



VOLUME 3 OF 3

THE CONTRACT

**NEC 3 Engineering and Construction Contract Option A:
Priced Contract with Activity Schedule of April 2013
(including amendments) for the construction of the plant.**

and

**NEC 3 Term Service Contract Option A: Priced Contract
with Price List of April 2013 (including amendments) for the
operation and maintenance of the plant.**

TENDER NO. RFP057/2024

**APPOINTMENT OF AN EPC CONTRACTOR TO CARRY OUT
ENGINEERING, PROCUREMENT, CONSTRUCTION AND
COMMISSIONING OF A 50 TON PER DAY BIODIGESTER PILOT
PLANT AT ROBINSON DEEP LANDFILL SITE, JOHANNESBURG
AND OPERATING AND MAINTAINING IT FOR A PERIOD OF 1 YEAR**



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Notes:

The Tender Document must be submitted as a whole. All forms must be properly completed as required and the document shall not be taken apart or altered in any way whatsoever.

All forms must be duly completed in **black ink** as required.

The list of returnable documents, which consists of forms and schedules to be completed and company specific certificates and information pages to be attached, comprise the following:

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THE CONTRACT

- C1 : AGREEMENT AND CONTRACT DATA**
- C2 : PRICING DATA**
- C3 : WORKS INFORMATION**
- C4 : SITE INFORMATION**

PART 1: AGREEMENT AND CONTRACT DATA

1. **Contract 1 – ENGINEERING, PROCUREMENT, CONSTRUCTION AND COMMISSIONING CONTRACT FOR A 50 TON PER DAY BIODIGESTER PILOT PLANT (BIOGAS DEMONSTRATION PLANT)**
 - a. **NEC 3 Engineering and Construction Contract Option A:** Priced Contract with *Activity Schedule* of April 2013 (including amendments).
2. **Contract 2 – OPERATIONS AND MAINTENANCE CONTRACT FOR A 50 TON PER DAY BIODIGESTER PILOT PLANT (BIOGAS DEMONSTRATION PLANT) FOR A PERIOD OF 1 YEAR**
 - a. **NEC3 Term Service Contract Option A:** Priced Contract with *Price List* of April 2013 (including amendments).

Document reference	Title	No of pages
C1.1	Form of Offer and Acceptance	5
C1.2	Contract Data	1
	Part One – Data provided by the <i>Employer</i> (Contract 1)	28
	Part Two – Data provided by the <i>Contractor</i> (Contract 1)	3
	Part One – Data provided by the <i>Employer</i> (Contract 2)	22
	Part Two – Data provided by the <i>Contractor</i> (Contract 2)	5
C1.3	Performance Guarantee	5
	Total number of pages	69

C1.1 FORM OF OFFER AND ACCEPTANCE

C1.1.1 Offer

The Employer, identified in the acceptance signature block, has solicited offers to enter a contract for the procurement of: **RFP057/2024- APPOINTMENT OF AN EPC CONTRACTOR TO CARRY OUT ENGINEERING, PROCUREMENT, CONSTRUCTION AND COMMISSIONING OF A 50 TON PER DAY BIODIGESTER PILOT PLANT AT ROBINSON DEEP LANDFILL SITE, JOHANNESBURG AND OPERATING AND MAINTAINING IT FOR A PERIOD OF 1 YEAR.**

The tenderer, identified in the offer signature block, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorized, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the service provider under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

Contract 1: NEC3 ECC – ENGINEERING PROCUREMENT CONSTRUCTION & COMMISSIONING

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The offered total of the amount due inclusive of VAT is ¹	R
(in words)	

Contract 2: TSC – OPERATIONS & MAINTENANCE FOR 1 YEAR

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The offered total of the amount due inclusive of VAT is ²	R
(in words)	

Grand Total for the Project: Contract 1 and Contract 2 Combined

The offered total of the Prices exclusive of VAT is	R
Value Added Tax @ 15% is	R
The offered total of the amount due inclusive of VAT is ³	R
(in words)	

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the Tender Data or issue a conditional Letter of Acceptance subject to certain conditions which must be fulfilled prior to final acceptance and signing of the acceptance part of this form, whereupon the tenderer becomes or may become the party named as the *Contractor* in the *Conditions of Contract* identified in the Contract Data.

Signature(s)

Name(s)

Capacity

For the tenderer:

Name of Tenderer

Address of Tenderer

Name of witness

Signature of witness Date

C1.1 FORM OF OFFER AND ACCEPTANCE (Continued)

C1.1.2 Acceptance

By signing this part of this form of offer and acceptance, the Employer identified below accepts the tenderer's offer. In consideration thereof, the Employer shall pay the service provider the amount due in accordance with the conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement between the Employer and the tenderer upon the terms and conditions contained in this agreement and in the contract that is the subject of this agreement.

The terms of the contract, are contained in:

- Part C1: Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
- Part C2: Pricing data
- Part C3: Scope of work.
- Part C4: Site information

and the schedules, forms, drawing and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorized representatives of both parties.

The tenderer shall within two weeks after receiving a completed copy of this agreement, including the schedule of deviations (if any), or the date specified in the conditional Letter of Acceptance, whichever date is the earliest, contact the Employer's representative (whose details are given in the contract data or Letter of Acceptance) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data or Letter of Acceptance. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement and the Employer may in its sole discretion accept such repudiation and either appoint one of the other tenderers or cancel the tender and re-issue it.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the Tenderer receives one fully completed original copy of this document, including the Schedule of Deviations (if any). Unless the Tenderer (now Contractor) within five days of the date of such receipt or the conditional Letter of Acceptance notifies the Employer in writing of any reason why he cannot accept the contents of this Agreement, this Agreement shall constitute a binding contract between the parties.

Signature(s)

Name(s)

Capacity

.....

.....

.....

for the Employer

Development Bank of Southern Africa Limited
 1258 Lever Road, Headway Hill,
 Midrand, Gauteng

Name of witness

Signature of witness Date

Schedule of Deviations

The extent of deviations from the Tender documents issued by the Employer prior to the Tender closing date is limited to those permitted in terms of the Tender Data and the Conditions of Tender. A Tenderer's covering letter will not necessarily be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

(Any cover letter must be referenced here if applicable, or it will not be valid as part of this submission).

Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the Tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.

Any change or addition to the Tender documents arising from the above agreements and recorded here shall also be incorporated in to the final Contract.

- 1 Subject
- Details
-
-
-
- 2 Subject
- Details
-
-
-
- 3 Subject
- Details
-
-
-
- 4 Subject
- Details
-
-
-
- 5 Subject
- Details
-

By the duly authorized representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from the amendments to the documents listed in the Tender Data and addend thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the Tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Tenderer:

Signature(s)

Name(s)

Capacity

Name of Tenderer

Address of Tenderer

.....

Name of witness

Signature of witness Date

For the Employer:

Signature(s)

Name(s)

Capacity

Name of Employer: **Development Bank of Southern Africa Limited**

Address of Employer 1258 Lever Road, Headway Hill, Midrand, Gauteng

Name of witness

Signature of witness Date

C1.2 CONTRACT DATA

Document reference	Title	No of pages
C1.2	Contract Data	
	Part One – Data provided by the <i>Employer</i> (Contract 1)	28
	Part Two – Data provided by the <i>Contractor</i> (Contract 1)	3
	Part One – Data provided by the <i>Employer</i> (Contract 2)	22
	Part Two – Data provided by the <i>Contractor</i> (Contract 2)	5
C1.3	Performance Guarantee	5
	Total number of pages	28

Part One - Data provided by the *Employer* – CONTRACT 1

ENGINEERING, PROCUREMENT, CONSTRUCTION AND COMMISSIONING CONTRACT FOR A 50 TON PER DAY BIODIGESTER PILOT PLANT (BIOGAS DEMONSTRATION PLANT)

NEC 3 Engineering and Construction Contract Option A: Priced Contract with *Activity Schedule* of April 2013 (including amendments).

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
2. Whenever a cell is shaded in the left hand column it denotes this data is optional and would be required in relation to the option selected. In the event that the option is not required select and delete the whole row. Where the following symbol is used “[●]” - data is required to be inserted relevant to the specific option selected.

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
		A: Priced contract with activity schedule
	dispute resolution Option	
		W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2: Changes in the law
		X7: Delay damages
		X13: Performance Bond
		X15: Limitation of Contractor's liability for his

		design to reasonable skill and care
		X16: Retention
		X17: Low Performance Damages
		X18: Limitation of liability
		Z: Additional conditions of contract
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The Employer is:	the Development Bank of Southern Africa Limited, acting through its Infrastructure Delivery Division (the "IDD"), a juristic person reconstituted and incorporated in terms of section 2 of the Development Bank of Southern Africa Act No 13 of 1997 (the "DBSA");
	Address:	Registered office at 1258 Lever Road Headway Hill, Midrand Johannesburg
	Represented by:	To be indicated at contracting
	Tel No.	To be indicated at contracting
	Fax No.	To be indicated at contracting
10.1	The Project Manager is:	DBSA
	Address:	Registered office at 1258 Lever Road Headway Hill, Midrand Johannesburg
	Tel No.	To be indicated at contracting
	e-mail:	To be indicated at contracting
10.1	The Supervisor is:	To be indicated at contracting
	Address:	Registered office at 1258 Lever Road Headway Hill, Midrand Johannesburg
	Tel No.	To be indicated at contracting

	Fax No.	To be indicated at contracting
	e-mail:	To be indicated at contracting
11.2(13)	The <i>works</i> is	Engineering, procurement, construction and commissioning of a 50 ton per day biodigester pilot plant (biogas demonstration plant) at Robinson Deep Landfill Site, Johannesburg.
11.2(14)	The following matters will be included in the Risk Register	Compliance with tender requirements; Personnel Clearance and Authorised Access to Site; Matters notified as early warnings; and Decisions resulting from risk reduction meetings.
11.2(15)	The <i>boundaries of the site</i> are	Robinson Deep Landfill Site, Johannesburg
11.2(16)	The Site Information is in	Part 4: Site Information
11.2(19)	The Works Information is in	Part 3: Scope of Work.
12.2	The <i>law of the contract</i> is the law of	The Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	5 Days
2	The Contractor's main responsibilities	Turn-key as per the scope of work
3	Time	
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	Contract 1: (EPC) The design, construction, implementation and commissioning, testing and handover of the biogas plant should be completed in 12 months from starting date. Tenderers to note that contract applicable to operations and maintenance (O&M) of the biogas plant will be NEC 3 Term Service Contract that will come into effect upon Completion of the works for Contract 1. The 12 months defects liability period for the plant as a whole and its subcomponents commissioned under the EPC Contract, will run concurrently with the O&M Contract.

30.1	The <i>access dates</i> are	Part of the site TBC	Date
30.3	The <i>key dates and conditions</i> to be met are	<i>condition</i> to be met	<i>key date</i>
		Site establishment	TBC
		Completion	TBC
31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	1 (one) week of the Contract Date.	
31.2	The <i>starting date</i> is	Site Handover Date	
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	4 weeks	
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	Confirmed	
4	Testing and Defects		
42.2	The <i>defects date</i> is	Contract 1: 12 months after [Completion of the whole of the <i>works</i>]	
43.2	The <i>defect correction period</i> is	5 days	
5	Payment		
50.1	The <i>assessment interval</i> is	20th of each month	
51.1	The <i>currency of this contract</i> is the	South African Rand	
51.4	The <i>interest rate</i> is	the prime interest rate of the Standard Bank of South Africa Limited as amended from time to time	
6	Compensation events		
60.1(13)	The place where weather is to be recorded is	The closest weather station to site.	
	The <i>weather measurements</i> to be recorded for each calendar month are:	<ul style="list-style-type: none"> • the cumulative rainfall (mm); • the number of days with rainfall of more than 10mm; • the number of days with minimum air 	

		<p>temperature less than 0 degrees Celsius;</p> <ul style="list-style-type: none"> the number of days with snow lying at +2 hours GMT; and these measurements: hourly wind direction and windspeed
	The <i>weather measurements</i> are supplied by	Contractor and verified with closest weather station to site.
	The weather data are the records of the past <i>weather measurements</i> for each calendar month which were recorded at	The closest weather station to site.
60.1(13)	Where no recorded data are available:- assumed values for the ten year return <i>weather data</i> for each <i>weather measurement</i> for each calendar month are:	As obtained by the contractor from the South African Weather Services verifiable records.
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	N/A
84.1	The <i>Contractor</i> provides these additional insurances: guide: lateral support if applicable, professional indemnity if contractor does design, SASRIA or any other insurance identified but not in table at cl 84.2.	<ol style="list-style-type: none"> The supplementary insurance is required. Such insurance shall comprise a Coupon Policy for Special Risks issued by the South African Special Risk Insurance Association. (SASRIA). Public liability insurance to be effected by the contractor for the sum of R15,000,000.00 (Fifteen Million Rand) per event with a deductible in an amount that the contractor deems appropriate. Professional Indemnity for the sum of R15,000,000.00 (Fifteen Million Rand) per claim in respect of Contractors design liability.
84.1	The <i>Employer</i> provides these insurances from the Insurance Table:	None
84.1	The <i>Employer</i> provides these additional insurances:	Nil
84.1	The <i>Contractor</i> provides these additional insurances:	The supplementary insurance is required. Such insurance shall comprise a Coupon Policy for Special Risks issued by the South African Special Risk Insurance Association. (SASRIA)

84.2	If the Employer is to provide Plant and Materials:- the insurance against loss of or damage to the <i>works</i> , Plant and Materials is to include cover for Plant and Materials provided by the Employer for an amount of	N/A
84.2	Insurance against loss of or damage to the <i>works</i> , Plant and Materials, without limitation on the number of claims	Insured sum is the total of the Prices plus 10%
84.2	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is	as prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 and the <i>Contractor's</i> common law liability for people falling outside the scope of the Act with a limit of Indemnity of not less than ZAR500 000.00 (Five hundred thousand Rands).
DATA FOR MAIN OPTION CLAUSES		
Option A	Option A: Priced Contract with <i>activity schedule</i>	There is no reference to Contract Data in this Option A and terms in italics are identified elsewhere in this Contract Data.
W1	Data for Option W1	
W1.1	The <i>Adjudicator</i> is (Name)	to be appointed as needed, see W1.2(3) below
W1.2(3)	The <i>Adjudicator nominating body</i> is:	The Party, which raises the dispute, shall select three adjudicators from the panel of adjudicators published by the South African Institution of Civil Engineering and/or Association of Arbitrators Southern Africa depending upon the technical or legal issues and nature of the dispute, determine their hourly fees and confirm that these adjudicators are available to adjudicate the dispute in question. The other Party shall then select, within seven (7) days, one of the three (3) nominated adjudicators to act as the adjudicator; failing which the chairperson for the time being of the Association of Arbitrators Southern Africa shall nominate an adjudicator on request from either party.
W1.4(2)	The <i>tribunal</i> is:	Arbitration, arbitrator to be appointed as required.
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators Southern Africa or its successor body.

	The place where arbitration is to be held is	South Africa, Johannesburg		
	The person or organisation who will choose an arbitrator - if the Parties cannot agree a choice or - if the arbitration procedure does not state who selects an arbitrator, is	the Chairman for the time being or his nominee of the Association of Arbitrators Southern Africa or its successor body on application of either party.		
DATA FOR SECONDARY OPTION CLAUSES				
X1	Price adjustment for inflation			
	The <i>base date</i> for indices is	No price adjustment allowed		
	The proportions used to calculate the Price Adjustment Factor are:	0. [•]	linked to the index for	[•]
		0. [•]	linked to the index for	[•]
		0. [•]	linked to the index for	[•]
		0. [•]	linked to the index for	[•]
		1.00		
	The indices are those prepared by	[•] Indices to be obtained from Steel and Engineering Industries Federation of Southern Africa (SEIFSA), Producer Price Index (PPI) and Consumer Price Index (CPI).		
X7	Delay damages			
	Delay damages for Completion of the whole of the <i>works</i> are	The penalty per calendar day shall be calculated as per the current formula of penalty calculation by the Department of Public works up to a maximum of 10% of the contract value. Thereafter, the employer shall have a right during the identified delay period to intervene and accelerate the work or appoint a third party to assist or complete the works to reach practical completion at the planned period. The cost of the appointed third party work shall be borne by the contractor.		

		<p>EXAMPLE</p> <p>Estimated contract value = R2 500 000 (excluding VAT)</p> <p>Contract period = 18 months</p> <p style="padding-left: 40px;">=R2 500 000 X0.0375/100</p> <p style="padding-left: 40px;">= R937.50/day</p> <p>Therefore rounded off to the nearest R10-00 = R 940-00/day.</p> <p>To a maximum of 10% of the total of prices. The Employer terminates this contract upon the contractor reaching the maximum penalty of 10%.</p>	
X13	Performance Bond		
	The amount of the performance bond is	being an on-demand Guarantee issued by a registered entity approved by the <i>Employer</i> – fixed at ten percent (10%) of the contract Price at Contract Date, reducing to five percent (5%) of the contract Price when the <i>Contractor</i> achieves Completion and expires 1 month after the <i>defects date</i> .	
X16	Retention		
	The <i>retention free</i> amount is	0%	
	The <i>retention percentage</i> is	10% of the contract value	
X17	Low performance damages		
	The amounts for low performance damages are	amount	performance level for
		Contract 1: NEC 3 ECC Option A contract for EPC	
		Up to 10% of the value of Contract 1	As per Tests On Completion (Annexure V)
X18	Limitation of liability		
	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	R0.00 (zero Rand)	

	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	cost for loss or damaged incurred by the <i>Employer</i>
	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	cost of the repair or reinstatement of property to original standard.
	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	total of the Prices as at the start date as adjusted in terms of X1 if X1 applies to the contract
	The <i>end of liability date</i> is	Contract 1: Latent defects 60 months after the Completion of the whole of the <i>works/Sectional Completion/Commissioning</i> per section of the <i>works</i> .
X20	Key Performance Indicators (not used with Option 12)	Not Applicable
	The <i>incentive schedule</i> for Key Performance Indicators is in	N/A
	A report of performance against each Key Performance Indicator is provided at intervals of	Every two weeks

PART A – Additional Definitions

Clause	Amendment
11.2 Identified and defined terms	<p>Add the following new definition as clause 11.2(34):</p> <p>“Baseline Risk Assessment means the baseline risk assessment contemplated in regulation 5(1)(a) of the Construction Regulations.”</p> <p>Add the following new definition as clause 11.2(35):</p> <p>"Construction Agent means an “agent” as per the Construction Regulations which means a competent person who acts as a representative for a client (“client” in this regard being the Employer); the agent contemplated herein: (i) manages the health and safety on a construction project for the client; (ii) is registered with a statutory body (being the South African Council for Project and Construction Management Professions or any other</p>

statutory body approved by the chief inspector); and (iii) is qualified to perform the functions required by the Construction Regulations”;

Add the following new definition as clause 11.2(36):

“Construction Safety Officer means the construction safety officer as defined in the Construction Regulations.”

Add the following new definition as clause 11.2(37):

“Construction Regulations means the Construction Regulations as defined in clause 27.4.2 below”

Add the following new definition as clause 11.2(38):

“A Contractor Insolvency Event means and is considered to occur if:

- the Contractor commits an act which, if committed by an individual, would constitute an act of insolvency within the meaning of Sections 8 or 9(3)(a)(v) of the Insolvency Act 24 of 1936, as amended, or any equivalent legislation in any jurisdiction to which it is subject;
- the Contractor begins negotiations or takes any other step with a view to generally deferring, re-scheduling or otherwise re-adjusting all or a material part of its indebtedness or proposes or makes a general scheme, arrangement, assignment, or composition with or for the benefit of its creditors or a moratorium is proposed or agreed in respect of or affecting all or a material part of its indebtedness;
- the Contractor makes an application to court for business rescue supervision or for its winding-up (whether provisionally or finally);
- a court of competent jurisdiction grants an order winding-up the Contractor (whether provisionally or finally) or makes an order placing the Contractor under business rescue supervision;
- an application or other legal process (including the filing of any document commencing judicial process) is issued seeking an order for the winding-up of the Contractor (whether provisionally or finally) or placing the Contractor under business rescue supervision, except for so long as such application or other legal process is being contested in good faith and by appropriate means or except for

the bona fide purpose of reconstruction, amalgamation, reorganisation, merger or consolidation; or

- a resolution is passed by:
 - the shareholders of the Contractor for the winding-up of the Contractor, whether by way of a members' or creditors' voluntary winding-up; or
 - the board of the Contractor for the Contractor to voluntarily begin business rescue proceedings and place himself under business rescue supervision."

Add the following new definition as clause 11.2(39):

- **"Temporary Works** is all temporary works of every kind required on site for the execution and Completion of the *works* and the remedying of any defects."

