



Tender Document - Returnable Documents, Request for Proposals
for the Engineering and Construction of Facilities to House a Hot
Isostatic Press (HIP) Machine at the CSIR Scientia Campus, Pretoria -
CSIR, RFP No. 3507/18/03/2022, February 2022

Document Information

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Amount in Words (VAT Inclusive):			

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Section 1 - CSIR Request for Proposals

Request for Proposals (RFP)

Engineering and Construction of Facilities to House a Hot Isostatic Press (HIP) Machine at the CSIR Scientia Campus, Pretoria

RFP No. 3507/18/03/2022

Date of Issue	Friday, 25 February 2022	
Compulsory Briefing Session / Site Inspection	<u>Date:</u> Friday, 04 March 2022 <u>Time:</u> 11h00 to 13h00 <u>Venue:</u> CSIR Pretoria Campus, Knowledge Commons, Building 50	
Closing Date	Wednesday, 18 March 2022	
Enquiries and submission of proposals	Strategic Procurement Unit	E-mail: tender@csir.co.za
CSIR business hours	08h00 – 16h30	
Category	Construction Services	

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SECTION A – TECHNICAL INFORMATION

1 INTRODUCTION

The Council for Scientific and Industrial Research (CSIR) is one of the leading scientific research and technology development organisations in Africa. In partnership with national and international research and technology institutions, CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR's main site is in Pretoria while it is represented in other provinces of South Africa through regional offices.

2 BACKGROUND

The CSIR has procured a Hot Isostatic Press (HIP) machine to operate at its facility in Pretoria. The HIP requires facility readiness, supporting equipment and infrastructure to enable it to function as intended. There is thus a need to appoint a Contractor to provide Engineering, Construction, Installation and Commissioning of a facility to accommodate the Hot Isostatic Press (HIP) Machine. The HIP machine will be supplied by the *Employer* unless expressly stated in the Works.

3 INVITATION FOR PROPOSAL

Proposals are hereby invited from CIDB registered Contractors to provide Engineering and Construction of Facilities to House a Hot Isostatic Press (HIP) Machine at the CSIR Scientia Campus, Pretoria.

4 SCOPE OF WORK

The Contractor's Scope of Work is as follows:

- The complete renovation of the existing facility with minor alterations to incorporate a new proposed lab, metrology lab, disabled toilet and offices.
- A back-up generator is also required and the civil work comprises mainly the construction of plinths for new equipment.
- Tenderers are to take cognisance of the heritage status of the facility. The bills of quantities, therefore, allows for a provisional sum for external work to the building - the scope of which will be determined by the Architect during the course of the contract.

NB: JBCC Building Principal Agreement form of contract will be used for the building contractor.

4.1 Supporting documents issued with RFP.

Documents enclosed on the RFP document.

- a) Section 1- Main RFP document
- b) Section 2 – Notes to Tenderers
- c) Section 3 - JBCC Principal Building Agreement and Contract Data
- d) Section 4 - Provisional Bills of Quantities
- e) Section 5 - ASAQS Model Preambles for Trades 2017
- f) Annexure A - Architectural Drawings
- g) Annexure B - Civil/ Structural Drawings
- h) Annexure C - Electrical Drawings
- i) Annexure D - Mechanical/ Fire Drawings
- j) Annexure E - Architectural Project Specification
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- m) Annexure H - Mechanical Project Specification
- n) Annexure J - Occupational Health and Safety Specifications
- o) Annexure K - Environmental Management Plan
- p) Annexure L - Waiver of Contractor's Lien

- q) Annexure M - Design Indemnity Form
- r) Annexure N - Local Content SBD 6.2
- s) Annexure O - Local Content Annexures C,D,E
- t) Annexure P - NT Instruction Note No 15 of 2016 - Steel Products
- u) Annexure Q - NT Designations Instruction Note - Plastic Pipes
- v) Annexure R - NT Instruction Note No 10 of 2019-20 - Electrical Cable Products
- w) Annexure S - Local Content Guideline
- x) Annexure T - SBD 1 form
- y) Annexure U - Designated Sectors Circular No 1 of 2021-2022 - Cement

5 PROPOSAL SPECIFICATION

All proposals are to be submitted in the format specified in this request.

Bidders are to submit responses in the format prescribed below. Failure to adhere to this may result in disqualification, and the tender may be deemed as non-responsive.

