- Glencore Western Chrome, Surveillance/monitoring of three chromium and one silica tailings storage facilities near Rustenburg, RSA, 2018 to 2019
- Anglo American Platinum, Quality assurance review as an independent engineering consultant for the construction of Mareesburg platinum tailings storage facility, RSA, 2018
- Sasol Group Technology, Hydraulic and geotechnical investigation into the possible deposition of fine coal slurry onto a fine ash residue facility, RSA, 2018
- Harmony Gold Mining, Detailed design and construction monitoring of slope stabilization through buttressing of various gold tailings storage facilities, RSA, 2019 to 2024
- Harmony Gold Mining, Pre-feasibility design of three new gold tailings storage facilities, RSA, 2019
- Glencore Zambia, Third party audit of two copper and cobalt tailings storage facilities at Mopani Copper Mines, Zambia, 2019
- Glencore Alloys, Compilation of a continuation report for a vanadium tailings storage facility, RSA, 2019
- Glencore Alloys, Comprehensive stability analyses of a vanadium tailings storage facility according to the updated Glencore Protocol 14 requirements, RSA, 2020
- Sasol Group Technology, Quality assurance as resident engineer for the Sasol/Jones & Wagener Owner's Management Team (OMT) on the Fine Ash Dam 6 (FAD6) construction project near Secunda (Project value approx. R2 billion), RSA, 2017 - 2018
- Harmony Gold Mining, St Helena 4 TSF recommissioning, Free State, RSA – 2019 - 2021
- Glencore Alloys, Rhovan Mine In-Pit deposition design, Northwest, RSA – 2023 - 2024
- AngloGold Ashanti Ghana, DTSF detailed design and geotechnical investigation, Obuasi, Ghana – 2023 - Current

Gunther Hinrichs

Civil Engineer (Pr Eng)

Gunther has 8 years of experience in the design and monitoring of tailings storage facilities and water dams. His experience includes the design of TSF and dam related infrastructure, such as embankments, spillways, sub-soil drainage systems and stormwater infrastructure. He also has experience in the surveillance and monitoring of these facilities, which includes annual audits and safety inspections. He is a member of SAICE and SANCOLD. Email address: hinrichs@jaws.co.za

KEY SKILLS

Tailings Storage Facility Design and Surveillance

Water Dam Design and Inspection

Tender Documentation & CQAI

EDUCATION

BEng (Civil), UP, 2016

PROF. REGISTRATION STATUS

Pr Eng (Reg. No.: 202403110)

EMPLOYMENT HISTORY

Jones & Wagener (2021 to date)

AECOM SA (2017-2021)

INDUSTRY INVOLVEMENT

SAICE

Member (2-273)

SANCOLD

Member (201750438)

Tailings Storage Facility Design and Surveillance

Gunther's experience in tailings storage facility design and surveillance includes TSF related infrastructure design, such as the design of embankments, spillways, sub-soil drainage and stormwater infrastructure. He also has experience in TSF surveillance, which includes annual audits of TSFs, the interpretation of monitoring instrumentation data, conducting life, stability and freeboard assessments, and the interpretation CPTu probing results. The following list of major projects in the last few years in Gunther's professional career involves various aspects of the above mentioned:

- Glencore Rhovan In-Pit Deposition Detail Design, South Africa, 2023-2024
- Harmony Gold Mining, Surveillance of TSFs, South Africa - 2021-2023

Water Dam Design and Inspection

Gunther's experience in water dam design and inspections includes the design of water dam infrastructure and safety evaluations. His skills range from flood analysis and hydraulic modelling, earthfill embankment design and modelling, the design of hydraulic structures, retaining walls, rehabilitation measures and sub-soil drainage systems, to conducting cost estimations and trade-off studies. The following list of major projects in the last few years in Gunther's professional career involves various aspects of the above mentioned:

- Millennium Challenge Corporation, Feasibility Study - Irrigated Agricultural Schemes, Lesotho - 2020-2021
- CMC di Ravenna, Itare Dam Detail Design, Kenya - 2017-2019
- AngloGold Ashanti, Adma Dam Safety Evaluation, South Africa - [2017]

Tender Documentation and CQA

Gunther has experience in the preparation of tender documentation, which includes the preparation of tender drawings, specifications and bill of quantities, as well as the evaluation of submitted tenders. His experience also includes construction quality control through construction monitoring, visual inspections and remote technical assistance. The following list of major projects in the last few years in Gunther's professional career involves various aspects of the above mentioned:

- NCP Chlorchem (Pty) Ltd. Rehabilitation of Dam 40, South Africa – 2018-2021
- Lesotho Highlands Development Authority, Mohale Dam face Slab Repairs, Lesotho – 2020-2021

Signature _____ **Date** 14/04/2025