Add the following new definition as clause 11.2(40):

- **"Intellectual Property"** means (a) any copyright, design rights, patents, inventions, logos, business names, service marks and trademarks, internet domain names, moral rights, rights in databases, data, source codes, reports, drawings, specifications, know-how, business methods, trade secrets and confidential business information, semi-conductor rights, topography rights, whether registered or unregistered, rights in the nature of unfair competition and the right to sue for passing off; (b) applications for registration and the right to apply for registration for any of these rights; (c) all other intellectual property rights and similar forms of protection; existing anywhere in the world; and (d) all inventions (whether patentable or unpatentable and whether or not reduced to practice), all improvements thereto, and all patents, patent applications, and patent disclosures, together with all reissues, continuations, continuations-in-part, revisions, extensions, and re-examinations thereof,

PART B - Amendments and additions to Existing Core and Optional Clauses

Clause	Amendment
12 Interpretation and the law	
12.5	<p>Added the following clauses after clause 12.4</p> <p>"Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the <i>Project Manager</i>, the <i>Supervisor</i>, or the <i>Adjudicator</i> does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing."</p>

12.6	Words denoting persons or parties shall include individuals and any organisation having legal capacity.
12.7	<p>In this contract, except where the context requires otherwise:</p> <ul style="list-style-type: none"> provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and; "written" or "in writing" means hand-written, type-written, printed or electronically made, and resulting in a permanent record.
12.8	<ul style="list-style-type: none"> The headings to the sections, clauses and sub-clauses of the conditions of this contract are for convenience only and do not affect the construction or interpretation of the conditions of contract. Any word or expression defined in any clause in the Z clauses, unless the application of the word or expression is specifically limited to the clause in question, bears the meaning prescribed to the word or expression throughout the Z clauses.
12.9	<p>Week means a continuous period of 7 days.</p> <ul style="list-style-type: none"> If the day for payment of any amount due by the Employer or Contractor in terms of this contract should fall on a Saturday, Sunday or official public holiday in the Republic of South Africa, the relevant day of payment is/are the next ordinary business day in the Republic of South Africa.
12.10	<ul style="list-style-type: none"> Where figures are referred to in numerals and in words, if there is any conflict between the two, the words shall prevail.
12.11	<ul style="list-style-type: none"> If any provision of this contract, which is not material to its efficacy as a whole, is rendered void, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provision is not in any way affected or impaired thereby and the parties shall endeavour in good faith to agree an alternative provision to the void, illegal or unenforceable provision.
12.12	<ul style="list-style-type: none"> Unless otherwise specifically recorded in this contract, termination of this contract for any cause does not release a party from any liability which at the time of termination has already accrued to such party or which thereafter may accrue in respect of any act or omission prior to such termination. Similarly, the termination of this contract does not release a party from any obligation which, by its nature, is intended to survive such termination.
Using the Contractor's design	
22.1	<p>Delete core clause 22.1 in its entirety and replace it with the following clauses:</p> <p>The Contractor carries out, and is responsible for, the design of the works. The designs are prepared by qualified designers who are engineers or other professionals who comply with the criteria (if any) stated in the tender document.</p>
22.2	<p>The Contractor shall design, execute and complete the works in accordance with the contract, and shall remedy any defects in the works. When completed, the works shall be fit for the purposes for which the works are intended. If errors, omissions, ambiguities,</p>

	inconsistencies, inadequacies or other defects are found in the Contractor's Documents ⁴ , they and the Works shall be corrected at the Contractor's cost, notwithstanding any consent or approval, under this clause.
22.3	The Contractor warrants that it has the experience and capability necessary for the design.
22.4	<p>The Employer shall not be responsible for any error, inaccuracy or omission of any kind in the tender documents as originally included in the tender and shall not be deemed to have given any representation of accuracy or completeness of any data or information, except as stated below. Any data or information received by the Contractor, from the Employer or otherwise, shall not relieve the Contractor from his responsibility for the design and execution of the Works.</p> <p>However, the Employer shall be responsible for the correctness of the following portions of the tender documents and of the following data and information provided by (or on behalf of) the Employer:</p> <p>(a) portions, data and information which are stated in the Contract as being immutable or the responsibility of the Employer,</p> <p>(b) definitions of intended purposes of the works or any parts thereof,</p> <p>(c) criteria for the testing and performance of the completed works, and</p> <p>(d) portions, data and information which cannot be verified by the Contractor, except as otherwise stated in the Contract.</p>
22.5	The design, Contractor Documents the execution and the completed works shall comply with the prescribed technical and international standards, building, construction and environmental laws, laws applicable to the product being produced from the works, and other standards specified in the tender document, applicable to the works, or defined by the applicable laws.
22.6	<p>The Contractor shall prepare, and keep up-to-date, a complete set of "as-built" records of the execution of the works, showing the exact as-built locations, sizes and details of the work as executed. These records shall be kept on the site and shall be used exclusively for the purposes of this contract. Two copies shall be supplied to the Employer prior to the commencement of the tests on Completion.</p> <p>In addition, the Contractor shall supply to the Employer as-built drawings of the works, showing all works as executed, and submit them to the Employer for review- these shall be known as the Contractor's Documents. The Contractor shall obtain the consent of the Employer as to their size, the referencing system, and other relevant details.</p>
22.7	Prior to commencement of testing the works on completion, the Contractor supply's to the Employer provisional operation and maintenance manuals in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair the Plant, where necessary

⁴ Defined at clause 22.6

26 Subcontracting	
26.1	<p>Core clause 26.1 to be amended as follows:</p> <p>The Contractor does not subcontract the whole or any part of the works without the written consent of the Employer, which consent shall be the sole discretion of the Employer. If the Contractor subcontracts work, he is responsible for Providing the Works as if he had not subcontracted. This contract applies as if a Subcontractor's employees and equipment were the Contractor's. For the avoidance of doubt, the Contractor shall be responsible for the acts or defaults of any of its subcontractors, its agents or employees, as if they were the acts or defaults of the Contractor.</p>
26.3	<p>Core clause 26.3 to be amended as follows:</p> <p>The Contractor submits the conditions of contract for each subcontract to the Project Manager and may redact all commercially sensitive information.</p>
26.4	<p>Add a new core clause 26.4 as follows:</p> <p>The Contractor shall procure from the Subcontractor all consents required in order to ensure that all the rights and obligations the Contractor may have under the subcontracts can be ceded and delegated to the Employer.</p>
26.5	<p>Add a new core clause 26.5 as follows:</p> <ul style="list-style-type: none"> • If the Contractor does not make payment of • any amount due and payable by him to a Subcontractor ("the Subcontractor debt") and the Project Manager considers that the Subcontractor debt adversely impacts on the progress of the Works or the obligations of the Contractor under the contract, Project Manager requests evidence of payment to the Subcontractor. In the absence of such evidence, the Employer may (at its own discretion) pay the Subcontractor debt directly to the Subcontractor concerned in which event such payment is, for all purposes under the Contract, regarded as a payment made on behalf of the Contractor and at the request of and with the approval and consent of the Contractor, as a payment towards the Prices. • Payment to the Subcontractor is conducted in terms of core clause 50.2 of the contract.
26.6	<p>Add a new core clause 26.6 as follows:</p> <p>All adverse effects as a result of or arising from the Subcontractor debt does not result in a compensation event.</p>
27 Health, safety and the environment	
27.4	<p>Clause 27.4 is deleted in its entirety and replaced with the following:</p> <p>Health and Safety specification</p>

27.4.1	The <i>Contractor</i> takes all reasonable steps and precautions to assess the Site, consider and receive all relevant information on the Site and health and safety related to the <i>works</i> , maintain the health and safety of persons in and about the execution of the <i>works</i> .
27.4.2	The <i>Contractor</i> acknowledges that the Occupational Health and Safety Act No. 85 of 1993 and the regulations promulgated therein (“the Act”); and the Construction Regulations 2014 promulgated under the Act (“the Construction Regulations”), Section 27 (2) of the Disaster Management Act, 2002 and Consolidated Directions on Occupational Health and Safety Measures at Certain Workplaces will in all respects be applicable to this contract and the <i>works</i> .
27.4.3	The <i>Employer</i> appoints the <i>Contractor</i> as the “Principal <i>Contractor</i> ” (as defined and provided for under the Construction Regulations 2014) for the Site.
27.4.4	Accordingly, the <i>Contractor</i> is responsible for all duties of the “Principal <i>Contractor</i> ” as defined and provided for under the Act and the Construction Regulations 2014 including but not limited to those obligations defined and provided for in Annexures A, B and C and all required Regulations and Standards applicable to the work of this contract.
27.4.5	The <i>Contractor</i> shall appoint a SACPCMP Registered Construction Health & Safety Officer for the Works and all other site-specific appointments as per Legislation requirements.
27.4.6	<p>The <i>Contractor</i> confirms that it has received sufficient information about the Site and the <i>works</i> in order to:</p> <ul style="list-style-type: none"> • comply with the provisions of the OHS Act and the Construction Regulations 2014, • comply with the provisions of this clause; • adhere to the <i>Employer’s</i> health and safety baseline specification, Baseline Risk Assessment and SHEQ Policy as set out in Annexures A, B and C; • be properly appointed in accordance with Section 37(2) of the Act
27.4.7	The <i>Contractor</i> acknowledges that the Project Manager acts as the <i>Employer’s</i> “Implementing Agent” in respect of all obligations which the <i>Employer</i> has as “Client” in the Construction Regulations 2014 and the Act.
27.4.8	Without limitation, the <i>Contractor</i> :
27.4.8.1	notwithstanding any actions which the <i>Employer</i> may take, accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Act, all its regulations (including the Construction Regulations 2014) and Annexures A, B and C. By entering into this contract it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act;
27.4.8.2	acknowledges and confirms that the Prices includes a sufficient amount for proper compliance with the Construction Regulations 2014, Section 27 (2) of the Disaster Management Act, 2002 and Consolidated Directions on Occupational Health and Safety Measures at Certain Workplaces and all applicable health and safety laws, regulations,

	rules, guidelines, procedures and all obligations imposed by this contract and Annexures A, B and C and generally for the proper maintenance of health and safety in and about the execution of <i>works</i> ;
27.4.8.3	undertakes, in and about the execution of the <i>works</i> , to comply with all applicable health and safety laws, regulations, rules, guidelines and procedures otherwise provided for under this contract and shall ensure that all sub-contractors, employees and Others under the <i>Contractor's</i> direction and control, likewise observe and comply with the foregoing; and
27.4.8.4	indemnifies the <i>Employer</i> against any loss, damage or claim suffered by the <i>Employer</i> due to a failure to comply with any provision of this clause 27.4 by the <i>Contractor</i> .
27.4.8.5	acknowledges and confirms that a Construction Safety Officer will be appointed by the <i>Contractor</i> for the Project and that the Prices includes a sufficient amount for the appointment of such.
27.4.9	The <i>Contractor</i> and his designer shall accept full responsibility and liability to comply with the Act, the Construction Regulations and Annexures A, B and C for the design of the Temporary <i>Works</i> and those parts of the Permanent <i>Works</i> which the <i>Contractor</i> is responsible to design in terms of this contract;
27.4.10	The <i>Employer</i> retains a right to inspect, review, obtain copies of all documents regarding, attend and participate in all meetings regarding; all inquiries, audits and reports conducted under this contract including but not limited to those that are conducted in accordance with:
27.4.10.1	Annexures A, B and C of this contract; and
27.4.10.2	Section 31 and/or 32 of the Act, its regulations and the Construction Regulations following any incident involving the <i>Contractor</i> and/or sub-contractor and/or their employees.
27.4.11	The <i>Contractor</i> shall notify the Project Manager and copy in the <i>Employer</i> in writing of all inquiries, audits, reports, investigations, complaints or criminal charges which may arise pursuant to <i>works</i> performed under this contract.
27.4.12	The <i>Employer</i> and the Project Manager shall, at all times during construction and for a period of 5 (five) years after Completion, have the right to access and inspect any part of the Site/ <i>works</i> and all documents, reports, designs, specifications whatsoever that are prepared pursuant to any clause of this contract.
27.4.13	The <i>Contractor</i> liaises with the <i>Employer</i> and the Project Manager regarding all issues related to this clause 27, and in particular, complies with all reasonable requests from the Project Manager to (i) attend any meetings and/or (ii) provides any documents, audits and reports; required by the <i>Employer</i> or Project Manager.
27.4.14	The <i>Contractor</i> complies with the Baseline Risk Assessment provided by the <i>Employer</i> . Notwithstanding the foregoing, the <i>Contractor</i> prepares its own Baseline Risk Assessment

	and complies with it where such Baseline Risk Assessment provides additional risks to those noted by the <i>Employer</i> or the <i>Project Manager</i> .
5 Payment	
51.2	Amend this clause by deleting the second and the third sentences of the clauses and replace them with the following: If a certified payment is late by more than 8 weeks, interest is paid on the late payment. Interest is assessed from 4 weeks after the date by which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is made.
51 Payment	Add the following new clauses after clause 51.4.
51.5	Within one week of receiving a payment certificate from the <i>Project Manager</i> in terms of core clause 51.1, the <i>Contractor</i> provides the <i>Employer</i> with a tax invoice in accordance with the <i>Employer's</i> procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.
51.6	If the <i>Contractor</i> does not provide a tax invoice in the form and by the time required by this contract, the time by when the <i>Employer</i> is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice.
51.7	The <i>Contractor</i> (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the <i>Employer's</i> VAT number on each invoice the Contractor submits for payment.
6 Compensation Events	
61 Notifying compensation events	
61.3	Delete the second bullet point in core clause 61.3 which reads " <i>the Project Manager has not notified the event to the Contractor</i> ", <i>Amend the last paragraph of the core clause 61.3 to read</i> <i>"If the Contractor does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices, the Completion Date or a Key Date."</i>
62.3	<i>Add to core clause 62.3,</i> <i>"The Programme Manager's reply which is an acceptance of a quotation for a compensation event may require the due authority of the Employer."</i>

<p>62.5</p>	<p>Add to core clause 62.5,</p> <p><i>"The Project Manager notifies the Contractor if the Employer's authority is required and includes in his notification any extension to the period within which he is required to reply to the Contractor's quotation.</i></p>
<p>9 Termination</p>	
<p>91.1</p>	<p>Amend this clause by the addition of the following at the end of the second main bullet point, fourth sub-bullet point, after the words "against it":</p> <p><i>"or the Contractor commits a Contractor Insolvency Event (R5),"</i></p>
<p>91.2</p>	<p>Amend this clause sub-bullet point two (R12) to read as follows:</p> <p><i>"not provided an on-demand performance bond or guarantee which this contract requires and/or failed to renew on-demand performance bond or guarantee upon expiry (R12)".</i></p>
<p>91.3</p>	<p>Amend this clause by adding the following at the end of the clause:</p> <ul style="list-style-type: none"> • <i>"failed to effect any of the required insurances(R22);</i> • <i>failed to provide a satisfactory recovery plan pursuant to Clause 37 (The Contractor's recovery plan) (R23); or</i> • <i>failed to comply with the provision of Clause Z3 (Broad Based Black Economic Empowerment) (R24).</i> <p>and for terminating for R22 to R24 the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table in clause 90.2 apply."</p>
<p>91.8</p>	<p>Add a new core clause 91.8 as follows:</p> <p>The Employer terminates if the Contractor reaches 10 % of the delayed damages amount being the maximum amount. (R25). When terminating for R25 - the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table in clause 90.2 apply.</p>
<p>9.0</p>	<p>Insert the following new clause 9.4</p>
<p>9.4 Termination for convenience</p>	<p>The <i>Employer</i> is entitled to terminate the Contract, at any time for the <i>Employer's</i> convenience, by giving notice of such termination to the <i>Contractor</i>. The termination shall take effect 28 days after the later of the dates on which the <i>Contractor</i> receives this notice or the <i>Employer</i> returns the performance bond and all monies held in retention, unless there are outstanding calls/claims thereon in which event, and if applicable, the <i>Employer</i> returns the performance bond and all monies held in retention promptly after the last of the outstanding calls/claims have been met. The <i>Employer</i> does not terminate the Contract under this sub-clause in order to execute the <i>works</i> himself or to arrange for the <i>works</i> to be executed by another contractor. The same procedures on termination as those applied</p>

	for reasons R1 to R15 or R18 stated in the Termination Table in clause 90.2 apply. The Contractor shall only be entitled to costs incurred at the date of termination.
Option X2: Changes in the Law	
X2.2	<p>Amend this clause by the addition of the following new clause:</p> <p>Notwithstanding anything contained in this clause or this agreement, a “change in law” does not include any law or piece of legislation that is enacted or made but not yet in force as at the date when the tender is submitted, or any proposed or draft law that is promulgated or issued for comment at any time before the tender is submitted if and to the extent that such law when enacted or made and brought into effect is materially unchanged.</p>
Option X13: Performance Bond	Amend this clause by adding the following new clause at the end of this clause: (if applicable in this contract)
X13.2	<p>The <i>Contractor</i> ensures that the on-demand performance bond is valid and enforceable until the <i>Contractor</i> has Provided the Works and remedied any and all <i>defects</i> therein. If the terms of the performance bond specifies its expiry date, then the Contractor extends the validity of the performance bond 28 days prior to such an expiry date, such that the performance bond lapses at the later of:</p> <ul style="list-style-type: none"> • the date of issue of the Defects Certificate; or • the date when the last <i>defect</i> notified has been remedied or accepted in accordance with this contract.
X13.3	<p>The <i>Employer</i> may make a claim under the performance bond, for amounts to which the <i>Employer</i> is entitled under the contract in the event of:</p> <ul style="list-style-type: none"> • failure by the <i>Contractor</i> to extend the validity of the performance bond as described in the preceding paragraph, in which event the <i>Employer</i> may claim the full amount of the performance bond, • failure by the <i>Contractor</i> to pay the <i>Employer</i> an amount due, as either agreed with the <i>Contractor</i> or assessed by the Project Manager (or otherwise determined) in accordance with the provisions of this contract, within 28 days after this agreement, assessment or determination, • failure by the <i>Contractor</i> to remedy a default within 28 days after receiving the <i>Employer's</i> notice requiring the default to be remedied, or • the occurrence of any one of the following termination reasons: R1 to R15, R18 and R22 to R24.

X13.4	The <i>Employer</i> indemnifies and hold the <i>Contractor</i> harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the performance bond to the extent to which the <i>Employer</i> is not entitled to make the claim.
X13.5	<p>Step Down</p> <p>The performance bond reduces by half its value on the date of issue of the Certificate of Completion.</p> <p>The performance bond expires/lapses on the later of:</p> <ul style="list-style-type: none"> • the date of issue of the Defects Certificate; or • the date when the last <i>defect</i> notified has been remedied or accepted in accordance with this contract.
X15.1	<p>Delete clause X15.1 in its entirety and replace with the following sentence:</p> <p><i>“The Contractor is liable for Defects in the works due to his design. The Contractor’s design and works must be fit for its intended purpose.”</i></p>
PART C – Additional Clauses (entitled Z-Clauses)	
Z1	Cession delegation and assignment
Z1.1	The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i> .
Z1.2	<p>Notwithstanding the above, the <i>Employer</i> may, on written notice to the <i>Contractor</i>, cede and delegate its rights and obligations under this contract to a Related Party or a Client of the <i>Employer</i>.</p> <p>For the purpose hereof</p>
Z1.2.1	<p>a “related party” means any entity that directly or indirectly, through one or more intermediaries, controls or is controlled by, or is under common control with the employer and includes any other “Organ of State” as defined in section 239 of the Constitution of the Republic of South Africa, 1996 and any entity or Organ of State for whom the employer carries out the works or acts as an implementing agent; and “Control” means the beneficial ownership of the majority in number of the issued equity of any entity (or the whole or majority of the entity’s assets), and/or the right or ability to direct or otherwise control the entity or the votes attaching to the majority of the entity’s equity and “controlled” or “under common control” shall have a similar meaning.</p>
Z2	Joint ventures

Z2.1	If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of this contract.
Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Project Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
Z2.3	The <i>Contractor</i> does not substantially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the <i>Employer</i> having been given to the <i>Contractor</i> in writing.
Z3	Broad Based Black Economic Empowerment, Construction Industry Development Board grading and the valid and active Tax Compliance Status Pin issued by SARS.
Z3.1	The <i>Contractor</i> warrants that it will:
Z3.1.1	comply with all laws including the <i>Broad Based Black Economic Empowerment Act 53 of 2003</i> , its regulations and Codes of Good Practice; and the <i>Preferential Procurement Act 5 of 2000</i> and all its regulations;
Z3.1.2	maintain or improve (i) the BEE rating stated in its BEE certificate (ii) the contractor's Construction Industry Development Board grading, and (iii) its valid and active Tax Compliance Status Pin issued by SARS submitted at tender stage; and
Z3.1.3	not conduct any Fronting practices as defined in the Codes of Good Practice.
Z4	Change of Broad Based Black Economic Empowerment (B-BBEE) status
Z4.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.
Z4.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Project Manager</i> within thirty days of the notification or as otherwise instructed by the <i>Project Manager</i> .
Z4.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the Contract Date the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Works.
Z4.4	Failure by the <i>Contractor</i> to notify the <i>Employer</i> of a change in its B-BBEE status may constitute a reason for termination. If the <i>Employer</i> terminates in terms of this clause, the

	procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.
Z5	Ethics
	<p>For the purposes of this Z-clause, the following definitions apply:</p> <p>Affected Party means, as the context requires, any party, irrespective of whether it is the Contractor or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,</p> <p>Collusive Action means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,</p> <p>Committing Party means, as the context requires, the <i>Contractor</i>, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,</p> <p>Corrupt Action means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,</p> <p>Fraudulent Action means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,</p> <p>Obstructive Action means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action and</p> <p>Prohibited Action means any one or more of a Coercive Action, Collusive Action, Corrupt Action, Fraudulent Action or Obstructive Action.</p>
	A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof
	<p>The Employer may terminate the Contractor's obligation to Provide the Service if a Committing Party has taken a Prohibited Action and the Contractor did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the Employer has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the Employer can terminate the Contractor's obligation to Provide the Services for this reason.</p> <p>If the Employer terminates the Contractor's obligation to Provide the Services for this reason, the procedures and amounts due on termination are respectively P1, P2, P3 and P4, and A1 and A3.</p>
	A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the Employer does not have a contractual bond with the Committing Party, the Contractor ensures that the Committing Party co-operates fully with an investigation.