5.1 Technical Proposal (Part A)

The following must be submitted as part of the **technical** proposal:

- Covering letter on company letterhead
- Profile of not more than 10 pages indicating the company's age, resources, and capability.
- Experience on similar projects in terms of providing similar construction EPC services executed between 2011 and 2021 – e.g., company name, contact person, email address, telephone number, nature of work, value of contract, contract duration (as per the table in paragraph 31).
- CV's indicating the relevant experience, relevant qualifications in the built environment and relevant professional registration of the key resources (construction supervisor / site manager and Health and Safety specialist).
- Construction programme (CP) of not more than 14 weeks clearly showing activities and dependencies. NB: The CP must be submitted on Microsoft (MS) project format.
- Provide a valid letter of good standing with the Department of Employment and Labour (COIDA) or with a private assurer;

- Provide proof of all risk insurance cover of a minimum of R 10m or Letter of Intent for cover from a registered financial policy insurer;
- Provide proof of CIDB registration of 5GB or 5ME and higher.

5.2 Financial Proposal (Part B)

The following must be submitted as part of the **financial** proposal:

- Cover Letter;
- Proposed cost/ commercial offer in the provided BOQ template- Bidders must complete all line items of the BoQ. Where an item is not priced, bidder must indicate a value of R0.
- The pricing must be firm for 90 days and inclusive of all costs to render the required services
- Copy of valid SANAS accredited B-BBEE certificate or valid sworn Affidavit; and
- CSD registration report (RSA suppliers only).

6 FUNCTIONAL EVALUATION CRITERIA

The evaluation of the functional/technical detail of the proposal will be based on the following criteria:

Functional Factor	Criteria Description	Weight (%)
Company profile (A1)	Profile of not more than 10 pages indicating the: <ul style="list-style-type: none"> • Age, resources, and capability 	10
Company Experience (A2)	<ul style="list-style-type: none"> • List of similar projects executed between 2011 and 2021 e.g. company name, contact person, email address, telephone number, nature of work, value of contract, contract duration (as per the table in paragraph 31). • NB – The list must be relevant to the project 	45
Staff capability	<ul style="list-style-type: none"> • CV of a construction supervisor / site manager (with relevant experience, relevant qualifications in the built environment and relevant professional registration). The construction supervisor / site manager must be available on site full time 	25

	<ul style="list-style-type: none"> CV of a construction health and safety specialist (with relevant experience, relevant qualifications in the built environment and relevant professional registration) 	10
Construction programme	<ul style="list-style-type: none"> Construction programme (CP) of not more than 14 weeks clearly showing activities and dependencies. NB: The CP must be submitted on Microsoft (MS) project format. 	10
TOTAL POINTS FOR FUNCTIONALITY		100

6.1 Proposals with functionality / technical points of less than the pre-determined minimum overall percentage of **70%** and a sub-minimum of **50%** for each individual criteria will be eliminated from further evaluation.

6.2 Refer to Appendix A for the scoring sheet that will be used to evaluate functionality.

7 ELIMINATION CRITERIA

Proposals will be eliminated under the following conditions:

- Submission after the deadline;
- Proposals submitted at incorrect email address (Bids must be submitted electronically at tender@csir.co.za);
- Failure to submit the Bidder's Declaration of Interest Form
- Failure to attend compulsory briefing session / site inspection
- Failure to submit proof of all risk insurance cover of a minimum of R 10m or Letter of Intent for cover from a registered financial policy insurer (No contract or PO will be issued to service provider if we do not have a valid risk insurance cover);
- Failure to submit active and valid proof of company registration document with the Department of Employment and Labour (DEL) or private assurer.
- If bidder does not provide proof of CIDB registration. It is estimated that the tenderers should have a CIDB contractor grading of 5GB or 5ME and higher.
- If the tenderer fails to meet the Local Production and Content requirements. (Bidders must complete signed local content Annexure C and SBD 6.2 declaration certificate) for Local Production and Content.

8 NATIONAL TREASURY CENTRAL SUPPLIER DATABASE REGISTRATION

Before any negotiations with the winning bidder commence, the winning bidder shall be required to:

- be registered on the National Treasury's Central Supplier Database (CSD). Registrations can be completed online at: www.csd.gov.za;
- provide proof of CIDB registration of 5GB or 5ME and higher;
- provide their CSD registration number to the CSIR; and
- provide the CSIR with a valid copy of their B-BBEE certificate or Affidavit. If no certificate can be provided, no points will be scored during the evaluation process. (RSA suppliers only).