	Any offer, payment, consideration, or benefit of any kind made by the <i>Contractor</i> , which constitutes or could be construed either directly or indirectly as a Prohibited Action such as an inducement or reward for the award or in execution of this contract, including Fronting as referenced in Sub-Clause Z3.1.3, constitutes grounds for terminating the <i>Contractor's</i> obligation to Provide the Services or taking any other action as appropriate against the <i>Contractor</i> (including civil or criminal action).
	Such Prohibited Action include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the <i>Employer</i> or other people or organisations and including in circumstances where the <i>Contractor</i> or any such member is removed from an approved vendor data base of the <i>Employer</i> as a consequence of such Prohibited Action.
Z6	Confidentiality
Z6.1	<p>Both Parties agree that in the course of the contract they shall exchange information between them and that they wish to protect the confidentiality of such information.</p> <p>Accordingly, for this clause, the “Discloser” shall mean the Party disclosing Information and the “Recipient” shall mean the Party receiving Information.</p> <p>“Information” shall mean all commercial, financial, technical, operational or other information appertaining to the Service and arising out of or in relation to the Contract (including without limitation all data, know-how, calculations, designs, drawings, methods, processes, systems, explanations, demonstrations etc.) as have been or may be disclosed or otherwise made available by the Discloser to the Recipient or to any person on the Recipient’s behalf or to which the Recipient or any person on the Recipient’s behalf has been granted access to (any such disclosure, availability or granting of access being referred to in this Agreement as “disclosure”), but shall exclude any such information which:</p> <p>(a) prior to disclosure was in the possession of the Recipient, as evidenced by the written records of the Recipient, and which the Recipient was entitled to use; or</p> <p>(b) at the time of disclosure the Information is in the public domain other than by reason of a breach of duty or of this Contract; or</p> <p>(c) after disclosure is received by the Recipient in good faith from a third party who is under no obligation of confidence in relation thereto or becomes generally available to third parties by publication or otherwise, other than by reason of a breach of duty or of this Agreement; or</p> <p>(d) the Discloser is compelled to disclose by virtue of a court order or tribunal</p>
Z6.2	Any disclosure of Information shall be solely for the purpose of the performance of the Contract and the Service and the Recipient shall not use nor permit nor cause others to use Information for any other purpose without the prior written consent of the Employer.
Z6.3	The <i>Contractor</i> does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information noted in the clause above. Should the <i>Contractor</i> disclose information to Others in terms of

	clause 25.1, the <i>Contractor</i> ensures that the provisions of this clause are complied with by the Employer.
Z6.4	If the <i>Contractor</i> is uncertain about whether any such information is confidential, it is to be regarded as confidential until notified otherwise by the <i>Project Manager</i> .
Z6.5	In the event that the <i>Contractor</i> is, at any time, required by law to disclose any such information which is required to be kept confidential, the <i>Contractor</i> , to the extent permitted by law prior to disclosure, notifies the <i>Employer</i> so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the <i>Contractor</i> may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
Z6.6	The taking of images (whether photographs, video footage or otherwise) of the <i>works and/or services</i> or any portion thereof, in the course of Providing the Services/Works and after
Z9	<i>Employer's limitation of liability</i>
Z9.1	The <i>Contractor's</i> entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the <i>Employer's</i> liability under the indemnity is limited to compensation as provided for under the compensation events stated in this contract.
Z10	<i>Employer's Step-in Rights and Additional Remedies</i>
Z10.1	In the event the <i>Contractor</i> and/or his subcontractor:
Z10.1.1	fails to carry out any obligation under the contract and the Works Information and fails to make good such failure and remedy it despite being requested to do so by the <i>Project Manager</i> in accordance with notices under Sub-Clause 16.1 (Early Warning) and/or Sub-Clause 13.1 (Communications), or
Z10.1.2	commits a breach of the Contract which reasonably places the project at risk of non-completion by the Completion Date, or non-Completion; or
Z10.1.3	commits a material breach of contract,
	the <i>Employer</i> may, without prejudice to its other rights in clause 9 (Termination), powers and remedies under the contract or in law, be entitled to step-in and take over the <i>works</i> , and on the account of the <i>Contractor</i> and at the <i>Contractor's</i> risk, to (i) make good the failure and remedy it, or complete the <i>works</i> himself, or (ii) call upon other contractors to make good the failure and remedy it or complete the <i>works</i> , or (iii) to call upon other contractors to partner with the <i>Contractor</i> to make good the failure and remedy it, or complete the <i>works</i> . Further, notwithstanding anything contained in this contract, where the <i>Employer</i> has "stepped-in" the <i>Contractor</i> shall remain responsible as if the <i>works</i> were executed by the <i>Contractor</i> for the <i>works</i> up to the Completion Date.

Z10.2	The <i>Contractor</i> shall co-operate with the <i>Employer</i> and facilitate and permit the use of all required Contractor's Equipment, Goods, information, materials and other matter (including Contractor's Documents and all other drawings, CAD files, technical data, models, plans, designs, diagrams, evaluations, details, specifications, schedules, reports, calculation results, manuals or other documents or recorded information (electronic or otherwise) which have been or are at any time prepared by or on behalf of the <i>Contractor</i> under the Contract or otherwise for and/or in connection with the <i>works</i>) and shall generally do all reasonable things required by the <i>Project Manager</i> to achieve this end; provided that where the foregoing constitute proprietary information, the <i>Contractor's</i> obligation hereunder shall be limited to furnishing <i>works</i> specific information in a form capable of being disclosed to third parties or providing assistance to third parties without requiring the <i>Contractor</i> to disclose non <i>works</i> -specific source codes or other proprietary information.
Z10.3	Any information, materials and other matter made available by the <i>Contractor</i> under this Sub-Clause Z.10 shall be used solely and exclusively for the purpose of making good and remedying the <i>Contractor's</i> failure and shall thereafter be returned to the <i>Contractor</i> . Any such information, materials and other matter which is made available by the <i>Employer</i> to other persons as contemplated in this Sub-Clause Z.13 shall be made available strictly in accordance with the foregoing and subject to a confidentiality undertaking.
Z11	Employer Procured Materials and Goods
Z11.1	The <i>Employer</i> is entitled but not obliged to procure materials and goods on behalf of the <i>Contractor</i> upon Contractor's request.
Z11.2	Should the <i>Employer</i> exercise this right, or should the <i>Employer</i> accept the <i>Contractor's</i> request, the <i>Contractor</i> shall:
Z11.2.1	issue to the <i>Project Manager</i> a list of all materials and goods the <i>Contractor</i> requires;
Z11.2.2	state in the list, the time within which such materials and goods must be provided;
Z11.2.3	take delivery of such materials and goods provided by the <i>Employer</i> ;
Z11.2.4	the Contractor and Project Manager shall ensure that the correct quantity of material is delivered and confirmed as delivered to Site, respectively prior to payment.
Z11.3	The <i>Contractor</i> shall be responsible for and takes the risk on all materials and goods despite the <i>Employer</i> procuring such materials and goods The <i>Contractor indemnifies and holds the Employer harmless</i> against all losses/damages and/or costs arising from any damage, loss or theft of such materials and goods.
Z11.4	The <i>Contractor</i> shall not be entitled to a compensation event (extension of time and costs) for the late delivery of any materials and goods procured by the <i>Employer</i> .

Z11.5	The cost(s) of all materials and goods procured by the <i>Employer</i> on behalf of the <i>Contractor</i> in accordance clause Z11 shall be deducted from the next payment certificate due to the <i>Contractor</i> .
Z11.6	The <i>Contractor</i> acknowledges that all <i>Employer</i> supplied materials and goods remain the property of the <i>Employer</i> .
Z12	Contractor Undertaking re CIDB and Tax Certificates
Z12.1	The <i>Contractor</i> shall ensure that all certificates, clearances and the like, including specifically any certificates required to be obtained by the <i>Contractor</i> for purposes of the contract in terms of the Construction Industry Development Board and the Value Added Tax Act, no 89 of 1991, remain in full force and effect up until the Completion Date.
Z12.2	Failure by the <i>Contractor</i> to notify the <i>Employer</i> of the expiry of any requisite certificate may constitute a reason for termination. If the <i>Employer</i> terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93. In addition to the <i>Employer's</i> right to terminate, should any requisite certificate that the <i>Contractor</i> is required to obtain expire or be null and void for any reason whatsoever, the <i>Employer</i> may withhold any payments due to the <i>Contractor</i> until such time as the <i>Contractor</i> provides the <i>Employer</i> and / or <i>Project Manager</i> with a valid and / or updated certificate, as the case may be.
Z13	Right to Audit
Z13.1	The <i>Employer</i> shall be entitled to, within 2 (two) Business Days of the giving of notice to the <i>Contractor</i> to such effect, conduct an audit of all relevant books, records, systems, processes, procedures and documents of the <i>Contractor</i> in order to verify compliance by the <i>Contractor</i> with its obligations in terms of this Contract and/or to assess any entitlement or claimed entitlement of the <i>Contractor</i> under this Contract or to investigate any allegations with regard to possible criminal activities or breach of DBSA policies or procedures.
Z13.2	The <i>Contractor</i> shall co-operate and render all assistance requested by the <i>Employer</i> relating to such audit. In addition, the <i>Contractor</i> shall provide the <i>Employer</i> with access to all such books, records, systems, data and documents of the <i>Contractor</i> that are relevant to this Contract, the <i>Contractor's</i> obligations under this Contract and/or any entitlement or claimed entitlement of the <i>Contractor</i> under this Contract and to any premises, shareholders, partners, members, subcontractors and Personnel of the <i>Contractor</i> for the purposes of conducting such audit. The <i>Employer</i> shall have the right to take copies of any records and information the <i>Employer</i> reasonably require to assist in connection with any such audit.
Z13.3	The <i>Contractor</i> shall maintain all data, records and documentation relating to this Contract and keep full and proper records in connection with providing the Works and all matters related thereto (whether contained in documents or in electronic format) for the period of this Contract, and for a period of at least 5 (five) years after termination or completion of all of the Works (as the case may be).

Z13.4	The Contractor shall ensure that the rights in this clause also apply to any subcontractors and that the Employer be afforded the same auditing rights by the subcontractors.
Z13.5	The Employer shall keep all information obtained in terms of this clause confidential and not disclose it to any third party. In the event that the Employer is, at any time, required by law to disclose any such information which is required to be kept confidential, the Employer, to the extent permitted by law prior to disclosure, notifies the Contractor so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the Employer may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
Z14	Intellectual Property
Z14.1	Subject to each Party retaining title to its own Intellectual Property prior to the contract date, title to, copyright in and other Intellectual Property rights in any documents or other property created by the Contractor for or in connection with the Works vests in the Employer on creation and the Contractor hereby cedes and assigns all such rights to the Employer with effect from the date of creation vesting such Intellectual Property in the Employer.
Z14.2	The Employer grants the Contractor a revocable license to use the Intellectual Property for the purposes of Providing the Works for the contract period.
Z14.3	Unless otherwise agreed by the Parties, the Contractor grants to the Employer a non-exclusive, perpetual, irrevocable, royalty free license to use any of the Contractor's Intellectual Rights, obtained prior to this contract, in connection with the Works and this contract.
Z14.4	All Intellectual Property created, enhanced or improvement arising from Providing the Works or from or in connection to the contract exclusively vests in the Employer.
Z14.5	If the Employer is prevented from receiving the Works or any part thereof as a result of any actual or alleged infringement of Intellectual Property rights, the Contractor must, at its cost, take all reasonable steps necessary to procure for the Employer the right to receive the Works or the relevant part thereof for its intended purpose.
Z14.6	Modification or replacement of the Works If the Contractor fails to procure the necessary rights in accordance with this clause within a reasonable time, the Employer may direct the Contractor, at the Contractor's cost, to promptly (i) amend the Works or the relevant part thereof to avoid the infringement of Intellectual Property rights; or (ii) replace the Works or the relevant part thereof with Works that do not infringe Intellectual Property rights.

C1.2 CONTRACT DATA (Continued)

Part two – Data provided by the Contractor – CONTRACT 1

[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry)

Whenever a cell is shaded in the left hand column it denotes this data is optional and would be required in relation to the option selected. In the event that the option is not required select and delete the whole row.]

A condition of contract is that:

- a. The contractor shall achieve in the performance of the contract the **Contract Skills Development Goal** (established in the **cidb Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice No 43495 of 3 July 2020**).
- b. The contractor shall achieve in the performance of the contract the **Contract Participation Goals (CPG)** relating to the engagement of targeted enterprises as established in the **cidb Standard for Indirect Targeting for Enterprise Development through Construction works Contracts Gazette Notice No 36190 of 25 February 2013**.

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)⁵ in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 152 to 154 of the ECC3 Guidance Notes.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

Completion of the data in full, according to Options chosen, is essential to create a complete contract.

Statements given in all contracts

- The *Contractor* is
Name
Address
.....
- The *direct fee percentage* is..... %.
- The *subcontracted fee percentage* is..... %.
- The *working areas* are the Site and
- The key people are
(1) Name
Job
Responsibilities
.....
Qualifications
Experience
.....
(2) Name

Job

Responsibilities

Qualifications

Experience

- The following matters will be included in the Risk Register (note as above with data by Employer this is risks identified at tender stage)

Optional statements

If the Contractor is to provide Works Information for his design

- The Works Information for the Contractor's design is in

If a programme is to be identified in the Contract Data

- The programme identified in the Contract Data is

If the Contractor is to decide the completion date for the whole of the works

- The completion date for the whole of the works is

Data for the Shorter Schedule of Cost Components

- The Activity Schedule is
- The tendered total of the Prices is
- The percentage for people overheads is %.
- The published list of Equipment is the last edition of the list published by
- The percentage for adjustment for Equipment in the published list is % (state plus or minus).
- The rates for other Equipment are

Equipment	size or capacity	rate
.....
.....
.....
.....
- The hourly rates for Defined Cost of design outside the Working Areas are

category of employee	hourly rate
.....
.....

-
-
- The percentage for design overheads is %.
 - The percentage for profit is..... %.
 - The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are
-
-
-
-

C1.2 CONTRACT DATA (Continued)

Part One - Data provided by the Employer – CONTRACT 2

OPERATIONS AND MAINTENANCE CONTRACT FOR A 50 TON PER DAY BIODIGESTER PILOT PLANT (BIOGAS DEMONSTRATION PLANT) FOR A PERIOD OF 1 YEAR

NEC3 Term Service Contract Option A: Priced Contract with *Price List* of April 2013 (including amendments).

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

1. Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.

2. Whenever a cell is shaded in the left hand column it denotes this data is optional and would be required in relation to the option selected. In the event that the option is not required select and delete the whole row. Where the following symbol is used “[●]” - data is required to be inserted relevant to the specific option selected.

Completion of the data in full, according to the Options chosen, is essential to create a complete contract.

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option:	
		A: Priced contract with price list
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	X1: Price adjustment for inflation
		X2 Changes in the law
		X13: Performance Bond
		X17: Low Service Damages
		X18: Limitation of liability
		X19: Task Order
		Z: Additional <i>conditions of contract</i>
	of the NEC3 Term Service Contract (April 2013)	

10.1	The <i>Employer</i> is (name)	the Development Bank of Southern Africa Limited, acting through its Infrastructure Delivery Division (the “ IDD ”), a juristic person reconstituted and incorporated in terms of section 2 of the Development Bank of Southern Africa Act No 13 of 1997 (the “ DBSA ”);
	Address	Registered office at 1258 Lever Road Headway Hill, Midrand Johannesburg
	Represented by	To be indicated at contracting
	Tel No.	To be indicated at contracting
10.1	The <i>Service Manager</i> is (name)	To be indicated at contracting
	Address	Registered office at 1258 Lever Road Headway Hill, Midrand Johannesburg
	Tel	To be indicated at contracting
11.2(2)	The <i>Affected Property</i> is	Robinson Deep Landfill, in Johannesburg, Gauteng
11.2(13)	The <i>service</i> is	Operations and Maintenance of biodigester pilot plant (biogas demonstration plant) at Robinson Deep Landfill Site, Johannesburg.
11.2(14)	The following matters will be included in the Risk Register	Compliance with tender requirements Personnel Clearance and Authorised Access to Site Matters notified as early warnings; and Decisions resulting from risk reduction meetings.
11.2(15)	The Service Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	5 calendar days
2	The <i>Contractor's</i> main responsibilities	Data required in this section of core clauses is also provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data
21.1	The <i>Contractor</i> submits a first plan for acceptance within	1 (one) week of the Contract Date
3	Time	

30.1	The <i>starting date</i> is.	1 day after Completion of Biomethane Plant (pending client approval and mandate being provided to the DBSA to continue with the operation and maintenance portion of the works)
30.1	The <i>service period</i> is	1 year/12 months from <i>starting date</i>
4	Testing and defects	
	The defects date is	3 months after Completion of the whole of the works. The <i>service</i> or particular parts thereof which are repaired or replaced, during the repair of a Defect, it shall be re-warranted against Defects for a further period of 18 months from the date such repaired <i>service</i> or replaced parts are installed whichever is the earlier.
5	Payment	
50.1	The <i>assessment interval</i> is	20th of each month
51.1	The <i>currency of this contract</i> is	South African Rand
51.2	The period within which payments are made is	4 (four) weeks after receipt of a valid invoice.
51.4	The <i>interest rate</i> is	the prime interest rate of the Standard Bank of South Africa Limited as amended from time to time
6	Compensation events	
60.1(15)	The place where weather is to be recorded is	The closest weather station to site.
	The <i>weather measurements</i> to be recorded for each calendar month are,	the cumulative rainfall (mm), the number of days with rainfall more than 10 mm, the number of days with minimum air temperature less than 0 degrees Celsius, the number of days with snow lying at +2 hours GMT;
		hours South African Time, and these measurements; hourly wind direction and windspeeds
	The <i>weather measurements</i> are supplied by	The closest weather station to site.
	The <i>weather data</i> are the records of past <i>weather measurements</i> for each calendar month which were recorded at	The closest weather station to site.

	and which are available from	the South African Weather Bureau
7	Use of Equipment Plant and Materials	No data is required for this section of the conditions of contract.
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	N/A
83.1	The <i>Contractor</i> provides these additional insurances:	<ul style="list-style-type: none"> The supplementary insurance is required. Such insurance shall comprise a Coupon Policy for Special Risks issued by the South African Special Risk Insurance Association. (SASRIA). Comprehensive Public liability insurance to be affected by the contractor for the sum of R15 000 000.00 (Fifteen Million Rand) per event with a deductible in an amount that the contractor deems appropriate.
83.1	The minimum amount of cover for insurance against loss and damage caused by the <i>Contractor</i> to the <i>Employer's</i> property is	Insured sum is the total of the Prices plus 10%
83.1	The minimum amount of cover for loss of or damage to Plant and Materials provided by the	Insured sum is the total of the Prices plus 10%
83.1	The minimum amount of cover for insurance in respect of loss of or damage to property (except the <i>Employer's</i> property, Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) arising from or in connection with the <i>Contractor's</i> Providing the Service for any one event is:	whatever the <i>Contractor</i> deems necessary in addition to that provided by the <i>Employer</i> .

83.1	The minimum limit of indemnity for insurance in respect of death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract for any one event is:	As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 199 and the <i>Contractor</i> common law liability for people falling outside the scope of the Act with a limit of indemnity of not less than R500 000-00 (five hundred thousand) in respect of each claim, without limit to the number of claims
9	Termination	There is no Contract Data required for this section of the <i>conditions of contract</i> .
10	DATA FOR MAIN OPTION CLAUSE	
A	Priced contract with price list	
11	DATA FOR OPTION W1	
W1.1	The <i>Adjudicator</i>	to be appointed as needed, see W1.2(3) below
W1.2(3)	The <i>Adjudicator nominating body</i> is:	The Party, which raises the dispute, shall select three adjudicators from the panel of adjudicators published by the South African Institution of Civil Engineering and/or Association of Arbitrators Southern Africa depending upon the technical or legal issues and nature of the dispute, determine their hourly fees and confirm that these adjudicators are available to adjudicate the dispute in question. The other Party shall then select, within seven (7) days, one of the three (3) nominated adjudicators to act as the adjudicator; failing which the chairperson for the time being of the Association of Arbitrators Southern Africa shall nominate an adjudicator on request from either party.
W1.4(2)	The <i>tribunal</i> is:	Arbitration, arbitrator to be appointed as required.
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Johannesburg, South Africa
	The person or organisation who will choose an arbitrator if the Parties cannot agree a choice or if the arbitration procedure does not state who selects an arbitrator, will be	the Chairman for the time being or his nominee of the Association of Arbitrators (Southern Africa) or its successor body.
12	DATA FOR SECONDARY OPTION CLAUSES	

X1	Price adjustment for inflation		
X1.1	The <i>base date</i> for indices is	No price adjustment allowed	
	The proportions used to calculate the Price Adjustment Factor are:	0. [•]	linked to the index for [•]
		0. [•]	linked to the index for [•]
		0. [•]	linked to the index for [•]
	The indices are those prepared by	[•] Indices to be obtained from Steel and Engineering Industries Federation of Southern Africa (SEIFSA), Producer Price Index (PPI) and Consumer Price Index (CPI).	
X2	Changes in the law	No data is required for this Option	
X13	Performance bond		
X13.1	The amount of the performance bond is	10% of the Total of the Prices of the Task Orders issued, reducing to five percent (5%) of the contract Price when the <i>Contractor</i> achieves Completion and expires 1 month after the <i>defects date</i> .	
X17	Low service damages		
	The amounts for low performance damages are	amount	Service level for
		Up to 10% of the value of this contract	As per Tests During Operation (Annexure W)
X18	Limitation of liability		
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss, including loss of profit and revenues is limited to:	R0-00 (Zero Rand)	
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to	cost for loss or damage incurred by the <i>Employer</i>	
X18.3	The <i>Contractor's</i> liability for Defects due to his design of an item of Equipment is limited to:	cost of the repair or reinstatement of property to original standard.	

X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> , for all matters arising under or in connection with this contract, other than the excluded matters, is limited to:	total of the Prices as at the start date as adjusted in terms of X1 if X1 applies to the contract		
X18.5	The <i>end of liability date</i> is	The <i>Contractor</i> shall remedy Latent Defects as may be notified by the <i>Service Manager</i> on or before the expiry date of the latent defect's notification period. The <i>Contractor</i> shall have the right of access to the <i>services</i> and to the records of the operation and performance of the <i>services</i> as may be required for this purpose. The <i>Contractor's</i> obligations to remedy Latent Defects shall be limited to repair or replacement of defective item or items. Latent defects 24 months after the Completion of the whole of the <i>works</i> .		
X19	Task Order			
X19.3	The amount for delay damages for late completion of the <i>service</i> is	Task Order	Description	Delay damage amount per day of the Task
		As issued	As issued	The penalty per day shall be calculated as per the current formula of penalty calculation by the Department of Public works up to a maximum of 10% of the Task value.
	The total delay damages payable by the <i>Contractor</i> does not exceed	10% of the combined Prices of the issued Task Orders.		
X19.5	The <i>Contractor</i> submits a Task Order programme to the <i>Service Manager</i> within	5 (five) days of receiving the Task Order		
	PART A – Additional Definitions			

	<p>Add the following new definition as clause 11.2(20):</p> <p>“A Contractor Insolvency Event means and is considered to occur if:</p> <ul style="list-style-type: none"> • the Contractor commits an act which, if committed by an individual, would constitute an act of insolvency within the meaning of Sections 8 or 9(3)(a)(v) of the Insolvency Act 24 of 1936, as amended, or any equivalent legislation in any jurisdiction to which it is subject; • the Contractor begins negotiations or takes any other step with a view to generally deferring, re-scheduling or otherwise re-adjusting all or a material part of its indebtedness or proposes or makes a general scheme, arrangement, assignment, or composition with or for the benefit of its creditors or a moratorium is proposed or agreed in respect of or affecting all or a material part of its indebtedness; • the Contractor makes an application to court for business rescue supervision or for its winding-up (whether provisionally or finally); • a court of competent jurisdiction grants an order winding-up the Contractor (whether provisionally or finally) or makes an order placing the Contractor under business rescue supervision; • an application or other legal process (including the filing of any document commencing judicial process) is issued seeking an order for the winding-up of the Contractor (whether provisionally or finally) or placing the Contractor under business rescue supervision, except for so long as such application or other legal process is being contested in good faith and by appropriate means or except for the bona fide purpose of reconstruction, amalgamation, reorganisation, merger or consolidation; or • a resolution is passed by: <ul style="list-style-type: none"> • the shareholders of the Contractor for the winding-up of the Contractor, whether by way of a members’ or creditors’ voluntary winding-up; or • the board of the Contractor for the Contractor to voluntarily begin business
	<p>Add the following new definition as clause 11.2(21):</p> <p>“Temporary Services is all temporary services of every kind required on site for the execution and Completion of the <i>services</i> and the remedying of any defects.”</p>
	<p>Add the following new definition as clause 11.2(22):</p> <p>“Intellectual Property” means (a) any copyright, design rights, patents, inventions, logos, business names, service marks and trademarks, internet domain names, moral rights, rights in databases, data, source codes, reports, drawings, specifications, know-how, business methods, trade secrets and confidential business information, semi-conductor rights, topography rights, whether registered or unregistered, rights in the nature of unfair competition and the right to sue for passing off; (b) applications for registration and the right to apply for registration for any of these rights; (c) all other intellectual property rights and similar forms of protection; existing anywhere in the world; and (d) all inventions (whether patentable or unpatentable and whether or not reduced to practice), all improvements thereto, and all patents, patent applications, and patent disclosures, together with all reissues, continuations, continuations-in-part, revisions, extensions, and re-examinations thereof,</p>

AMENDMENTS AND ADDITIONS TO EXISTING CORE AND OPTIONAL CLAUSES	
	Added the following clauses after clause 12.4
12.5	Words denoting persons or parties shall include individuals and any organisation having legal capacity.
12.6	In this contract, except where the context requires otherwise: <ul style="list-style-type: none"> provisions including the word "agree", "agreed" or "agreement" require the agreement to be recorded in writing, and; "written" or "in writing" means hand-written, type-written, printed or electronically mail, and resulting in a permanent record.
12.7	<ul style="list-style-type: none"> The headings to the sections, clauses and sub-clauses of the conditions of this contract are for convenience only and do not affect the construction or interpretation of the conditions of contract. Any word or expression defined in any clause in the Z clauses, unless the application of the word or expression is specifically limited to the clause in question, bears the meaning prescribed to the word or expression throughout the Z clauses.
12.8	Week means a continuous period of 7 days. <ul style="list-style-type: none"> If the day for payment of any amount due by the Employer or Contractor in terms of this contract should fall on a Saturday, Sunday or official public holiday in the Republic of South Africa, the relevant day of payment is/are the next ordinary business day in the Republic of South Africa.
12.9	<ul style="list-style-type: none"> Where figures are referred to in numerals and in words, if there is any conflict between the two, the words shall prevail.
12.10	<ul style="list-style-type: none"> If any provision of this contract, which is not material to its efficacy as a whole, is rendered void, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provision is not in any way affected or impaired thereby and the parties shall endeavour in good faith to agree an alternative provision to the void, illegal or unenforceable provision.
12.11	<ul style="list-style-type: none"> Unless otherwise specifically recorded in this contract, termination of this contract for any cause does not release a party from any liability which at the time of termination has already accrued to such party or which thereafter may accrue in respect of any act or omission prior to such termination. Similarly, the termination of this contract does not release a party from any obligation which, by its nature, is intended to survive such termination.
26 Subcontracting	
26.1	<p>Core clause 26.1 to be amended as follows:</p> <p>The Contractor does not subcontract the whole or any part of the services without the written consent of the Employer, which consent shall be the sole discretion of the Employer. If the Contractor subcontracts services, he is responsible for Providing the Service as if he had not subcontracted. This contract applies as if a Subcontractor's employees and equipment were the Contractor's. For the avoidance of doubt, the Contractor shall be responsible for the acts or defaults of any of its subcontractors, its agents or employees, as if they were the acts or defaults of the Contractor.</p>

26.2	<p>Delete Core clause 26.2 and replaced as follows: The Contractor submits the conditions of contract for each subcontract to the Service Manager and may redact all commercially sensitive information.</p>
26.3	<p>Delete Core clause 26.3 and replaced as follows: The Contractor shall procure from the Subcontractor all consents required in order to ensure that all the rights and obligations the Contractor may have under the subcontracts can be ceded and delegated to the Employer.</p>
26.4	<p>Add a new core clause 26.4 as follows: If the Contractor does not make payment of any amount due and payable by him to a Subcontractor ("the Subcontractor debt") and the Service Manager considers that the Subcontractor debt adversely impacts on the progress of the Services or the obligations of the Contractor under the contract, Service Manager requests evidence of payment to the Subcontractor. In the absence of such evidence, the Employer may (at its own discretion) pay the Subcontractor debt directly to the Subcontractor concerned in which event such payment is, for all purposes under the Contract, regarded as a payment made on behalf of the Contractor and at the request of and with the approval and consent of the Contractor, as a payment towards the Prices. Payment to the Subcontractor is conducted in terms of core clause 50.2 of the contract.</p>
26.5	<p>Add a new core clause 26.5 as follows: All adverse effects as a result of or arising from the Subcontractor debt does not result in a compensation event.</p>
27	
Health, safety and environment	the
27.4	<p>Clause 27.4 is deleted in its entirety and replaced with the following: Health and Safety specification</p>
27.4.1	<p>The <i>Contractor</i> takes all reasonable steps and precautions to assess the Site, consider and receive all relevant information on the Site and health and safety related to the <i>services</i>, maintain the health and safety of persons in and about the execution of the <i>services</i>.</p>
27.4.2	<p>The <i>Contractor</i> acknowledges that the Occupational Health and Safety Act No. 85 of 1993 and the regulations promulgated therein ("the Act"); and the Construction Regulations 2014 promulgated under the Act ("the Construction Regulations"), Section 27 (2) of the Disaster Management Act, 2002 and Consolidated Directions on Occupational Health and Safety Measures at Certain Workplaces will in all respects be applicable to this contract and the <i>services</i>.</p>
27.4.3	<p>The <i>Employer</i> appoints the <i>Contractor</i> as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014) for the Site.</p>
27.4.4	<p>Accordingly, the <i>Contractor</i> is responsible for all duties of the "Principal Contractor" as defined and provided for under the Act and the Construction Regulations 2014 including but not limited to those obligations defined and provided for in Annexures A, B and C and all required Regulations and Standards applicable to the service of this contract.</p>
27.4.5	<p>The <i>Contractor</i> shall appoint a SACPCMP Registered Construction Health & Safety Officer for the services and all other site-specific appointments as per Legislation requirements.</p>

27.4.6	The <i>Contractor</i> confirms that it has received sufficient information about the Site and the services in order to:
27.4.7	The <i>Contractor</i> acknowledges that the Project Manager acts as the <i>Employer's</i> "Implementing Agent" in respect of all obligations which the <i>Employer</i> has as "Client" in the Construction Regulations 2014 and the Act.
27.4.8	Without limitation, the <i>Contractor</i> :
27.4.8.1	notwithstanding any actions which the <i>Employer</i> may take, accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Act, all its regulations (including the Construction Regulations 2014) and Annexures A, B and C. By entering into this contract, it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act;
27.4.8.2	acknowledges and confirms that the Prices includes a sufficient amount for proper compliance with the Construction Regulations 2014, Section 27 (2) of the Disaster Management Act, 2002 and Consolidated Directions on Occupational Health and Safety Measures at Certain Workplaces and all applicable health and safety laws, regulations, rules, guidelines, procedures and all obligations imposed by this contract and Annexures A, B and C and generally for the proper maintenance of health and safety in and about the execution of <i>services</i> ;
27.4.8.3	undertakes, in and about the execution of the <i>works</i> , to comply with all applicable health and safety laws, regulations, rules, guidelines and procedures otherwise provided for under this contract and shall ensure that all sub-contractors, employees and Others under the <i>Contractor's</i> direction and control, likewise observe and comply with the foregoing; and
27.4.8.4	indemnifies the <i>Employer</i> against any loss, damage or claim suffered by the <i>Employer</i> due to a failure to comply with any provision of this clause 27.4 by the <i>Contractor</i> .
27.4.8.5	acknowledges and confirms that a Construction Safety Officer will be appointed by the <i>Contractor</i> for the Project and that the Prices includes a sufficient amount for the appointment of such.
27.4.9	The <i>Contractor</i> and his designer shall accept full responsibility and liability to comply with the Act, the Construction Regulations and Annexures A, B and C for the design of the Temporary <i>Works</i> and those parts of the Permanent <i>Works</i> which the <i>Contractor</i> is responsible to design in terms of this contract;
27.4.10	The <i>Employer</i> retains a right to inspect, review, obtain copies of all documents regarding, attend and participate in all meetings regarding; all inquiries, audits and reports conducted under this contract including but not limited to those that are conducted in accordance with:
27.4.10.1	Annexures A, B and C of this contract; and
27.4.10.2	Section 31 and/or 32 of the Act, its regulations and the Construction Regulations following any incident involving the <i>Contractor</i> and/or sub-contractor and/or their employees.
27.4.11	The <i>Contractor</i> shall notify the Project Manager and copy in the <i>Employer</i> in writing of all inquiries, audits, reports, investigations, complaints or criminal charges which may arise pursuant to <i>services</i> performed under this contract.
27.4.12	The <i>Employer</i> and the Project Manager shall, at all times during construction and for a period of 5 (five) years after Completion, have the right to access and inspect any part of the Site/ <i>works</i> and all documents, reports, designs, specifications whatsoever that are prepared pursuant to any clause of this contract.
5 Payment	

51.2	Amend this clause by deleting the second and the third sentences of the clauses and replace them with the following: If a certified payment is late by more than 8 weeks, interest is paid on the late payment. Interest is assessed from 4 weeks after the date by which the late payment should have been made until the date when the late payment is made, and is included in the first assessment after the late payment is made.
51 Payment	Add the following new clauses after clause 51.4.
51.5	Within one week of receiving a payment certificate from the <i>Service Manager</i> in terms of core clause 51.1, the <i>Contractor</i> provides the <i>Employer</i> with a tax invoice in accordance with the <i>Employer's</i> procedures stated in the Services Information, showing the amount due for payment equal to that stated in the payment certificate.
51.6	If the <i>Contractor</i> does not provide a tax invoice in the form and by the time required by this contract, the time by when the <i>Employer</i> is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice.
51.7	The <i>Contractor</i> (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the <i>Employer's</i> VAT number on each invoice the Contractor submits for payment.
61 Notifying compensation events	
61.3	Delete the second bullet point in core clause 61.3 which reads " <i>the Service Manager has not notified the event to the Contractor</i> "., <i>Amend the last paragraph of the core clause 61.3 to read</i> <i>"If the Contractor does not notify a compensation event within eight weeks of becoming aware of the event, he is not entitled to a change in the Prices, the Completion Date or a Key Date."</i> .
62.3	<i>Add to core clause 62.3,</i> <i>"The Service Manager's reply which is an acceptance of a quotation for a compensation event may require the due authority of the Employer."</i>
62.5	<i>Add to core clause 62.5,</i> <i>"The Service Manager notifies the Contractor if the Employer's authority is required and includes in his notification any extension to the period within which he is required to reply to the Contractor's quotation."</i>
9 Termination	
91.1	Amend this clause by the addition of the following at the end of the second main bullet point, fourth sub-bullet point, after the words "against it": "or the <i>Contractor</i> commits a <i>Contractor Insolvency Event</i> (R5),"
91.2	Amend this clause sub-bullet point two (R12) to read as follows: "not provided an on-demand performance bond or guarantee which this contract requires and/or failed to renew on-demand performance bond or guarantee upon expiry (R12)".

<p>91.3</p>	<p>Amend this clause by adding the following at the end of the clause:</p> <ul style="list-style-type: none"> • “failed to effect any of the required insurances(R22); • failed to provide a satisfactory recovery plan pursuant to Clause 22 (<i>The Contractor’s recovery plan</i>) (R23); or • failed to comply with the provision of Clause Z3 (<i>Broad Based Black Economic Empowerment</i>) (R24). <p>and for terminating for R22 to R24 the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table in clause 90.2 apply.”</p>
<p>91.8</p>	<p>Add a new core clause 91.8 as follows:</p> <p>The Employer terminates if the Contractor reaches 10 % of the delayed damages amount being the maximum amount. (R25). When terminating for R25 - the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table in clause 90.2 apply.</p>
<p>9.0</p>	<p>Insert the following new clause 9.4</p>
<p>9.4 Termination for convenience</p>	<p>The <i>Employer</i> is entitled to terminate the Contract, at any time for the <i>Employer’s</i> convenience, by giving notice of such termination to the <i>Contractor</i>. The termination shall take effect 28 days after the later of the dates on which the <i>Contractor</i> receives this notice or the <i>Employer</i> returns the performance bond and all monies held in retention, unless there are outstanding calls/claims thereon in which event, and if applicable, the <i>Employer</i> returns the performance bond and all monies held in retention promptly after the last of the outstanding calls/claims have been met. The <i>Employer</i> does not terminate the Contract under this sub-clause in order to execute the <i>works</i> himself or to arrange for the <i>works</i> to be executed by another contractor. The same procedures on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table in clause 90.2 apply. The Contractor shall only be entitled to costs incurred at the date of termination.</p>
<p>Option X2: Changes in the Law</p>	
<p>X2.2</p>	<p>Amend this clause by the addition of the following new clause:</p> <p>Notwithstanding anything contained in this clause or this agreement, a “change in law” does not include any law or piece of legislation that is enacted or made but not yet in force as at the date when the tender is submitted, or any proposed or draft law that is promulgated or issued for comment at any time before the tender is submitted if and to the extent that such law when enacted or made and brought into effect is materially unchanged.</p>
<p>Option X13: Performance Bond</p>	<p>Amend this clause by adding the following new clause at the end of this clause: (if applicable in this contract)</p>

X13.2	<p>The <i>Contractor</i> ensures that the on-demand performance bond is valid and enforceable until the <i>Contractor</i> has Provided the Services and remedied any and all <i>defects</i> therein. If the terms of the performance bond specify its expiry date, then the <i>Contractor</i> extends the validity of the performance bond 28 days prior to such an expiry date, such that the performance bond lapses at the later of:</p> <ul style="list-style-type: none"> • the date of issue of the Defects Certificate; or • the date when the last <i>defect</i> notified has been remedied or accepted in accordance with this contract.
X13.3	<p>The <i>Employer</i> may make a claim under the performance bond, for amounts to which the <i>Employer</i> is entitled under the contract in the event of:</p> <ul style="list-style-type: none"> • failure by the <i>Contractor</i> to extend the validity of the performance bond as described in the preceding paragraph, in which event the <i>Employer</i> may claim the full amount of the performance bond, • failure by the <i>Contractor</i> to pay the <i>Employer</i> an amount due, as either agreed with the <i>Contractor</i> or assessed by the Project Manager (or otherwise determined) in accordance with the provisions of this contract, within 28 days after this agreement, assessment or determination, • failure by the <i>Contractor</i> to remedy a default within 28 days after receiving the <i>Employer's</i> notice requiring the default to be remedied, or • the occurrence of any one of the following termination reasons: R1 to R15, R18 and R22 to R24.
X13.4	<p>The <i>Employer</i> indemnifies and hold the <i>Contractor</i> harmless against and from all damages, losses and expenses (including legal fees and expenses) resulting from a claim under the performance bond to the extent to which the <i>Employer</i> is not entitled to make the claim.</p>
Z	<p>THE ADDITIONAL CONDITIONS OF CONTRACT ARE</p> <p>Z1 to Z17 always apply</p>
Z1	<p>Cession delegation and assignment</p>
Z1.1	<p>The <i>Contractor</i> does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the <i>Employer</i>.</p>
Z1.2	<p>Notwithstanding the above, the <i>Employer</i> may, on written notice to the <i>Contractor</i>, cede and delegate its rights and obligations under this contract to a Related Party or a Client of the <i>Employer</i>.or the purpose hereof</p>
Z1.2.1	<p>a “related party” means any entity that directly or indirectly, through one or more intermediaries, controls or is controlled by, or is under common control with the employer and includes any other “Organ of State” as defined in section 239 of the Constitution of the Republic of South Africa, 1996 and any entity or Organ of State for whom the employer carries out the works or acts as an implementing agent; and “Control” means the beneficial ownership of the majority in number of the issued equity of any entity (or the whole or majority of the entity’s assets), and/or the right or ability to direct or otherwise control the entity or the votes attaching to the majority of the entity’s equity and “controlled” or “under common control” shall have a similar meaning.</p>
Z2	<p>Joint ventures</p>
Z2.1	<p>If the <i>Contractor</i> constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the <i>Employer</i> for the performance of this contract.</p>

Z2.2	Unless already notified to the <i>Employer</i> , the persons or organisations notify the <i>Project Manager</i> within two weeks of the Contract Date of the key person who has the authority to bind the <i>Contractor</i> on their behalf.
Z2.3	The <i>Contractor</i> does not substantially alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the <i>Employer</i> having been given to the <i>Contractor</i> in writing.
Z3	Broad Based Black Economic Empowerment, Construction Industry Development Board grading and the valid and active Tax Compliance Status Pin issued by SARS.
Z3.1	The <i>Contractor</i> warrants that it will:
Z3.1.1	comply with all laws including the <i>Broad Based Black Economic Empowerment Act 53 of 2003</i> , its regulations and Codes of Good Practice; and the <i>Preferential Procurement Act 5 of 2000</i> and all its regulations;
Z3.1.2	maintain or improve (i) the BEE rating stated in its BEE certificate (ii) the contractor's Construction Industry Development Board grading, and (iii) its valid and active Tax Compliance Status Pin issued by SARS submitted at tender stage; and
Z3.1.3	not conduct any Fronting practices as defined in the Codes of Good Practice.
Z4	Change of Broad Based Black Economic Empowerment (B-BBEE) status
Z4.1	Where a change in the <i>Contractor's</i> legal status, ownership or any other change to his business composition or business dealings results in a change to the <i>Contractor's</i> B-BBEE status, the <i>Contractor</i> notifies the <i>Employer</i> within seven days of the change.
Z4.2	The <i>Contractor</i> is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the <i>Project Manager</i> within thirty days of the notification or as otherwise instructed by the <i>Project Manager</i> .
Z4.3	Where, as a result, the <i>Contractor's</i> B-BBEE status has decreased since the Contract Date the <i>Employer</i> may either re-negotiate this contract or alternatively, terminate the <i>Contractor's</i> obligation to Provide the Works.
Z4.4	Failure by the <i>Contractor</i> to notify the <i>Employer</i> of a change in its B-BBEE status may constitute a reason for termination. If the <i>Employer</i> terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.
Z5	Ethics

Z5.1	<p>For the purposes of this Z-clause, the following definitions apply:</p> <p>Affected Party means, as the context requires, any party, irrespective of whether it is the Contractor or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,</p> <p>Collusive Action means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,</p> <p>Committing Party means, as the context requires, the <i>Contractor</i>, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractors or the Subcontractor's employees,</p> <p>Corrupt Action means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,</p> <p>Fraudulent Action means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,</p> <p>Obstructive Action means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action and</p> <p>Prohibited Action means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action</p>
Z5.2	<p>A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof</p>
Z5.3	<p>The Employer may terminate the Contractor's obligation to Provide the Service if a Committing Party has taken such Prohibited Action and the Contractor did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the Employer has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the Employer can terminate the Contractor's obligation to Provide the Service for this reason.</p> <p>If the Employer terminates the Contractor's obligation to Provide the Service for this reason, the procedures and amounts due on termination are respectively P1, P2, P3 and P4, and A1 and A3.</p>
Z5.4	<p>A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the Employer does not have a contractual bond with the Committing Party, the Contractor ensures that the Committing Party co-operates fully with an investigation.</p>
Z5.5	<p>Any offer, payment, consideration, or benefit of any kind made by the <i>Contractor</i>, which constitutes or could be construed either directly or indirectly as a Prohibited Action such as an inducement or reward for the award or in execution of this contract, including Fronting as referenced in Sub-Clause Z3.1.3, constitutes grounds for terminating the <i>Contractor's</i> obligation to Provide the Services or taking any other action as appropriate against the <i>Contractor</i> (including civil or criminal action).</p>

Z5.6	Such Prohibited Action include making of offers, payments, considerations, or benefits of any kind or otherwise, whether in connection with any procurement process or contract with the <i>Employer</i> or other people or organisations and including in circumstances where the <i>Contractor</i> or any such member is removed from an approved vendor data base of the <i>Employer</i> as a consequence of such Prohibited Action.
Z6	Confidentiality
Z6.1	<p>Both Parties agree that in the course of the contract they shall exchange information between them and that they wish to protect the confidentiality of such information.</p> <p>Accordingly, for this clause, the “Discloser” shall mean the Party disclosing Information and the “Recipient” shall mean the Party receiving Information.</p> <p>“Information” shall mean all commercial, financial, technical, operational or other information appertaining to the Service and arising out of or in relation to the Contract (including without limitation all data, know-how, calculations, designs, drawings, methods, processes, systems, explanations, demonstrations etc.) as have been or may be disclosed or otherwise made available by the Discloser to the Recipient or to any person on the Recipient’s behalf or to which the Recipient or any person on the Recipient’s behalf has been granted access to (any such disclosure, availability or granting of access being referred to in this Agreement as “disclosure”), but shall exclude any such information which:</p> <p>(a) prior to disclosure was in the possession of the Recipient, as evidenced by the written records of the Recipient, and which the Recipient was entitled to use; or</p> <p>(b) at the time of disclosure the Information is in the public domain other than by reason of a breach of duty or of this Contract; or</p> <p>(c) after disclosure is received by the Recipient in good faith from a third party who is under no obligation of confidence in relation thereto or becomes generally available to third parties by publication or otherwise, other than by reason of a breach of duty or of this Agreement; or</p>
Z6.2	Any disclosure of Information shall be solely for the purpose of the performance of the Contract and the Service and the Recipient shall not use nor permit nor cause others to use Information for any other purpose without the prior written consent of the Discloser.
Z6.3	The <i>Contractor</i> does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the <i>Contractor</i> , enters the public domain or to information which was already in the possession of the <i>Contractor</i> at the time of disclosure (evidenced by written records in existence at that time). Should the <i>Contractor</i> disclose information to Others in terms of clause 25.1, the <i>Contractor</i> ensures that the provisions of this clause are complied with by the recipient.
Z6.4	If the <i>Contractor</i> is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the <i>Project Manager</i> .