SECTION B – TERMS AND CONDITIONS

9 PROCEDURE FOR SUBMISSION OF PROPOSALS

- 9.1 All proposals must be submitted electronically to tender@csir.co.za.
- 9.2 Respondents must use the RFP number as the subject reference number when submitting their bids.
- 9.3 The e-mail and file sizes should not exceed a total of 25MB per e-mail.
- 9.4 The naming/labeling syntax of files or documents must be short and simple (e.g., Product Catalogues).
- 9.5 All documents submitted electronically via e-mail must be clear and visible.
- 9.6 All proposals, documents, and late submissions after the due date will not be evaluated.
- 9.7 Documents submitted via cloud (i.e., dropbox, WeTransfer, Google Drive) will not be considered.

NB: NO HARD COPIES OR PHYSICAL SUBMISSIONS WILL BE ACCEPTED

10 TENDER PROGRAMME

The tender program, as currently envisaged, incorporates the following key dates:

- Issue of tender documents: Friday, 25 February 2022
- Briefing session / Site Inspection: Friday, 04 March 2022

- Closing / submission Date:

Friday, 18 March 2022

11 COMPULSORY BRIEFING SESSION / SITE INSPECTION LOGISTICS

Please take note of the following Safety Protocols to follow when visiting the CSIR site for the site inspection:

a. Prior to site visit

- i) *Only a maximum of two delegates from each company/bidder will be allowed on site.*
- ii) *All bidders/contractors must prior to visiting the CSIR site complete the online COVID-19 symptom screening questionnaire via the following link - <https://screen.csir.co.za/>*
- *All bidders attending the compulsory briefing session must prior to the visit watch the CSIR Safety and Health video via the following link - <http://streaming.csir.co.za/View.aspx?id=9264~4v~6hmMEM7b> (Please view this video prior to visiting any of the CSIR sites).*
- *All bidders must watch the COVID-19 Visitor's induction video <https://www.youtube.com/watch?v=XD4NDvtO8ck> (Please view this video prior to visiting any of the CSIR sites).*
- *Any special requests for Personal Protective Equipment relating to the area to be inspected must be stated upfront*

b. Entrance to a CSIR site

- i) *All bidders/delegates must wear a cloth face mask on entrance and at all times during the site inspection*
- ii) *The Covid-19 self-screening questionnaire must be completed on the morning of entry to the site and a screenshot of the result must be shown to Security.*
- iii) *All delegates will subject to temperature screening at the gates using a non-contact temperature scanner and any person with a temperature of 38 C and above will not be allowed entry*

c. Conduct during site visit

- i) *All Covid-19 precautionary measures as explained in the videos and induction must be obeyed*
- ii) *Masks must be worn for the duration of the visit*
- iii) *Hand-sanitizer will be made available at the entry points to buildings and at the meeting venue*

- iv) *No pens, paper or other stationary will be distributed. Bidders need to bring their own pens, notepads, etc. to avoid sharing or passing of items*
- v) *Social distancing of at least 2m must be maintained at all times*
- vi) *Where items for inspection need to be handled, sanitizer must be used by the delegate prior to and after handling/touching the item*
- vii) *Depending on the available space at the inspection site, the number of delegates allowed at a specific may be limited to allow for social distancing*
- viii) *No refreshments will be served during the site inspection*

NB: Should a delegate not feel well during an inspection they need to immediately alert the host and the Medical Assistance will be contacted for assistance

12 SUBMISSION OF PROPOSALS

- 12.1 All proposals are to be submitted electronically to tender@csir.co.za. No late proposals will be accepted.
- 12.2 Responses submitted by companies must be signed by a person or persons duly authorised.
- 12.3 All e-mailed proposal submissions are to be clearly subject-referenced with the RFP number. Proposals must consist of two parts, each of which must be sent in two separate e-mails with the following subject:
- PART 1:** Technical Proposal RFP No.: 3507/18/03/2022
- PART 2:** Pricing Proposal RFP No.: 3507/18/03/2022
- 12.4 The CSIR will award the contract to qualified tenderer(s) whose proposal is determined to be the most advantageous to the CSIR, taking into consideration the technical (functional) solution, price, and B-BBEE.
- 12.5 Proposals submitted must be in the following file formats:
- PDF

13 DEADLINE FOR SUBMISSION

Proposals shall be submitted at the e-mail address mentioned above no later than the closing date of **Friday, 18 March 2022**, during CSIR's business hours. The CSIR business hours are between 08h00 and 16h30.