Z6.5	In the event that the <i>Contractor</i> is, at any time, required by law to disclose any such information which is required to be kept confidential, the <i>Contractor</i> , to the extent permitted by law prior to disclosure, notifies the <i>Employer</i> so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the <i>Contractor</i> may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
Z6.6	The taking of images (whether photographs, video footage or otherwise) of the <i>works and/or services</i> or any portion thereof, in the course of Providing the Services and after Completion, requires the prior written consent of the <i>Project Manager</i> . All rights in and to all such images vests exclusively in the <i>Employer</i> .
Z6.7	The <i>Contractor</i> ensures that all its subcontractors abide by the undertakings in this clause.
Z7	Waiver and estoppel: Add to core clause 12.3:
Z7.1	Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the <i>Service Manager</i> or the <i>Adjudicator</i> does not constitute a waiver of rights and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing signed by both parties.
Z8	Provision of a Tax Invoice and interest. Add to core clause 51
Z8.1	Within one week of receiving a payment certificate from the <i>Service Manager</i> in terms of core clause 51.1, the <i>Contractor</i> provides the <i>Employer</i> with a tax invoice in accordance with the <i>Employer's</i> procedures stated in the Service Information, showing the amount due for payment equal to that stated in the payment certificate.
Z8.2	The <i>Contractor</i> (who is required to register as a person carrying on an enterprise in terms of the Value-Added Tax No. 89 of 1991(the "VAT Act")) must issue a tax invoice that is compliant with the VAT Act.
Z8.3	The <i>Contractor</i> (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the <i>Employer's</i> VAT number 4740101508 on each invoice he submits for payment.
Z9	<i>Employer's</i> limitation of liability
Z9.1	The <i>Employer's</i> liability to the <i>Contractor</i> for the <i>Contractor's</i> indirect or consequential loss is limited to R0.00 (zero Rand)
Z9.2	The <i>Contractor's</i> entitlement under the indemnity in 82.1 is provided for in 60.1(12) and the <i>Employer's</i> liability under the indemnity is limited to compensation as provided for in core clause 63 and X19.11 if Option X19 Task Order applies to this contract.
Z10	Communications
Z10.1	Add to the end of the first sentence in core Clause 13.1: "excluding communication by a communications protocol allowing the interchange of short text messages between mobile telephone."

<p>Z11</p>	<p>Defects:</p> <p>Insert new Z-clauses as follows:</p> <p>Amend the Contract Data to include provision for:</p>
<p>Z11.1</p>	<p>Insert a definition in core clause 11.2 (20) as follows:</p> <p>The Defects Certificate is either a list of Defects that the <i>Service Manager</i> has notified before the defects date which the <i>Contractor</i> has not corrected or, if there are no such Defects, a statement that there are none.</p>
<p>Z11.2</p>	<p>Replace the definition of defect in core clause 11.2 (4) as follows:</p> <ul style="list-style-type: none"> • a part of the <i>service</i> which is not in accordance with the Service Information or • a part of the <i>service</i> designed by the <i>Contractor</i> which is not in accordance with the applicable law or the <i>Contractor's</i> design which the <i>Service Manager</i> has accepted.

<p>Z12</p>	<p>Replace Core clause 42 as follows:</p> <p>42.1 Until the <i>defect date</i>, the <i>Service Manager</i> may instruct the <i>Contractor</i> to search for a Defect. He gives his reason for the search with the instruction. Searching may include:</p> <ul style="list-style-type: none"> • Uncovering, dismantling, recovering and re-erecting work.; • Providing facilities, material and samples for tests and inspections done by the Service Manager; • Doing tests and inspections which the Service Information does not require <p>42.2 Until the end of liability date, the Service Manager promptly notifies the Contractor of each Defect as soon as he finds it, and the Contractor promptly notifies the Service Manager of each Defect as soon as he finds it.</p> <p>42.3 The Contractor corrects a Defect whether or not the Service Manager notifies him of it.</p> <p>42.4 The Contractor corrects a notified Defect before the end of the defect correction period. The defect correction period begins at Completion for Defects notified before Completion and when the Defect is notified for other Defects.</p> <p>42.5 The Service Manager issues the Defects Certificate at the later of the defects date and the end of the last defect correction period. The Employer's rights in respect of a Defect which the Service Manager has not found or notified are not affected by the issue of the Defects Certificate.</p> <p>42.6 The Service Manager arranges for the Employer to allow the Contractor access to and use of a part of the services which he has taken over if they are needed for correcting a Defect. In this case the defect correction period begins when the necessary access and use have been provided.</p> <p>42.7 Until the end of liability date, the following will not be considered a Defect:</p> <ul style="list-style-type: none"> • Repair by the Employer or third party without the prior written consent of the Contractor • Failure, by the Employer or a third party, to comply with Contractor's instructions for storage, commissioning, operation and maintenance of the equipment; • Normal equipment wear and tear or exposure to inclement weather.
<p>Z13</p>	<p>Add core clause 28: Using the Contractor's design:</p> <p>28.1 The Employer may use and copy the Contractor's design for any purpose connected with construction, use, alteration or demolition of the works unless otherwise stated in the Service Information and for other purposes as stated in the Service Information.</p>
<p>Z14</p>	<p>Amend clause 43.1 by deleting the last sentence of the paragraph and replacing it with the following:</p> <p>44.1 <i>"If the Service Manager accepts the quotation, he gives an instruction to change the Service Information, the Prices and the Completion Date accordingly."</i></p>

<p>Z15</p>	<p>Add core clause 45: Uncorrected Defects</p> <p>45.1 If the <i>Contractor</i> is given access in order to correct a notified Defect but he has not corrected it within its defect correction period, the <i>Service Manager</i> assesses the cost to the <i>Employer</i> of having the Defect corrected by other people and the <i>Contractor</i> pays this amount. The Service Information is treated as having been changed to accept the Defect.</p>
	<p>45.2 If the <i>Contractor</i> is not given access in order to correct a notified Defect before the defects date, the <i>Service Manager</i> assesses the cost to the <i>Contractor</i> of correcting the Defect and the <i>Contractor</i> pays this amount. The Service Information is treated as having been changed to accept the Defect.</p>
<p>Z16</p>	<p>Intellectual Property</p>
<p>Z16.1</p>	<p>Subject to each Party retaining title to its own Intellectual Property prior to the contract date, title to, copyright in and other Intellectual Property rights in any documents or other property created by the Contractor for or in connection with the Works vests in the Employer on creation and the Contractor hereby cedes and assigns all such rights to the Employer with effect from the date of creation vesting such Intellectual Property in the Employer.</p>
<p>Z16.2</p>	<p>The Employer grants the Contractor a revocable license to use the Intellectual Property for the purposes of Providing the Works for the contract period.</p>
<p>Z16.3</p>	<p>Unless otherwise agreed by the Parties, the Contractor grants to the Employer a non-exclusive, perpetual, irrevocable, royalty free license to use any of the Contractor's Intellectual Rights, obtained prior to this contact, in connection with the Works and this contract.</p>
<p>Z16.4</p>	<p>All Intellectual Property created, enhanced or improvement arising from Providing the Works or from or in connection to the contract exclusively vests in the Employer.</p>
<p>Z16.5</p>	<p>If the Employer is prevented from receiving the Works or any part thereof as a result of any actual or alleged infringement of Intellectual Property rights, the Contractor must, at its cost, take all reasonable steps necessary to procure for the Employer the right to receive the Works or the relevant part thereof for its intended purpose.</p>
<p>Z16.6</p>	<p>Modification or replacement of the Works</p> <p>If the Contractor fails to procure the necessary rights in accordance with this clause within a reasonable time, the Employer may direct the Contractor, at the Contractor's cost, to promptly (i) amend the Works or the relevant part thereof to avoid the infringement of Intellectual Property rights; or (ii) replace the Works or the relevant part thereof with Works that do not infringe Intellectual Property rights.</p>
<p>Z17</p>	<p>Right to Audit</p>
<p>Z17.1</p>	<p>The Employer shall be entitled to, within 2 (two) Business Days of the giving of notice to the Contractor to such effect, conduct an audit of all relevant books, records, systems, processes, procedures and documents of the Contractor in order to verify compliance by the Contractor with its obligations in terms of this Contract and/or to assess any entitlement or claimed entitlement of the Contractor under this Contract or to investigate any allegations with regard to possible criminal activities or breach of DBSA policies or procedures.</p>

Z17.2	The Contractor shall co-operate and render all assistance requested by the Employer relating to such audit. In addition, the Contractor shall provide the Employer with access to all such books, records, systems, data and documents of the Contractor that are relevant to this Contract, the Contractor's obligations under this Contract and/or any entitlement or claimed entitlement of the Contractor under this Contract and to any premises, shareholders, partners, members, subcontractors and Personnel of the Contractor for the purposes of conducting such audit. The Employer shall have the right to take copies of any records and information the Employer reasonably require to assist in connection with any such audit.
Z17.3	The Contractor shall maintain all data, records and documentation relating to this Contract and keep full and proper records in connection with providing the Works and all matters related thereto (whether contained in documents or in electronic format) for the period of this Contract, and for a period of at least 5 (five) years after termination or completion of all of the Works (as the case may be).
Z17.4	The Contractor shall ensure that the rights in this clause also apply to any subcontractors and that the Employer be afforded the same auditing rights by the subcontractors.
Z17.5	The Employer shall keep all information obtained in terms of this clause confidential and not disclose it to any third party. In the event that the Employer is, at any time, required by law to disclose any such information which is required to be kept confidential, the Employer, to the extent permitted by law prior to disclosure, notifies the Contractor so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the Employer may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.

C1.2 CONTRACT DATA (Continued)

Part two – Data provided by the Contractor – CONTRACT 2

[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry)

Whenever a cell is shaded in the left hand column it denotes this data is optional and would be required in relation to the option selected. In the event that the option is not required select and delete the whole row.]

A condition of contract is that:

- c. The contractor shall achieve in the performance of the contract the **Contract Skills Development Goal** (established in the **cidb Standard for Developing Skills through Infrastructure Contracts, published in Gazette Notice No 43495 of 3 July 2020**).
- d. The contractor shall achieve in the performance of the contract the **Contract Participation Goals (CPG)** relating to the engagement of targeted enterprises as established in the **cidb Standard for Indirect Targeting for Enterprise Development through Construction works Contracts Gazette Notice No 36190 of 25 February 2013**.

Notes to a tendering contractor:

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name):	
	Address	
	Tel No.	
	Fax No.	
11.2(8)	The <i>direct fee percentage</i> is	
	The <i>subcontracted fee percentage</i> is	
11.2(14)	The following matters will be included in the Risk Register Note: The listing of risks on the Risk Register does not have the effect of fixing either of the parties with any particular risk.	
11.2(15)	The Service Information for the <i>Contractor's</i> design and plan is in:	The Service Information

21.1	The plan identified in the Contract Data is contained in:	
24.1	The key persons are:	
	1 Name:	
	Job:	
	Responsibilities:	
	Qualifications:	
	Experience:	
	2 Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
	3 Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
	4 Name:	
	Job	

	Responsibilities:	
	Qualifications:	
	Experience:	
5	Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
6	Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
7	Name:	
	Job	
	Responsibilities:	
	Qualifications:	

	Experience:	
8	Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
9	Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
10	Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
11	Name:	
	Job	
	Responsibilities:	
	Qualifications:	

	Experience:	
	12 Name:	
	Job	
	Responsibilities:	
	Qualifications:	
	Experience:	
A	Priced contract with price list	
11.2(12)	<p>The <i>price list</i> is in</p> <p>Note: The <i>price list</i> is used for payment purposes</p> <p>Please insert a reference to the list of activities prepared by the Tenderer which he expects to carry out in Providing the Services indicating a lump sum for each activity which requires such.</p>	The Prices C2.2
11.2(19)	The total of the Prices is	Total of Task Orders

C1.3 PERFORMANCE BOND

Pro-Forma NEC3 ECC Variable Performance Bond for Works and Maintenance – Demand Guarantee

To: *Employer*

Dear Sirs

Reference No. [●] *[Drafting Note: Guarantor/Bank reference number to be inserted]*

Performance Bond: *[Drafting Note: Name of Contractor to be inserted]*

Employer: Contract Reference - [●] *[Drafting Note: Contract reference number to be inserted]*

1. In this Guarantee:

1.1 the following words and expressions have the following meanings:

1.1.1 “Guarantor” - means [●], [●] Branch, (Registration No. [●]); *[Drafting Note: Name of Guarantor to be inserted]* [●] **Financial Services Board Registration number [●]**
NB: Guarantees submitted must be issued by either an insurance company duly registered in terms of the Short-Term Insurance Act, 1998 (Act 53 of 1998) or by a bank duly registered in terms of the Banks Act, 1990 (Act 94 of 1990) No alterations or amendments of the wording of the pro-forma will be accepted unless approved prior to it been issued by the Employer.

1.1.1 “Guarantor’s Address” - means [●]; *[Drafting Note: Guarantor’s physical address to be inserted]*

1.1.2 “Contract” - means the written agreement entered into between *Employer* and the *Contractor* on or about [●] [●] 200[●] (Contract Reference No. [●]), as amended, varied, restated, novated or substituted from time to time; *[Drafting Note: signature date and Contract reference number to be inserted]*

1.1.3 “Contractor” - means [●] a [●] registered in accordance with the laws of [●] with registration number [●]; *[Drafting Note: Name and details of Contractor to be inserted]*

1.1.4 “Employer” - means The Development Bank of Southern Africa Limited, acting through its Infrastructure Delivery Division (the “IDD”), being a development finance institution reconstituted and incorporated as a juristic person in terms of section 2 of the Development Bank of Southern Africa Act No 13 of 1997;

1.1.5 “Expiry Date” – means the date of issue of the Defects Certificate or such later date as may be determined by the application of clause 3.3;

1.1.6 “this Guarantee” - means this Performance Bond;

1.1.7 “Guaranteed Sum” - means the sum of [● - figure] ([● - words]) as reduced from time to time as provided for in paragraph 3 below; *[Drafting Note: Maximum aggregate Guarantee amount to be inserted not exceeding 10% of the contract sum]*

- 1.1.8 “Project Manager” - means [●] a [●] registered in accordance with the laws of [●] with registration number [●]; and
- 1.1.9 a “recovery statement”, an “interim payment certificate”, a “Payment Certificate”, a “Certificate(s) of Completion” or “Defect Certificate” shall mean any such certificate as issued by the Project Manager;
- 1.2 words and expressions defined in the Contract shall, unless otherwise defined in this Guarantee or otherwise required by the context of this Guarantee, have the same meanings in this Guarantee as those ascribed to them in the Contract, albeit that the Contract itself, and any terms as defined therein, are merely referenced for convenience and not to create an accessory obligation.
2. At the instance of the *Contractor*, the Guarantor hereby confirms that we hold the Guaranteed Sum at the disposal of *Employer*, as security for the proper performance by the *Contractor* of all of his obligations in terms of and arising from the Contract, and hereby irrevocably and unconditionally both agree and undertake to pay to *Employer*, on written demand from *Employer* envisaged in paragraph 3 below and received prior to the Expiry Date, any amount or amounts as may be so demanded from time to time, subject to a maximum of the Guaranteed Sum in the aggregate.
3. The Guarantor’s liability shall be limited to the diminishing amounts of the Guaranteed Sum as follows:
- 3.1 Maximum Guaranteed Sum (not exceeding 10% of the contract sum) in the amount of:
[● – amount in figures] ([● – amount in words]),
from and including the date of issue of this Guarantee and up to and including the Completion Date.
- 3.2 Reducing the Guaranteed Sum (not exceeding 5.0% of the contract sum) in the amount of:
[● – amount in figures] ([● – amount in words]),
from and including the day after the Completion Date up to and including the date of the issue of the Defects Certificate.
- 3.3 Reducing the Guaranteed Sum (not exceeding 0% of the contract sum) in the amount of:
R nil
from and including the day after the date of the issue of the Defect Certificate, where after this Guarantee for Construction shall expire. Where the final payment certificate reflects payment due to the *Employer* this Guarantee shall expire upon payment of the full amount certified. The Guarantor’s liability limits set out in paragraphs 3.1 to 3.3 shall apply in respect of any claim received by the Guarantor during the Security validity.
4. A demand for payment under this Guarantee shall be made in writing at the Guarantor’s address and shall:
- 4.1 confirm the “Guaranteed Sum” at the time of the demand;

- 4.2 state the amount claimed (“the Demand Amount”); and
- 4.3 state that the Demand Amount is payable to *Employer* in the circumstances contemplated in the Contract:
- 4.3.1 in regard to sums certified, shall state the Demand Amount to be the amount so certified and shall:
- 4.3.1.1 state that such first written demand notice issued by *Employer* to the Guarantor at the Guarantor's Address, with a copy to the *Contractor*, records that a period of seven (7) calendar days has elapsed since the issue of the first written demand notice in terms of paragraph 4.3.1.2 and that the sum certified has not been paid to date. *Employer* herewith calls up this Guarantee and demands payment of the sum certified from the Guarantor;
- 4.3.1.2 be accompanied by a copy of a preceding first written demand notice issued by *Employer* to the *Contractor* stating that payment of a sum certified by the Project Manager in an interim or final payment certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, *Employer* intends to call upon the Guarantor to make payment in terms of paragraph 4.3.1.1;
- 4.3.1.3 and
- 4.3.1.4 shall be accompanied by a copy of the applicable payment certificate which entitles *Employer* to receive payment in terms of the Contract of the sum certified;
- 4.3.2 where the Demand Amount is for the Guaranteed Sum or the full outstanding balance thereof, *Employer* shall deliver a first written demand notice to the Guarantor at the Guarantor's Address calling up this Guarantee stating that:
- 4.3.2.1 the Contract has been terminated due to the *Contractor's* default and that the Guarantee is called up in terms of this sub-paragraph. This demand shall enclose a copy of the notice of termination; or
- 4.3.2.2 a provisional sequestration or liquidation court order has been granted against the *Contractor* and that the Guarantee is called up in terms of this sub-paragraph. The demand notice shall enclose a copy of the court order.
5. Notwithstanding the reference herein to the Contract the Guarantor acknowledges that:
- 5.1 the liability of the Guarantor in terms hereof is as principal and not as surety and the Guarantor’s obligation/s to make payment:
- 5.1.1 is and shall be absolute and unconditional in all circumstances; and
- 5.1.2 is not, and shall not be construed to be, accessory or collateral on any basis whatsoever;

6. *Employer* shall be entitled to arrange its affairs with the *Contractor* in any manner which it sees fit, without advising us and without affecting the Guarantor's liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the *Contractor* or any variation under or to the Contract.

7. Should *Employer* cede its rights against the *Contractor* to a third party where such cession is permitted under the Contract, then *Employer* shall be entitled to cede to such third party the rights of *Employer* under this Guarantee on written notification to the Guarantor of such cession.

8. The Guarantor's obligations in terms of this Guarantee:
 - 8.1 shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum; and
 - 8.2 shall not be discharged and compliance with any demand for payment received by the Guarantor in terms hereof shall not be delayed, by the fact that a dispute may exist between *Employer* and the *Contractor*.

9. This Guarantee:
 - 9.1 shall expire on the Expiry Date until which time it is irrevocable;
 - 9.2 is, save as provided for in 7 above, personal to *Employer* and is neither negotiable nor transferable;
 - 9.3 shall be returned to the Guarantor upon the earlier of payment of the full Guaranteed Sum or expiry hereof;
 - 9.4 shall be regarded as a liquid document for, firstly, the purpose of demonstrating and/or determining the amount due by the Guarantor to *Employer* and, secondly, obtaining any court order; and
 - 9.5 shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.

10. The Guarantor chooses the *domicilium citandi et executandi* for all purposes in connection with this Guarantee at the Guarantor's Address.

Signed at _____

Date _____

For and behalf of the Guarantor

Guarantor Signatory 1: _____

Guarantor Signatory 2: _____

Capacity of Guarantor
Signatory 1: _____

Capacity of Guarantor
Signatory 2: _____

Witness: _____
(Printed Name
of Witness) _____

Witness: _____
(Printed Name
of Witness) _____

Guarantor's seal or stamp

PART 2: PRICING DATA

NEC 3 Engineering and Construction Contract Option A: Priced Contract with *Activity Schedule* of April 2013 (including amendments).

Document reference	Title	No of pages
C2.1	Pricing Assumptions: Option A	4
C2.2	Pricing Instructions	1
C2.3	The Activity Schedule	1
C2.4	Amendments, Qualifications And Alternatives By Tenderer	1
	Total number of pages	7

C2.1 PRICING ASSUMPTIONS: OPTION A

The conditions of contract

How work is priced and assessed for payment

Clause 11 in NEC3 **Engineering and Construction Contract (ECC3)** Option A states:

Identified and defined terms	11 11.2	(20) The Activity Schedule is the activity schedule unless later changed in accordance with this contract. (22) Defined Cost is the cost of the components in the Shorter Schedule of Cost Components whether work is subcontracted or not excluding the cost of preparing quotations for compensation events. (27) the Prices for Work Done to Date is the total of the Prices for <ul style="list-style-type: none"> • Each group of completed activities and • Each completed activity which is not in a group. A completed activity is one which is without defects which would either delay or be covered by immediately following work. (30) the Prices are the lump sum prices for each of the activities on the Activity Schedule unless later changed in accordance with this contract.
The programme	31 31.4	The Contractor provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptances.
Acceleration	36 36.3	When the Project Manager accepts a quotation for an acceleration, he changes the Prices, Completion and the Key Dates accordingly, and accepts the revised programme, provided that the acceleration does not arise as a result of the Contractor's own doing.
The Activity Schedule	54 54.1	Information in the Activity Schedule is not Works Information or Site Information,
	54.2	If the Contractor changes a planned method or working at his discretion so that activities on the Activity Schedule do not relate to the operations on the Accepted Programme, he submits a revision of the Activity Schedule to the Project Manager for acceptance.
	54.3	A reason for not accepting a revision of the Activity Schedule is that <ul style="list-style-type: none"> • It does not comply with the Accepted Programme, • Any changed Prices are not reasonably distributed between the activities or • The total of the Prices is changed.
Compensation events	63 63.10	If the effect of a compensation event is to reduce the total Defined Cost and the event is <ul style="list-style-type: none"> • A change to the Works Information or • A correction of an assumption stated by the Project manager for assessing an earlier compensation event, the Prices are reduced.
	63.12	Assessments for changed Prices for compensation events are in the form of changes to the Activity Schedule.
	63.14	If the project Manager and the Contractor agree, rates and lump sums may be used to assess a compensation event.