Where a proposal is not received by the CSIR by the due date and stipulated e-mail address, it will be regarded as a late submission. Late submissions will not be considered.

14 AWARDING OF TENDERS

- 14.1 Awarding of tenders will be published on the National Treasury e-tender portal or the CSIR's tender website. No regret letters will be sent out.

15 EVALUATION PROCESS

15.1 Evaluation of proposals

An evaluation team will evaluate all proposals for functionality, price, and B-BBEE. Based on the results of the evaluation process and upon successful negotiations, the CSIR will approve the awarding of the contract to successful tenderer/s.

A two-phase evaluation process will be followed:

15.1.1 The first phase includes the evaluation of elimination, local content, and functionality criteria.

15.1.2 The second phase includes the evaluation of price and B-BBEE status.

Pricing Proposals will only be considered after the functionality phase has been adjudicated and accepted. Only proposals that achieved the specified minimum qualification scores for functionality will be evaluated further using the preference points system.

15.2 Preference points system

The 80/20 preference point system will be used where 80 points will be dedicated to pricing and 20 points to B-BBEE status. If all tenders received are more than R50m, the proposal will be cancelled and re-issued.

16 PRICING PROPOSAL

- 16.1 Pricing proposal must be cross-referenced to the sections in the Technical Proposal. Any options offered must be clearly labelled. Separate pricing must be provided for each option offered to ensure that pricing comparisons are clear and unambiguous.
- 16.2 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations indicated.
- 16.3 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable.
- 16.4 Only firm prices* will be accepted during the tender validity period. Non-firm prices** (including prices subject to rates of exchange variations) will not be considered.
- 16.5 Bidders must quote as per the pricing schedule.
- 16.6 Payment will be according to the CSIR Payment Terms and Conditions.

17 VALIDITY PERIOD OF PROPOSAL

Each **proposal** shall be valid for a period of three (3) months calculated from the closing date.

18 APPOINTMENT OF SERVICE PROVIDER

- 18.1 The contract will be awarded to the tenderer who scores the highest total number of points during the evaluation process, except where the law permits otherwise.
- 18.2 Appointment as a successful service provider shall be subject to the parties agreeing to mutually acceptable contractual terms and conditions. In the event of the parties failing to reach such agreement, CSIR reserves the right to appoint an alternative tenderer .
- 18.3 Awarding of contracts will be announced on the National Treasury website, and no regret letters will be sent to unsuccessful bidders.

19 ENQUIRIES AND CONTACT WITH THE CSIR

Any enquiry regarding this RFP shall be submitted in writing to CSIR at tender@csir.co.za with **RFP No: 3507/18/03/2022 – “Engineering and Construction of Facilities to House a Hot Isostatic Press (HIP) Machine at the CSIR Scientia Campus, Pretoria”** subject.

Any other contact with CSIR personnel involved in this tender is not permitted during the RFP process other than as required through existing service arrangements or as requested by the CSIR as part of the RFP process.

20 MEDIUM OF COMMUNICATION

All documentation submitted in response to this RFP must be in English.

21 COST OF PROPOSAL

Tenderers are expected to fully acquaint themselves with the conditions, requirements, and specifications of this RFP before submitting proposals. Each bidder assumes all risks for resource commitment and expenses, direct or indirect, of proposal preparation and participation throughout the RFP process. The CSIR is not responsible directly or indirectly for any costs incurred by tenderers.

22 CORRECTNESS OF RESPONSES

22.1 The tenderer must confirm satisfaction regarding the correctness and validity of their proposal and that all prices and rates quoted cover all the work/items specified in the RFP. The prices and rates quoted must cover all obligations under any resulting contract.

22.2 The tenderer accepts that any mistakes regarding prices and calculations will be at their own risk.

23 VERIFICATION OF DOCUMENTS

23.1 Tenderers should check the numbers of the pages to satisfy themselves that none are missing or duplicated. The CSIR will accept no liability concerning anything arising from the fact that pages are missing or duplicated.

23.2 Only one electronic copy of the proposal (Technical and Financial) must be submitted via e-mail to tender@csir.co.za. If the bidder sends more than one proposal, the first submission shall take precedence should it not have been recalled/withdrawn in writing by the bidder. Pricing schedule and B-BBEE credentials should be submitted with the proposal, but as a separate e-mail and no such information should be available in the technical proposal.