Implementing compensation events	65 65.4	The changes to the Prices, the Completion date and the Key Dates are included in the notification implementing a compensation event.
Payment on termination	93 93.3	The amount due on termination is assessed without taking grouping of activities into account.

Clause 11 in NEC3 **Term Service Contract, April 2013 (TSC3)** core clauses and Option A states:

Identified and defined terms	11 11.2	(12) The Price List is the <i>price list</i> unless later changed in accordance with this contract.
		(17) The Price for Services Provided to Date is the total of the Price for each lump sum item in the Price List which the <i>Contractor</i> has completed and where a quantity is stated for an item in the Price List, an amount calculated by multiplying the quantity which the <i>Contractor</i> has completed by the rate.
		(19) The Prices are the amounts stated in the Price column of the Price List. Where a quantity is stated for an item in the Price List, the Price is calculated by multiplying the quantity by the rate.

This confirms that Option A is a priced contract where the Prices are derived from a list of items of service which can be priced as lump sums or as expected quantities of service multiplied by a rate or a mix of both.

Function of the Price List

Clause 54.1 in Option A states: "Information in the Price List is not Service Information". This confirms that instructions to do work or how it is to be done are not included in the Price List but in the Service Information. This is further confirmed by Clause 20.1 which states, "The *Contractor* Provides the Service in accordance with the Service Information". Hence the *Contractor* does **not** Provide the Service in accordance with the Price List. The Price List is only a pricing document.

Link to the *Contractor's* Plan / Programmes

Clause 21.4 states that "The *Contractor* provides information which shows how each item description on the Price List relates to the operations on each Plan / Programmes which he submits for acceptance". Hence when compiling the *price list*, the tendering contractor needs to develop his first clause 21.2 Plan / Programmes in such a way that operations shown on it can be priced in the Price List and result in a satisfactory cash flow in terms of clause 11.2(17).

Preparing the Price List

It will be assumed that the tendering contractor has read Pages 14, 15 and 73 of the TSC3

Guidance Notes before preparing the *price list*. Items in the *price list* may have been inserted by the *Employer* and the tendering contractor should insert any additional items which he consider necessary. Whichever party provides the items in the *price list* the total of the Prices is assumed to be fully inclusive of everything necessary to Provide the Service as described at the time of entering into this contract.

Article I. As the *Contractor* has an obligation to correct Defects (core clause 42.1) and there is no compensation event for this unless the Defect was due to an *Employer's* risk, the lump sum Prices and rates must also include for the correction of Defects.

If the *Contractor* has decided not to identify a particular item in the *price list* at the time of tender the cost to the *Contractor* of doing the work must be included in, or spread across, the other Prices and rates in the *price list* in order to fulfil the obligation to complete the *service* for the tendered total of the Prices.

There is no adjustment to lump sum prices in the *price list* if the amount, or quantity, of work within that lump sum item of service later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event. See Clause 60.1.

Hence the Prices and rates tendered by the *Contractor* in the *price list* are inclusive of everything necessary and incidental to Providing the Service in accordance with the Service Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk.

The *Contractor* does not have to allow in his Prices and rates for matters that may arise as a result of a compensation event. It should be noted that the list of compensation events includes those arising as a result of an *Employer's* risk event listed in core clause 80.1.

Format of the price list

Entries in the first four columns in the *price list* in section C2.2 are made either by the *Employer* or the tendering contractor.

If the *Contractor* is to be paid an amount for the item which is not adjusted if the quantity of work in the item changes, the tendering contractor enters the amount in the Price column only, the Unit, Expected Quantity and Rate columns being left blank.

If the *Contractor* is to be paid an amount for an item of work which is the rate for the work multiplied by the quantity completed, the tendering contractor enters the rate which is then multiplied by the Expected Quantity to produce the Price, which is also entered.

If the *Contractor* is to be paid a Price for an item proportional to the length of time for which a service is provided, a unit of time is stated in the Unit column and the expected length of time (as a quantity of the stated units of time) is stated in the Expected Quantity column.

C2.2 PRICING INSTRUCTIONS

- 1 The Activity Schedule to be priced is to be drawn up by the Contractor.
- 2 The agreement is based on the NEC3 suite of documents, Option A. The additions, deletions and alterations to the NEC3 document as well as the contract specific variables are as stated in the Contract Data.
- 3 Preliminaries requirements are based on the various parts of SANS 1921, Construction and management requirements for works contracts. The additions, deletions and alterations to the various parts of SANS 1921 as well as the contract specific variables are as stated in the Specification Data in the Scope of Work.
- 4 It will be assumed that prices included in the Activity Schedule (if any), are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards).
- 5 The Contractor is required to make designs for the works. The Contractor will assume responsibility for design for suitability for purpose for the portion of the works which he has designed.
- 6 Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted.
- 7 The Activity Schedule is not intended for the ordering of materials. Any ordering of materials, based on the Activity Schedule, is at the Contractor's risk.
- 8 Activity Schedule and pricing to be submitted should be at a detailed level.
- 9 No variations will be considered for any omissions by the tenderer.
- 10 The contract price shall remain fixed for the duration of the contract and will not change with any fluctuations in foreign exchange and CPAP.
- 11 Bidders are required to make reference to the specifications for the full extent of the works required to be done under each of the trade activities listed in this Activity Schedule.
- 12 CPAP shall only be applicable to works that progress to later than twelve (12) months from commencement date. Where the period is prolonged beyond the first twelve months due to the delay or non-performance by the employer, the CPAP shall be applicable; however, where the period is extended due contractor's failure to perform or delay caused by the contractor CPAP shall not be applicable. The contract value is to be adjusted using CPAP indices. The base month to be used to calculate CPAP is tender closing date. The value of the certificates issued shall be adjusted in accordance with the NEC3 Contract Price Adjustment Schedules, from the thirteenth month of the works.

C2.3 THE ACTIVITY SCHEDULE

The following Activity Schedule/Price List **provides the minimum quantities to be priced and is issued as a guideline**. The Tenderer may expand on this Activity Schedule, to include any additional items/quantities as deemed necessary.

Attached as separate **Annexure D**, in Excel format and should be populated in Excel and then be converted to PDF format, which must be signed and submitted with the Excel format.

Both formats to be submitted.

Please note: Deliverables completed per Activity Schedule will be approved by the Project Steering Committee (PSC) where after invoices will be submitted to the Project Manager who will process the invoice within the time frame stipulated in the contract data, and remuneration of approved invoice will be paid within the time frame stipulated in the contract data.

The Employer (DBSA to arrange with CoJ, through Pikitup) will make available the required electricity, sewer, and water supply connection. Similarly, the Egoli gas startup and backup fuel cost will be a reimbursable cost from the contractor. Third party fuel and energy costs will not bear any markup from the contractor.

Water and electricity will be available free of charge from Pikitup but will be metered and consumption needs to be included in the monthly reporting to ensure responsible water use. Water is to be used sparingly.

The priced Activity Schedule (to be compiled by Contractor), following hereafter will form an integral part of the "Contract" between the successful appointed Contractor and the Employer.

I, _____ of _____,
(Authorised Signatory) (Company Name)

Hereby acknowledge having read, understood and agree to requirements as set out in C2.3 and warrant that the documents submitted are true and accurate.

(Signature)

(Date)

C2.4 AMENDMENTS, QUALIFICATIONS AND ALTERNATIVES BY TENDERER

- Use this page as a cover page to the *Amendments, Qualifications and Alternatives by Tenderer*.
- Unless otherwise stated in the tender data, amendments, qualifications and alternatives shall be recorded here

PAGE	CLAUSE OR ITEM	PROPOSAL
		<hr/>

I, _____ of _____,
 _____ (Authorised Signatory) _____ (Company Name)

~~Hereby acknowledge having read, understood and agree to requirements as set out in C2.4 and warrant that the documents submitted are true and accurate.~~

 _____ (Signature) _____ (Date)

PART 3: SCOPE OF WORK

NEC 3 Engineering and Construction Contract Option A: Priced Contract with *Activity Schedule*

Document reference	Title	No of pages
	This cover page	1
C3.1	Employers Works Information	4
C3.2	Contractors Works Information	17
C3.3	Particular Specifications	1
C3.4	Drawings	1
	Total number of pages	24

C3.1 EMPLOYERS WORKS INFORMATION

The following standards and any other relevant documentation pertaining thereto must be studied and all principles in this regard must be applied to all procurement documentation, practices and procedures.

Area	Reference
National Building Regulations (NRB)	SANS 10400 (SABS 0400)
Construction Work	Applicable SANS 2001 Standards for Construction Works
Product /Construction standard(s)	ASME VIII / AWS D1.1 / EN 13445 / PD 5500 / EN 12952 / EN 12953 / ASME B31.1 / ASME1 / ASME B31.3 / BS 2633 / SABS 347:2012
Alternative Standard(s) (Refer to ISO 3834-5, clause 2.1b)	BS EN 13480
Welding Process(es) (ISO 4063) ISO 3834-2	MMA (111) / SAW (121) / MIG/MAG (131/135) / FCAW (136) / TIG (141) Quality requirements for Fusion Welding of Metallic Materials
Parent Material Group(s) (ISO/TR 15608)	1 / 2 / 3 / 4 & 6 / 5 / 7 & 8 / 9 / 11
Mechanical Works for Steel Structures	BS EN 10149-2 / EN 10149-2 – Hot-rolled flat products made of high yield strength steels for cold forming
Mechanical Works for Steel Structures	BSEN 101421 EN 10142 – Specification for continuously hot-dip zinc coated low carbon steel sheet and strip for cold forming: technical delivery conditions
Mechanical Works for Steel Structures	BSEN 10147 / EN 10147 – Continuously hot-dip zinc coated structural steels strip and sheet
Mechanical Works for Steel Structures	BSEN 10327 / EN 10326 – Continuously hot-dip coated strip and sheet of structural steels. Technical delivery conditions
Mechanical Works for Steel Structures	EN 10346 – Continuously hot-dip coated steel flat products. Technical delivery conditions
Mechanical Works for Steel Structures	ISO 1090-2 – Steel structures and aluminium structures - Requirements for execution of steel structures
Mechanical Works for Steel Structures	ISO 1460 – Metallic coatings - Hot dip galvanized coatings on ferrous materials - Gravimetric determination of the mass per unit area
Mechanical Works for Steel Structures	SANS 32 / EN 10240 – Internal and/or external protective coatings for steel tubes - Specification for hot dip galvanized
Mechanical Works for Steel Structures	SANS121 / ISO 1461 – Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods
Mechanical Works for Steel Structures	SANS12944 / EN ISO 12944 – Paints and varnishes. Corrosion protection of steel structures by protective paint systems

Area	Reference
Mechanical Works for Steel Structures	SANS14713 / ISO 14713 – Protection against corrosion of iron and steel in structures - Zinc and aluminium coatings – Guidelines
Mechanical Works for Steel Structures	SANS50025-2 / EN 10025-2 – Hot-rolled products of non-alloy structural steels - Part 2: Technical delivery conditions for non-alloy structural steels
Bolts, nuts and screws	ISO 3505-1/ EN ISO 3506-1 – Mechanical properties of corrosion-resistant stainless-steel fasteners. Bolts, screws and studs
Bolts, nuts and screws	ISO 3506-2 / EN ISO 3506-2 – Mechanical properties of corrosion-resistant stainless-steel fasteners. Nuts
Bolts, nuts and screws	ISO898-1 – Mechanical properties of fasteners made of carbon steel and alloy steel. Bolts, screws and studs with specified property classes. Coarse thread and fine pitch thread
Bolts, nuts and screws	SANS 14399 / EN 14399 – High-strength structural bolting assemblies for preloading
Design and static dimensioning	SANS10160 – Basis of structural design and action for buildings and industrial standards
Design and static dimensioning	SANS10162-1 – The structural use of steel Part 1: Limit states design of hot-rolled steelwork
Design and static dimensioning	SANS 10162-2 – The structural use of steel Part 2: Limit states design of cold- formed steelwork
Design and static dimensioning	SANS 10162-3 – Basis of structural design and actions for buildings and industrial structures Part 3: Wind Actions
Design and static dimensioning	SANS 10400 I BS 8118 – 1991 – Code of Practice - The Application of the National Building Regulations
Lightning Protection	SANS 10200:1985.
Lightning Protection	SANS 61024 – Protection of structures against lightning.
Lightning Protection	SANS 62305 – Earthing and Lightning Protection.
Lightning Protection	SANS 10313:2008 Protection against lightning - Physical damage to structures and life Hazard.
Earthing and Grounding	SANS 10292:2001
Civil Works	SANS 1200 – Standardised Specification for Civil Engineering Construction
Control and Monitoring System	R842: Government Gazette, 8 August 2008
Quality	SANS 9001/150 9001 – Quality Management Standard
Quality	Standard for Quality Management Systems (ISO) 9001:2015

Area	Reference
Environmental	National Environmental Management Act No 107 of 2008 (NEMA)
Safety	Occupational Health and Safety Act, Act Nr 85 of 1993 including the following Regulations:
Safety	Pressure Equipment Regulations, 2009
Safety	Major Hazard Installation Regulations, 2001
Pressurized equipment	SANS 347:2012 Categorization and conformity assessment criteria for all pressure equipment.
Compressed Natural Gas	SANS 208: The design and installation of compressed natural gas (CNG) vehicle filling stations;
Natural gas	SANS 827: The installation of pipes and appliances for use with natural gas;
Hazardous Areas	SANS 10108: Hazardous Areas classifications;
Combustion	SANS 329: Industrial thermo processing equipment (Safety requirements for combustion and fuel-handling systems)
Gas piping	SANS 4437: Buried polyethylene (PE) pipes for the supply of gaseous fuels - Metric series – Specifications.
Explosion protection	ARP 0108:2005: Regulatory requirements for explosion protected apparatus
Health	National Norms and Standards relating to Environmental Health in terms of National Health Act, 2003 (Act Nr 61 of 2003)
Chemicals	SANS 10234: Global Harmonized System of Classification and labelling of chemicals.
General	Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017.

- i. The contractor shall provide a minimum **Contract Participation Goal (CPG) of 5%** of the total project value and develop targeted enterprises in two agreed developmental areas.
- ii. The contractor shall appoint an **Enterprise Development Coordinator** who shall:
 - a. Develop a project specific Enterprise Development plan to improve the targeted enterprise's performance in the identified developmental areas and shall allocate resources to monitor progress in relation to improved performance and
 - b. Submit to the employer's representative a monthly enterprise development report (Performa ED 105 P) which documents all mentoring activities that have taken place during that month and the progress made in improving the targeted enterprise's performance in the agreed developmental areas, countersigned by the targeted enterprise
- iii. The **Enterprise Development Coordinator** shall have the following competencies (this is a condition of contract and will not be assessed during evaluation):
 - a. Minimum experience of 5 years in the construction industry at Managerial level as a Site Agent, Contracts Manager, Site Manager, Construction Manager, Business Development Manager or Enterprise Development Manager.
 - b. Minimum experience of 2 years in training and development in Building or Construction; and;
 - c. National Diploma or B Degree in the Built Environment or Business Management

C3.2 CONTRACTORS WORKS INFORMATION

3.2 DESCRIPTION OF THE WORKS

3.2.1 Employer's objectives

The Development Bank of Southern Africa (DBSA) entered a partnership and concluded a Memorandum of Agreement (MoA) with the City of Johannesburg and University of Johannesburg in June 2018. The aim of this MoA is to carry out the full implementing agent role for contracting and managing the design, construction, installation, commissioning, and subsequent operations and maintenance of the CoJ Biodigester Plant on behalf of the City of Johannesburg.

The amount of waste which is being generated in the City of Joburg (CoJ) continues to escalate due to significant growth, both in population as well as in the average income of the Gauteng residents. At this point in time, existing landfills are running out of airspace at a rapid rate and the development of new landfill sites is difficult because there is a scarcity of suitable land within the jurisdiction of the CoJ. By far the largest landfill in the CoJ jurisdiction is Robinson Deep Landfill operated by PIKITUP.

A large portion of this waste is biodegradable as it is organic in nature. A feasibility study done by University of Johannesburg (UJ) in 2011 showed that some of waste streams within the city lend themselves to separation at source and can easily produce a clean organic waste stream that can be utilized in an anaerobic digestion process to produce biogas. It was established that the Johannesburg Fresh Produce Market (JFPM) is such a producer of relatively clean (>95%) organic waste and typically generates on average more than 50 tons per day.

In 2018 the design and development for such a biogas facility was initiated with the initial target processing capacity to be less than the threshold amount required for a full Environmental Impact Assessment (EIA), but adequate for a sizeable commercial scale demonstration plant. Potential uses for the biogas considered initially during the feasibility stage where: production of heat, production of electricity, and/or production of biomethane. The use of waste heat and other renewable sources for integrated power use was also investigated and incorporated.

The primary objective is to procure the services of an EPC contractor with the necessary expertise to design, construct, commission and operate the plant; the EPC contractor is expected to assemble a team of professionals with extensive project implementation expertise. The EPC contractor will report and provide support to the Employer regarding the implementation of the project.

The turnkey contractor will also be responsible for the Health and Safety compliance, building regulations standards compliance, building plans and SDPs with approvals, scheduling and estimation, quality control and assurance, and refurbishment, warranty and guarantees as detailed in the Tender Scope.

3.2.2 Employers Objectives and Overview of the works

The Employer seeks to achieve the following objectives with the project:

1. Divert organic waste from landfill.
2. Establish a world class waste to energy recovery demonstration plant.
3. Enable training of CoJ staff and UJ students in waste to energy technology.
4. Enable data collection on performance of biogas production from organic waste within the city that would be usable in scaling up in the future.
5. Train their staff and employees to manage, operate and maintain the facility.
6. Maximize the use of underutilized infrastructure within the city.
7. Generate renewable energy as heat and power from partnership with Energy Joburg. (Phase 1 This Tender)

8. Provide a renewable alternative to CNG fuel from biogas for fueling some of the CNG fuel capable DDF busses. (Phase 2 – Not this Tender)
9. Beneficiate the residual digestate within the city operations and as a registered compost product for future sales.

The Contractor must provide the following resources, registered with the relevant statutory regulatory bodies, and active registration certificates to be included in the resource's documentation.

- i. Construction Manager
- ii. Electrical & Electronics/Instruments Engineer
- iii. Mechanical & Fire Engineer
- iv. Gas Practitioner – (SAQCC registered)
- v. Construction Health and Safety Manager
- vi. Plant Manager (Process Engineer) – (GCC)
- vii. Operations Health, Safety, Environment and Quality Officer

The project scope of work entails but not limited to the following:

1. Procurement of a Professional Team with required Specialist Disciplines.
2. Finalisation of End User Requirements.
3. Review and finalisation of Detailed Design and Specifications
4. Client Approval of Scope to be implemented.
6. Construction Works
7. Handover to Client and End User
8. Close-Out of Project

3.2.3 Functionality

The functional description corresponds with the Process Description for the envisaged plant and any deviations from the foreseen concept design must be highlighted in the Technical Offer and motivated.

FEEDSTOCK PROCESSING

Waste will be collected daily to minimise odours from rotting waste at JFPM. JFPM will do some high-level separation at source on their site to minimise contamination. This will be done by a 3rd party contractor to be contracted by the Client separately. The exact feedstock composition varies with seasons as different produce (fruits and vegetables) is available from the JFPM at different times. BMP tests were done in the Feasibility Study by the University of Johannesburg (see Annexure O), which deals with JFPM waste source from page 30 onwards. This is expected to be >96% fruits and vegetables by weight. Also, pictures of the waste are included in the Feasibility Study. Waste contamination is typically light packaging made of netting, cardboard bags, cardboard boxes, wooden crates, cellophane wrapping, polystyrene trays, and other light packaging.

For the organic wastes from the fresh produce market, no grit separation is needed as after de-packaging it is all clean organic waste which will be pulped thoroughly to <5 mm particle size before blending and feeding to the digester. Spatial allowance for de-gritting equipment and de-packaging equipment for future expansion should be allowed for as in subsequent phases other organics might be processed which would need these unit processes.

Considering the potential for fire and explosions on site due to the presence of flammable gas (both pipeline natural gas and biogas), suitable firefighting measures and equipment need to be put in place with the correct

electrical hazardous area zoning to be applied in the detail design phase. The Contractor should aim to use maximise the use of natural ventilation in areas where hazardous or explosive atmospheres can develop and to minimize electrical equipment and instrumentation within such areas.

WASTE HANDLING

Waste will be delivered daily from JFPM in bins and delivered in the waste receiving and processing hall by tipping the contents of the bins on the floor. A small loader moves material around the tipping floor and loads the process feed hopper. The loader operator will have an assistant to scout the waste delivered for bulky contamination. This contamination will be removed from the waste tipped on the floor before loaded into the process feed hopper. The Waste Processing Building has multiple roller shutter doors. These will open for each delivery and a signalling system should be put in place to allow truck drivers to reverse safely once the door is open. Doors close after each delivery to ensure that odours are contained in the building and treated through the ventilation exhaust.

The waste feedstock is then processed manually and mechanically to feed it into the digesters. This includes waste sorting to remove any contaminants by utilising waste pickers to manually remove contaminants from a picking belt before pulping, grinding, blending, and pumping to a buffer tank. Due to the high moisture content of the organic waste, leachate will develop on the tipping floor. It is important to keep waste disposal vehicle tyres clear of this leachate and to reticulate runoff inside the hall to a point where it can be easily washed off, collected and added into the digester feed. AN existing culvert and pit can be converted for this purpose.

The residual sludge, called digestate, produced after anaerobic digestion process will be separated into both a liquid and solid fraction that are high in organic nutrients and have a nutrient value for use in offsetting chemical fertilizer, irrigation water and compost use. The City of Johannesburg will contract off-takers for the digestate for collection and removal on a daily basis.

Packaging and other general waste rejects will be dropped in bins that are consolidated into larger skips for disposal to landfill once a day. Wheelie bins are proposed located under the picking line, these are then decanted by a bin tipper into a Skip for consolidation and daily removal. Waste processing area cleanliness is a high priority to reduce the development of odours and attracting vermin. Excess waste delivered by the waste supply contractor from JFPM should be diverted from the plant and may be disposed of at Robinson Deep landfill or at a suitable alternative disposal facility but only if the cost to the city will be less than when disposing at Robinson Deep. Claims of the contractor for excess or residual waste disposal need to be accompanied by a waybill from the disposal facility.

LOGISTICS

The city will separately contract the waste supply from JFPM to the project site and the Contractor would be introduced to this service provider at a suitable point in time.

The contractor will be responsible for all the diversion or disposal of rejected, residual and excess waste to Robinson Deep landfill if it was tipped on the tipping floor. If the waste was rejected before tipping from the delivery vehicle due to capacity constraints or quality issues, the waste management contractor delivering the waste will be diverted to Robinson Deep landfill.

The contractor will also be responsible for setting up schedules for gas, residual waste, and digestate collections and waste deliveries with external parties.

The contractor will not be responsible for maturing the solid digestate portion produced daily but will engage with an external 3rd party service provider appointed by the Employer separately that will utilise the digestate fractions for beneficial use.

BIOGAS PRODUCTION

The plant size is a nominal 50 tons of clean organic waste per day. Biogas is produced by microbial degradation of putrescible organic waste in a process called Anaerobic Digestion (AD). The process employed in this project is mesophilic anaerobic digestion with two insulated and clad Continuously Stirred Tank Reactors in series. The temperature will be controlled at 38°C to 40°C. It requires careful feed preparation and control in large tanks called digesters. Even though the nominal phase 1 design capacity is 50 ton per day of organic waste from the JFPM, the variability of waste from JFPM can range from 10 to 150 tons per day of waste (see attached Annexure E: JFPM Waste Data). The contractor should therefore allow for a waste buffer in a feed buffer tank and/or in bins and the waste reception area considering the raw waste storage limitations of the Environmental Authorisation. Spatial allowance for expansion to 100 tons per day should be kept in mind wherever possible.

Digester heights aren't limited, but ground stability and planning approval impacts should be considered when going over the height of the existing building. The major height limitations are minimum heights in the waste receiving and processing building where hooklift, REL and FEL compactors need to discharge. The Contractor needs to ensure that this is suitable for all 3 types especially the types of vehicles they will be contracting to collect the waste. The digesters have no height limitation but should keep in mind height to diameter.

Internal Combustion Engines are utilised by Energy Joburg to produce electricity from landfill gas on the Robinson Deep landfill site. This site is in close proximity and on the same Erf as the Biogas Project.

For phase 1, the excess capacity of the se generators and the existing environmental flare, will be utilised to produce electricity and heat. The biogas expected from the biogas plant will have a similar (yet slightly higher) calorific value than the landfill gas currently utilised. Biogas, which is typically 60 vol.% methane (CH₄) and 40 vol.% carbon dioxide (CO₂) has a calorific value of around 22 MJ/Nm³. This gas will need to be piped to the exiting inlet of the landfill gas system. The biogas should be treated to remove the bulk of the Hydrogen Sulphide (H₂S) before piped to the Landfill Gas project. Due to the aim to utilise the gas for Biomethane Production in the future, Oxygen in stead of Atmospheric air should be used for any biological desulphurisation (to minimise nitrogen in the gas).

A buried pipeline of approximately 252 m of HDPE piping is envisaged for this gas reticulation. A suitable gradient towards one or more condensate traps should be allowed for so that the condensate can be removed on a continual basis. The contractor can decide on where these condensate traps should be placed and how many there will be. The gas will be transported through this pipeline with a blower located on the outlet of the desulphurisation plant. An emergency flare will be located on the biogas site in case of an outage or downtime at the Landfill Gas Project. This flare will be supplied from the same blower as the one from the desulphurisation plant. The piping at the desulphurisation plant should be configured so that the desulphurisation unit can be bypassed for maintenance while still having the flare operational.

Conceptual locations of the desulphurisation unit, blower, flare and condensate pit(s) are shown in the Conceptual Design Layout (see attached Annexure F: Concept Design Layout).

The contractor will manage the daily waste processing, and biogas production, and scheduling interactions with waste delivery and residual removal contractors (the latter contracted separately by CoJ).

BUILDINGS AND STRUCTURES

The following buildings are envisaged for the project some supplied by the client and other to be supplied by the contractor:

- a. Weighbridge office and weighbridge: New building.(by the Employer)
- b. Management building: Existing but to be refurbished under a separate contract but made available to the Contractor for occupation after renovation. (by the Employer)

- c. Main processing building: Existing but to be increased in height, re-sheeted, and upgraded.. The current incinerator equipment is to be decommissioned and removed with all its parts by an external contractor and this will be completed before the Contractor starts. (by the Employer)
- d. Hot water boiler building: Existing building on top of which the incinerator flue gas treatment is located. To be refurbished to cater for the backup boiler system and any other equipment the Contractor may seem fit to place there. (by the Employer)
- e. Control room: New building directly adjacent to the current Main processing building where the old wash bay and incinerator ash removal was located. (by the Employer)
- f. Digestate dewatering: Existing shed next to main processing building to be refurbished.
- g. Pump Shed: New (next to or in between digesters). (by the Contractor)
- h. Storage shed: Existing shed next to main processing building to Digestate Dewatering building. (by the Employer)
- i. Small storage room: Existing shed next to the Storage shed. (by the Employer)

The contractor may suggest to utilise the buildings differently if they can provide adequate motivation.

The project site is an old incinerator facility which is being refurbished by the Client for use by the Contractor (Annexure G: Concept Structural Report).

Incoming and outgoing waste from the project will be weighed by a newly built weighbridge for the biogas plant. Waste that bypasses the plant will require a waybill from the Robinson Deep landfill weighbridge (separate).

Lightning protection rods and earthing will need to be installed to prevent lightning damage as per a certified electrical engineer's design provided by the Contractor.

The following liquid holding tanks are envisaged:

- Rainwater capturing tanks
- Feed buffer tank
- Digesters 1 & 2
- Digestate liquid tank

PIPING AND RETICULATION

- a. Hot water pipes will be corrosion treated, insulated and clad. These can run above ground in certain areas and cross the internal road underground in a culvert or in a pipe bridge, whichever is more economical.
- b. Waste and digestate slurry piping will be either stainless steel, or HDPE.
- c. The biogas pipeline material of construction can be suitably graded HDPE if submerged underground or Stainless Steel if mounted above ground according to the relevant regulations.
- d. Pipes and cables can be routed underground in a covered culvert or above ground on a pipe/cable rack or both. Danger tape should be installed for gas pipes and electrical reticulation.
- e. Gas and Electricity reticulation should be adequately separated.
- f. Care should be taken for thermal expansion of hot water piping and for condensate formation in the biogas line. Condensate traps or an angled installation should be considered (min 2 deg).
- g. The electricity will be supplied from the existing mini sub-station on the Pikitup property (one connection point and breaker for the project).

ROADS AND PAVEMENT

The Client will upgrade the paving and roads for the facility. However, the Contractor will need to reinstate and repair any pavement and ground works that they disturb on site to the same specifications as the rest of the site. The Contractor will excavate the required foundations for the biogas plant tanks and equipment and be fully responsible for the civil and structural works associated with these systems.

Roads will allow for load bearing vehicles such as busses and waste dump trucks. Non-load bearing pavement will be interlocking bricks with suitable curbs. The storm water runoff should be taken into account when setting out walkways, pathways, pavements and roads. The site slopes toward the leachate pond and the lowest point of the site at the edge of the pond shall have an attenuation system that caters for the flows from the site as well as storm water from the rest of the site that is diverted through this facility.

INSTRUMENTATION AND CONTROL

The contractor will need to report on process parameters of the biogas plant on a monthly basis based on recorded data. In addition to this a daily mass balance needs to be calculated taking into account material flows coming into and out of the facility. For this reason, adequate instrumentation and control should be allowed for. This should be recorded on a data repository on a local server that is backed up on the cloud.

CCTV cameras will also record to this server for a period of up to 1 week.

The CCTV cameras will be displayed in the control room on a large screen. As a minimum the following will be monitored:

- a. Waste processing hall internal.
- b. Weighbridge outward and inward facing.
- c. Gates.
- d. Management office entrance.
- e. Control building entrance.
- f. Main processing building entrance.

A control room adjacent to the existing Waste Receiving and Processing building will be made available to the contractor. The contractor will install all the data connections and required control system UPS and SCADA in this room and link it up with the field units.

The Motor Control Centre (MCC) will also be supplied by the contractor and this panel can be situated in either a separated part of the existing backup boiler building, or in the Waste Receiving and Processing building. This will be a Low Voltage (LV) Panel. During the design phase the cable routing should be communicated to the Client to align with the PSP (Professional Service Providers) doing the building renovations.

The Distributed Management Systems of all sub sections will report to a main PLC in the control room linked to a SCADA system for the entire facility. The SCADA system display will be on 3 large screens in the control room. At a minimum, the following process data will be recorded and stored and will be made available remotely on request by the client:

#	Parameter	Location/Source
1	Daily and weekly feedstock and digestate analyses	Manually entered
2	Online biogas analyser outputs	SCADA
3	Gas sample analyses	Manually entered

4	Digester temperatures	SCADA
5	Process temperatures and pressures	SCADA
6	Tank levels	SCADA
7	Weighbridge data (in and out)	Manual or automated
8	Flow meter data (hot water, feed, digestate, biogas)	SCADA
9	Bus identification, driver information, filling timestamps and quantity data	SCADA (future allowance)
10	Valve positions, motor and switch status	SCADA
11	Electricity consumption (Biogas plant consumption and Waste processing plant consumption)	SCADA
12	Water consumption and effluent production	SCADA

This data will also form part of the monthly report to ensure production targets are met. historian and saved on a suitable data repository.

BATTERY LIMITS

- a. Pikitup: Pikitup are the site custodians and operators of the landfill. The electricity and water supply to the plant will be through existing Pikitup connections on site.
- b. JFPM: Joburg Fresh Produce Market has dedicated it's waste to the project and will do source separation on site to reduce contamination. A 3rd Party waste management company will be contracted separately by the Employer to deliver the waste to the Project Site and the Contractor will schedule and engage with this contractor.
- c. JCPZ: Johannesburg City Parks and Zoo will be one of the ultimate end users of the digestate products but will be engaging with a 3rd party composting and digestate liquid management company appointed separately by the Employer. The contractor will interface with the 3rd party contractor to be introduced in due time.
- d. Energy Joburg: The biogas off-take for the project. This interface will be at the connection into the exiting inlet pipe to the Landfill gas project. The project will meter the biogas flow in this line and this biogas flow metering will be made available to Energy Joburg for control purposes on their side.
- e. City Power: The site electrical supply entity to the site for Pikitup. However, the project will engage with Pikitup for Utilities.
- f. Egoli Gas: Natural gas supply on site. The Contractor will set up a new functioning connection with Egoli gas on site to connect to. The Contractor will manage the account and refer bills to CoJ as a pass-through cost.
- g. Energy Joburg: Energy Joburg operate the Joburg Landfill Gas project. They are operating 3 large 1 MWe gensets. Substantial heat is available from this plant and they have agreed to sell heat from this plant at a discount to the CoJ biogas project. Heat supply to the digester project by allowing the

contractor to tie into the genset cooling water system by inserting a running and standby plate frame heat exchanger. The contractor will pump water through the heat exchanger in a closed loop from the digesters to the landfill gas generator location (where the plate frame heat exchanger is to be located). The heat will be sold to the project for R9.5/GJ (this is a reimbursable rate under the contract but will be paid by the contractor to Energy Systems and reimbursed by CoJ). A draft offtake agreement has been compiled.

UTILITIES AND SERVICES

The site has access to the following external services:

- a. Sewer
- b. Potable Water supply (from Joburg Water via Pikitup connection)
- c. Electrical supply (from Joburg Water via Pikitup connection)
- d. Natural gas (Egoli Gas)
- e. Road access through the main entrance managed by PIKITUP for Robinson Deep Landfill on to an intersection with Turffontein road and Marlborough Road with a traffic light.
- f. Hot water from Energy Joburg

The site includes a natural gas supply for the backup hot water boiler. A containerised diesel generator for backup power supply is envisaged with a soft return is envisaged for the plant.

DIGESTATE HANDLING

The Contractor will separate the digestate into a solid and liquid fraction. The solid fraction will have a maximum water concentration of 77% and the liquid fraction will have a maximum solids concentration of 5% to ensure that the different handling mechanisms remain suitable and appropriate throughout the project life. The Solid digestate will be evenly filled into 30m³ roro-bins interchanged in the Digestate Solids discharge shed. The liquid fraction will be kept in an agitated tanks for pumping into tankers on a scheduled basis to be utilised by a 3rd party.

Solid digestate will also be removed daily by a 3rd party. The contractor shall manage these 3rd party removal companies to ensure that schedules are maintained for ensuring plant operations. The contractor shall also inspect quality of vehicles and bins are such that spillages don't occur and report to the Employer if 3rd party contractors are not complying with this requirement. The Contractor will be responsible for the filling of vehicles and bins and should ensure that the mechanisms and operations are of such a nature that spillages are prevented.

GENERAL

This project is a pilot project to demonstrate the CoJ's ability to implement and operate such a project. Scaleup and replication of such systems is crucial for the sustainability of the City.

Spatial allowance needs to be made for expansion of the facility up to 100 tons of waste per day. Some allowances are indicated in the concept layout design.

The project will require the construction and revamp of specific infrastructure for the successful long-term operations of the plant in a demarcated area. A 3D model representation of the envisaged facility and the demarcated area is given in Annexure H.

The facility will operate as a commercial demonstration plant and access to field visits from Schools, Universities and interest groups should be allowed for in the week during working hours upon scheduling and booking with the operations team. A maximum group size of 20 is suggested.

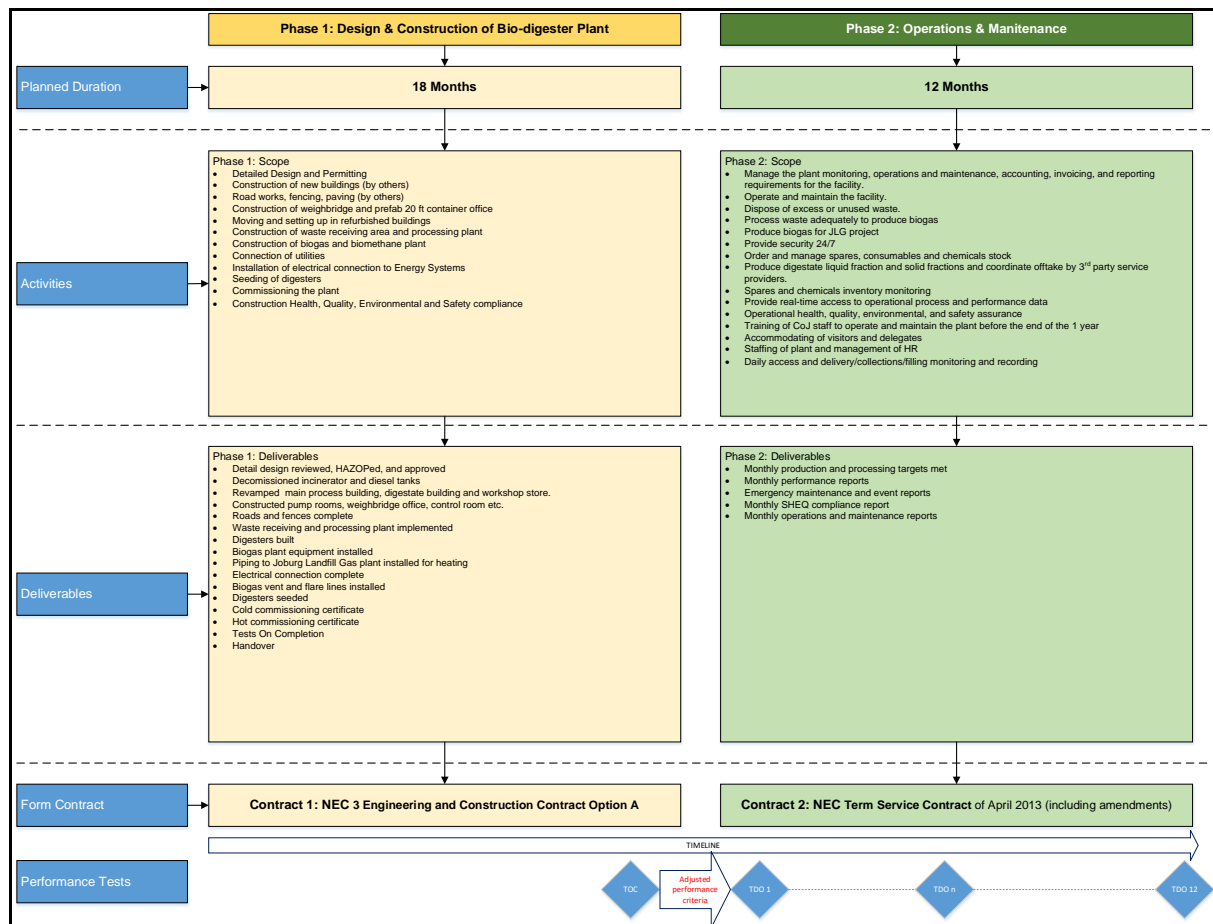
3.2.4 Project Contracting and Phasing

The project will be broken down into the following two components:

PART1: Engineering Procurement and Construction (EPC) of the waste processing and biogas production facility including waste collection, pre-sorting, biogas conditioning, biogas reticulation, heating, and residual separation equipment.

PART 2: Operations and Maintenance (O&M) of the waste processing and biogas production facility including waste collection, pre-sorting and residual disposal on behalf of CoJ for 1 year following the completion of the commissioning and handover of the plant. The contractor will manage the facility on a day-to-day basis and report to the client monthly.

Figure 1 below sets out the contracting structure and phases for the project (See **Annexure O**)



3.3 SCOPE OF WORK

Due to certain project constraints, the project has been split into two separate phases.

Phase 1: The establishment of the 50 ton per day biogas plant and reticulation of clean biogas to the Landfill Gas project site. **(this Tender).**

Phase 2: The establishment of a biomethane upgrading plant on the same site and the required bus filling and biomethane compression infrastructure with various other upgrades. (**not this Tender**)

The use of biogas as bus fuel through upgrading of the biogas was selected as the most ideal methodology to utilize the biogas in CoJ owned Metrobus busses but the biomethane and bus fuelling component will only be added in phase 2. This compressed biomethane fuel is essentially equivalent to Compressed Natural Gas (CNG) and will offset expensive and polluting diesel in the CNG capable Metrobus fleet (Annexure E: Biogas Specification).

The old incinerator facility located at the Robinson Deep landfill was selected as the project site. The site is also shared with other users such as the Joburg Landfill Gas Project (operated by Energy Systems) that generates electricity from landfill gas, and Pikitup that operate the landfill and that have offices outside the project site boundary. Pikitup are the custodians of the site and the site is owned by the Johannesburg Property Company (a Municipal Owned Entity). This site has existing (yet aged) infrastructure that will be repurposed for the CoJ Biomethane project. The project site will be cordoned off separately. The contractor will be required to utilize certain new and refurbished buildings which the Client will upgrade and establish in parallel to the biogas plant establishment.

3.3.1 General Functional Specifications

The plant should, be designed, constructed, and operated to perform as a minimum, to the following guaranteed performance criteria:

1. Minimum **on-specification** Biogas produced per week - 450 GJ/week based on LHV.
2. Minimum weekly organic waste processing - 350 tons/week.
3. Maximum moisture content of digestate solids - <77%.
4. Maximum solids concentration in digestate liquid - <5%.
5. Minimum availability of Biogas plant – 95%.

The guaranteed performance criteria for both contracts is the same accept if adjusted subsequent to Tests On Completion (TOC Annexure V) for Contract 1 after Low performance Damages have been settled. The actual performance will be linked to a equally weighted value between the 6 parameters listed above, each parameter linked to the % of the actual performance relative to guaranteed performance.

For Contract 1: NEC 3 ECC Option A for the EPC of the plant.

These performance criteria will be tested according to the Tests On Completion (Annexure V)

For Contract 2: NEC Term Service Agreement for Plant Operations and Maintenance.

The monthly report will serve as the monthly test whereby underperformance regarding the functional specifications will be penalized on the same scale as set out in the Tests During Operation (TDO Annexure W). Unavailability of gas offtake and of waste availability is the responsibility of the employer and the contractor will not be penalized for this. For monthly payment certificates the relevant low performance damages will be subtracted if applicable.

If the Employer is responsible for unavailability, no-feedstock, no biogas off-takers, or other interruptions, these impacts will be excluded from the calculations of Low Performance damages and the performance of the contractor and plant will be adjusted.

3.3.2 Scope of Works (SOW)

The Scope of Works will involve, but is not limited to the following work elements:

PART 1: Engineering, Procurement, Construction and Commissioning portion

- a. Detailed design finalization based on review of concept design (provided).
- b. HAZOP and design review with client.
- c. Issuing of final health and safety specification to the professionals, early works specialist and the principal contractor and submission of health and safety plans thereof.
- d. Application for construction work permit (Department of Employment and Labour). Note new MHI regulations.
- e. Compilation and submission of contractors final site plans for Site Development Plan approval and Building Plan approval as well as Fire chief signoff.
- f. Provide all relevant signoffs for gas, pressure, civil, structural, and electrical system designs.
- g. Submission of Major Hazardous Installation Assessment Report to the Department of Employment and Labour noting the New MHI regulations.
- h. Furnish a laboratory with suitable analytical equipment for biogas plant operation and sample management.
- i. Supply and installation of a single point of electrical connection at the on-site LV substation (Mini-sub) that is to be refurbished by the Employer.
- j. Supply and install a biogas line from the biogas plant (post desulphurization but before the future biomethane upgrading plant inlet) for diversion of biogas to the Joburg Landfill Gas project inlet.
- k. Supply and install hot water reticulation and a duty and standby hot water plate-frame heat exchanger at the Joburg Landfill Gas CHP's, connecting at-least two heat exchanger units and a duty/standby pump arrangement to allow for switchover when maintenance is done on a CHP or heat exchanger. Hot water flow and temperature metering for billing is essential.
- l. Supply and install an emergency flare.
- m. Supply and install a backup hot water boiler and connect the same to the Egoli gas network.
- n. Supply and install a diesel backup generator with soft return (for critical loads only).
- o. Put up signage for project including; project name, names and logos of all parties involved with the project implementation, directions for vehicles, statutory health and safety signage.
- p. Supply and install 3 off automatically fast opening polymer roller doors (suitable for odor control) of adequate size to allow the reversing of waste management vehicles and for them to discharge on the waste processing building floor. Steel roller shutter doors can be used on all other open sections of the building.
- q. Provide a suitable loader vehicle to function in the limited space on the inside of the waste processing building to pick up waste and to discharge into the feed hopper of the picking line.
- r. Construct suitable channels and slopes for managing leachate on the waste processing floor building and collect it for addition to the biogas plant feed system. It is essential that the leachate be washed off periodically to prevent odors.
- s. Supply and install a liquids and sludge receiving pit (with lid) in the waste processing building to discharge to the macerator and into the buffer tank, care should be taken for removal of debris and contaminants from the pit. The pit should allow for vehicle discharge of up to 20 m³ by tipping motion without spillage.
- t. Supply and install an odor management system in the building for suppressing odors. Manage ventilation odors to the out-side to prevent odor nuisance.
- u. Supply and install adequate ventilation to ensure OSHA compliance of the facility.
- v. Supply and install an elevated picking line with chutes to wheelie bins to allow for manual separation of packaging contaminants in waste. Allow for 12 picking stations on a platform with vertical chutes to wheelie bins (6 on each side of the elevated conveyor). This is to be located in the Waste Receiving and Processing building.
- w. Supply and install a magnet for removal of any dangerous metal parts before the organic waste pulper.
- x. Supply and install a buffer tank feed pump and inline macerator with digestate recycle and blending system.
- y. Supply and Install a buffer tank (and mixers) to ensure adequate waste buffering to ensure stable plant operations.
- z. Construct a pump shed in-between the digester tanks to provide platform access on it's roof to the digesters for maintenance and monitoring. Internally the pump shed must allow for pumping between

digesters and into each digester individually from the buffer tank. Heat reticulation and management will be based here as well as digester sampling and online monitoring systems for temperature, pH and other online measurements. The shed should allow for natural ventilation and consist of a raised concrete floor. It should protect equipment against rain.

- aa. Connect effluent to sewers and install a retention pit and testing area suitable for sewer connection requirements.
- bb. External rainwater runoff to be channeled to the site stormwater runoff.
- cc. Installation of an elevated dewatering system in a refurbished building demarcated for this function for decanting liquid digestate into a liquid digestate tank and spreading thickened solid digestate into a Roro-bin without spillage below it. A diversion system or two bin system needs to be included to allow for periods of bin exchange on site.
- dd. Installation of a digestate liquid fraction tank (with stirring functionality to suspend settleable solids).
- ee. Installation of tanker filling point for both bottom or top filling of tankers with flow metering.
- ff. Supply and installation of insulated and clad digester tanks with adequate heating and mixing capacity (to be configurable in series or in parallel operations for substrate flow).
- gg. Supply and install gas storage capacity is required in at least one of the digester roofs.
- hh. Supply and install desulphurization equipment (which can be done externally or internally but requires that the process meets the Biogas Specification and does not add any additional nitrogen to the biogas).
 - ii. Supply and install condensate traps in biogas reticulation lines with condensate transfer lines to Sewer.
- jj. Supply and install biogas blower (s) may be needed for ensuring adequate pressure and flow for the inlet of the Joburg Landfill Gas plant delivery point (see Biogas Specification).
- kk. Supply and install a supply line from the Egoli Gas, including reinstating the existing gas line, termination, pressure testing and making good.
- ll. Supply and install a UPS for control system and security system backup.
- mm. Establish internet connectivity.
- nn. Connect to utilities.
- oo. Commission the facility.
- pp. Perform performance tests on completion based on throughput over 1 week of feedstock and average output of on specification biogas and digestate cake.
- qq. Supply suitable digester seeding material.
- rr. General:
 - i. Area lighting as required for safe operations.
 - ii. Earthing and bonding
 - iii. Provide electrical and water outlets for maintenance and cleaning.
 - iv. Furnish and equip a storage, consumables, spares store, and workshop area and outfitting with suitable tools for operations. This includes lockable storage units for small tools and countertop work-space for disassembly of pumps and mechanical equipment used on the site.
 - v. Provide lightning protection.
 - vi. Provide compressed and conditioned air where and when required.
 - vii. Install public announcement system.
 - viii. Install fire-fighting system (fire extinguishers).
 - ix. Provide functioning Information Technology system for monitoring plant performance, capturing data from weighbridge, gas supply, level, temperature, pressure and flow sensors for an overall reporting package.
 - x. Implement a comprehensive plant wide SCADA system that is remotely accessible and displayed on multiple computer screens in the control room.
 - xi. Provide all waste bins.
 - xii. Supply startup chemicals and critical spares

PART 2: Operations and Maintenance portion

- a. Daily operations of the waste processing facility (7 days a week). The facility should be open for the filling of gas for 16 hours per day and for processing of waste a minimum of 8 hours per day.
- b. Scheduling of waste deliveries with JFPM and the 3rd party waste management contractor and receiving of waste as per the agreed schedule.
- c. Engaging with Energy Joburg regarding heat supply from the Joburg Landfill Gas Project and the supply of biogas from the Biogas Project to the Joburg Landfill Gas Project.
- d. Scheduling of digestate liquid removal and coordinating with Pikitup and 3rd party contractors as per the agreed schedule.
- e. Scheduling of digestate solids removal with 3rd party off-taker.
- f. Removal of residual waste from facility and disposal thereof.
- g. Disposal of excess or unsuitable waste to Robinson Deep.
- h. Cleaning of facility and housekeeping.
- i. Service and Maintain equipment.
 - i. As per service schedules of OEM's.
 - ii. Unplanned and emergency servicing and maintenance.
- j. Managing staff involved in all activities on site.
- k. Manage and report on SHEQ.
- l. Perform statutory test on pressure vessels and other statutory equipment on the required intervals.
- m. Emergency drills
- n. Reporting monthly on performance, events and activities in a mutually agreed reporting format.
- o. Data capturing to keep record of:
 - a. Waste processed;
 - b. Plant output performance and uptime;
 - c. Consumption of utilities and consumables;
 - d. Identified vehicles delivering waste and collecting products and wastes (RFID card filling system for busses);
- p. Maintain laboratory capabilities for digester monitoring and additional waste selection from time to time.
- q. Provide 24 hour site security.
- r. Recordkeeping of all deliveries, receipts, and bills.
- s. Procurement of all vehicles, tools, services, spares and consumables required for the operation of the plant.
- t. Facilitating visitors from the public based on a booking system that allows visits from Schools, Universities and interest groups (up to 20 people).
- u. Managing facility finances and invoicing to Client reimbursable costs, namely:
 - a. Procurement of hot water at 75-85 deg C from Energy Systems at R 9.5/GJ for heating the digesters and returning of cold water <65 deg C to Energy Systems. (reimbursable)
 - b. Pro-rata waste disposal costs based on contracted rate.
- v. Complying with the requirements of the Occupational Health and Safety Act (ACT 85 Of 1993) including General Maintenance, Inspections, Training and Service Works.
- w. Tenderers to note that contract applicable to maintenance of the biodigester plant will be NEC 3 Term Service Contract that will come into effect upon practical completion of the Biogas Plant works. Servicing and Maintenance of equipment under the O&M will not obviate the necessity of the contractor to support the defects liability period of 12 months for equipment on the plant. Faulty equipment within the first 12 months due to defects will be replaced by the Contractor at it's cost, and not repaired under the O&M agreement

In the event that the majority of the knowledge for this portion of works resides with one of the consortium partners, the below requirements shall apply:

1. Guaranteed presence throughout the O&M period through SLA or JV agreements, these should be submitted with the tender.

2. Knowledge transfer plan and agreement.
3. The scope for this portion of works entails:

3.4 DEVELOPMENT FACILITATION

- The EPC Contractor is expected to engage meaningfully and intensively with stakeholders such as the local community leadership, the DBSA, City of Johannesburg, Local Community Structures, etc., for the purpose of obtaining buy-in, support, additional relevant documentation, policies, norms and standards, strategic plans, Departmental perspectives, resolution of issues, etc. The development facilitation will entail execution of the charter according to the process set out by DBSA and COJ as identified by the client and will comprise the following:
 - Meeting with the relevant local community, authority and buy-in and ownership.
 - Identification of relevant stakeholders and analysis thereafter.
 - Conduct and record on workshops with identified stakeholders and obtain buy-in.
 - Developing a draft development charter/project charter.
 - Conduct a second round of workshops to ensure that all inputs are included.
 - Presentation of the final development charter.
 - Signing of development charter/project charter.
 - Working with the established project steering committee during implementation of the project.
 - Determine the availability of data, drawings and plans relating to the project by collecting and studying all necessary data (previous planning and implementation work) and information relevant to this study.

3.5 MANDATORY REQUIREMENTS AND GENERAL SPECIFICATIONS

Considerations of sustainable building practices such as rainwater harvesting, water conservation and reuse need to be considered.

As part of a turnkey solution the contractors will gather their own professional teams for the execution of the projects in accordance with the DBSA SCM policies and Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000) and its Regulations as published in the Government Gazette No. 47452 of Vol. 689 4 November 2022.

In this section C3.2 the term client shall have the meaning ascribed to the term Employer in terms of this NEC3 ECC Option A Agreement.

The DBSA as an Implementing Agent will do the following for the remaining period of the contract:

- Procure, appoint a Turnkey Contractor
- Facilitate briefing session
- Evaluate bids and make recommendations,
- Manage and supervise the works by the Turnkey Contractor during implementation
- Conduct regular meetings with the Turnkey Contractor
- Report at regular meetings held by GPW
- Conduct site inspections during construction
- Continuous engagement with the relevant stakeholders
- Close the programme

The DBSA as an Implementing Agent will do the following for the remaining period of the contract:

- Procure, appoint, and manage the Contractor,
- Facilitate the briefing session,
- Evaluate bids and make recommendations,
- Manage and supervise the works by the Contractor during implementation

- Do safety, health, environment, and quality audits and liaise with the CoJ for handover of the Biodigester Plant,
- Conduct regular meetings with the Contractor
- Report at regular meetings held by CoJ
- Oversee execution of the works
- Conduct site, practical, works and final completion inspections
- Continuous engagement with relevant stakeholders
- Close projects

Definition of pricing

- The Bidder / Supplier / Contractor must quote in full for the design and construction of the administrative headquarters refurbishment, pedestrian link construction and construction of temporary car park on a turnkey basis.
- The Bidder / Supplier / Contractor must price for connection of all services from the point at which the employer such indicates the connection point during construction. Such prices must include electrical cabling, water pipes, and sewerage pipe.
- The Bidder / Supplier / Contractor must price for all regulatory cost requirements including registration of project with Department of Labour, Municipalities, Eskom, and others.

Contract management

The bidder must price for all contract management responsibilities, construction health and safety requirements.

All costs must be in line with the applicable guidelines of respective Professional Councils at the time of RFP closing, and all personnel appointed must be in possession of active professional registration.

For commencement of works, all designs must be signed off by the respective professionals in line with SANS regulations.

Contingency

Allowance of 15% overall for EPC and O&M scope of works (to remain the Client's).

Note: Successful bidder to take note of the following:

- Successful bidder will accept responsibility for design for suitability and fit for purpose;
- All equipment is to be commissioned and fully operational to meet design/operational requirements;
- Downtime of biomethane plant to be kept to a maximum of 5%;
- Prior approval of planned downtime during construction is required;

Recording of weather

The Contractor shall erect an effective rainfall gauge on the site and record the daily rainfall figures in a book. Such book shall be handed to the employer's representative for his signature no later than 1 day after rain that is considered to justify a compensation event occurs, but such signature is not an acknowledgement by the Employer that the event is a compensation event.

Unauthorised persons

The Contractor shall keep unauthorized persons from the works at all times. Under no circumstances may any person except guards be allowed to sleep on the building site.

Management meetings

A Schedule of meetings will be agreed with the contractor.

Daily records

The Contractor is instructed to keep a set of signed-off daily diaries.

Payment certificates

Monthly valuations of completed work, including materials on site is to be completed and presented to the client representative by no later than the 20th of each month to be assessed for payments. The payment certificate will be issued no later than the 25th of each month (Including Contractor's tax invoice) to the Project Manager or Supervisor for payment within 30 calendar days. Notwithstanding the above, the Employer may request the Contractor to submit claims every 2 weeks to foster better cash flow for the Contractor.

3.6 CONDITIONS OF BIDDING AND FORMS OF CONTRACT

- The bidder is responsible for all designs and costs associated with the preparation of their bid submission.
- The bidder shall not have any claims for costs reimbursements should their bid not be successful.
- All bids received shall be deemed in whole that they have considered all permutation for delivering the project / product is requested by the employer.
- The bidder must support their bid offer price with a detailed Activity Schedule for ease of evaluation, and work management. The attached Activity Schedule is for information purposes only. It is the bidder's responsibility to verify the information included in the Activity Schedule supplied and inform the DBSA if they detect discrepancies.
- The bidder's works and specifications shall comply to all Legislations and Regulations associated to the construction industry
- The employer reserves the rights to renegotiate the prices and conditions offered by the bidder
- All bids shall be received as the stipulated date and time of bid submission
- The employer shall provide access to the site earmarked for development
- The employer shall not pay for any deposit prior to commencement of works by successful bidder
- All payments for the contractor shall be payable as per the conditions of contract or where sectional completion is applicable, the supplier shall submit their claims after approval of works deemed complete by the employer
- The successful bidder is expected to conclude and sign the service level agreement prior to commencement of the contract
- Should both the bidder and employer not reach agreement with respect to content, context, and legal framework of Service Level Agreement, the employer reserves the right to withdraw the appointment
- The Contract to be used for the construction of the works shall be NEC3 option B with a Activity Schedule.

3.7 OCCUPATIONAL HEALTH AND SAFETY

The Turnkey Contractor needs to comply with the following legal requirements:

- Occupational Health and Safety Act, 85 of 1993, Edition 23 (latest edition)
- Code of Practice: Managing exposure to SARS-CoV-2 in the workplace
- Annexure A - DBSA Occupational Health and Safety Baseline specification
- Annexure B - DBSA Baseline Risk Assessment;
- Annexure C - Safety, Health, Environment and Quality Policy.
- Full time Construction Health and Safety Manager (SACPCMP)

C3.3 PARTICULAR SPECIFICATIONS

In addition to the Standardized and Project Specifications the following Particular Specifications shall apply to this contract and are separately bound in hereafter.

PARTICULAR SPECIFICATION	PAGE NO.
HEALTH AND SAFETY BASELINE SPECIFICATIONS	Annexure A
BASELINE RISK ASSESSMENT	Annexure B
SHEQ POLICY	Annexure C
GUIDELINE ACTIVITY SCHEDULE	Annexure D
BIOGAS SPECIFICATION	Annexure E
JFPM WASTE DATA	Annexure F
CONCEPT PLANT LAYOUT	Annexure G
3D MODEL VIEWS	Annexure H
DRAFT EQUIPMENT LIST	Annexure J
LOCALITY MAP	Annexure K
GEOTECHNICAL STUDY REPORT	Annexure L
PROCESS DESCRIPTION	Annexure M
COJ BIOMETHANE UJ FEASIBILITY STUDY	Annexure N
COJ BIOGIGESTER CONTRACTING STRUCTURE	Annexure O
TESTS ON COMPLETION	Annexure P
TESTS DURING OPERATION	Annexure Q
CONTROL ROOM BUILDING FURNISHING	Annexure R

C3.4 DRAWINGS

3.4.1 TENDER DRAWINGS

Note: Concept Design Drawings available, project is Turnkey and EPC Contractor to conclude Detailed Design & Construction Drawings.

LIST OF DRAWINGS			
DRAWING NUMBER / SHEET NUMBER	CURRENT REVISION	CURRENT REVISION DATE	DRAWING DESCRIPTION / SHEET NAME
ED-002-ENG-DWG-PFD-001_SHEET 01	REV 14	2023-12-19	PROCESS FLOW DIAGRAM: WASTE RECEIVING AND PROCESSING
ED-002-ENG-DWG-PFD-001_SHEET 02	REV 14	2023-12-19	PROCESS FLOW DIAGRAM: BIOGAS PRODUCTION
ED-002-ENG-DWG-PFD-001_SHEET 03	REV 14	2023-12-19	PROCESS FLOW DIAGRAM: BIOGAS CONDITIONING
ED-002-ENG-DWG-PFD-001_SHEET 04	REV 14	2023-12-19	PROCESS FLOW DIAGRAM: DIGESTATE TREATMENT
ED-002-ENG-DWG-PFD-001_SHEET 05	REV 14	2023-12-19	PROCESS FLOW DIAGRAM: HOT WATER SUPPLY
ED-002-ENG-DWG-PFD-001_SHEET 06	REV 14	2023-12-19	PROCESS FLOW DIAGRAM: ADDITIONAL FEEDING
ED-002-100-A-M-001-01	REV 0M	2023-12-15	SITE PLAN – SHEET 1 – LAYOUT
ED-002-100-A-M-001-01	REV 0M	2023-12-15	SITE PLAN – SHEET 2 – 3D VIEWS
ED-002-100-A-C-002-01	REV A	2024-12-15	WEIGHBRIDGE CONTROL ROOM LAYOUT
ED-002-100-A-C-003-01	REV A	2024-01-17	NEW CONTROL ROOM, ABLUTIONS & MESS-CONTROL ROOM
ED-002-100-A-C-004-01	REV A	2024-01-21	MAIN WASTE PROCESSING BUILDING
ED-002-100-A-S-001	REV A	2024-01-21	WORKSHOP STEELWORK DETAIL
ED-002-100-A-S-002	REV A	2024-01-21	DIGESTATE STORE STEELWORK AND DETAIL
ED-002-100-A-C-005-01	REV A	2024-01-21	NEW PLINTHS LAYOUT & DETAILS
ED-002-ENG-DWG-DIM-004_SHEET 01	REV 0D	2019-10-29	BIO-METHANE GAS PLANT PICKING PLANT LAYOUT 3D
ED-002-ENG-DWG-DIM-005_SHEET 01	REV 0B	2019-10-29	BIO-METHANE GAS PLANT 3D PICKING PLANT

PART 4: SITE INFORMATION

Document reference	Title	No of pages
	This cover page	1
C4.1	<i>Locality Plan</i>	1
	Total number of pages	2

C4.1 LOCALITY PLAN

The work is located at the following sites in Robinson Deep, Johannesburg:

- JMPD Academy – composting site and store
- JFPM – waste collection point
- Pikitup Robinson Deep Landfill – Biomethane Plant facility and energy supply from Joburg Landfill Gas.

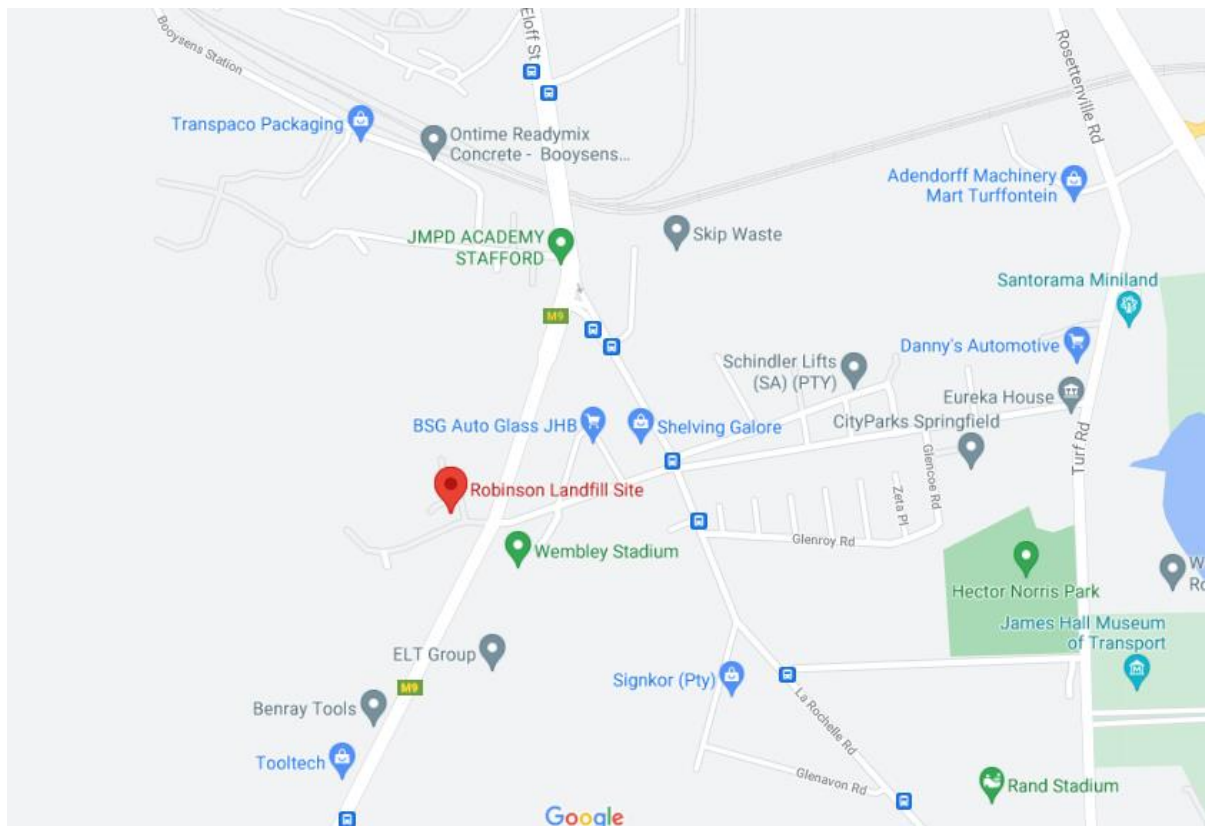


Figure 2: Robinson Deep, Johannesburg Locality Map

See Annexure K: Locality Map (with coordinates).