24 CONSTRUCTION INDUSTRY DEVELOPMENT BOARD (CIDB)

24.1 Only those tenderers who are registered with the CIDB or are capable of being so prior to the closing date and time of this RFP submissions, with a grading of **5GB OR 5ME and higher** class of construction works, will be considered. (NB: If the CIDB status is not active at the time of tender closing date, the bidder will be disqualified)

24.2 Joint ventures are eligible to submit proposals provided that:

- Every member of the joint venture is registered with the CIDB;
- The lead partner has a contractor grading designation in the **5GB OR 5ME and higher** class of construction work; or not lower than one level below the required grading designation in the class of works construction works under consideration and possess the required recognition status;
- The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to **5GB OR 5ME and higher** class of construction work.

25 LOCAL PRODUCTION AND CONTENT

25.1 Only locally manufactured designated goods and/or services from local raw material or input will be considered.

25.2 If the raw material or input to be used for a specific item is not available locally, bidders should obtain written authorisation from the DTi should there be a need to import such raw material or input and;

25.3 A copy of the authorisation letter must be submitted together with the bid document at the closing date and time of the RFP. For further information, bidders may contact the DTi at telephone 012 394 3717/1390.

25.4 The guidelines and declarations that should be used by tenderers when preparing a tender are available on the DTi website. Guidance on the calculation of local content and manufacturing can be assessed on the DTi's official website – <http://www.thedtic.gov.za/sectors-and-services-2/industrial-development/industrial-procurement/>

25.5 Tenderers must complete Declarations D and E, and consolidate the information on Declaration C. Annexures C, D and E must be submitted with the tender by the closing date

and time as determined by the CSIR. If the tender is successful, the tenderer must continuously update Declarations C, D and E with actual values for the duration of the contract.

25.6 The Declaration Certificate for Local Production and Content (SBD 6.2) in addition to the above declarations must also be completed, duly signed, and submitted by the bidder at the closing date and time of the tender; and

25.7 The rates of exchange quoted by the bidder in paragraph 6.8 below of the declaration certificate will be verified for accuracy.

25.8 The exchange rate to be used for the calculation of local production and content must be the exchange rate published by the South African Reserve Bank (SARB) AT 12:00 on the date of advertisement of bid.

25.9 Only the South African Bureau of Standards (SABS) approved technical specification number SANS 1286:2011 must be used to calculate local content.

25.10 Bidders must clearly indicate in their bids, the quantities of products to be supplied, and the level of local content for each product.

25.11 Applicable local production and content minimum thresholds for this tender are as per the table below:

Tender Item No. as per BOQ	Page No. on BOQ	Designated Sector	Item, Product, or Service Description	Minimum Applicable Local Content Threshold
Section 2, Bill No. 1: 35 - 36	Pg. 46	Cement	Brickwork in NFP bricks in class II mortar in building up openings, including bonding new to existing and making good cement plaster on both sides (making good paintwork elsewhere)	100%
39 - 42	Pg. 47	Cement	Making good of Finishes	100%
43 - 47	Pg. 47-48	Cement	Openings through existing walls etc.	100%
Section 2, Bill No. 3: 1	Pg. 57	Cement	15MPa/20mm concrete	100%
Section 2, Bill No. 3: 2 – 7	Pg. 58	Cement	30MPa/19mm concrete	100%
Section 2, Bill No. 3: 13	Pg. 59	Steel Products	Ref 395 fabric reinforcement in concrete surface beds,	100%

			slabs, etc	
Section 2, Bill No. 3: 14	Pg. 59	Steel Products	Mild steel and high tensile steel reinforcing to structural concrete work.	100%
Section 2, Bill No. 4: 1 – 2	Pg. 63	Cement	Brickwork of clay bricks (14 MPa nominal compressive strength) in class 1 mortar	100%
Section 2, Bill No. 4: 3 – 6	Pg. 63	Cement	Brickwork of NFP bricks in class II mortar	100%
Section 2, Bill No. 4: 8 – 9	Pg. 63	Cement	Brickwork reinforcement	100%
Section 2, Bill No. 6: 1 – 2	Pg. 69	Steel Products	Semi-solid flush doors with veneer, hung to <i>steel frames</i>	100%
Section 2, Bill No. 9: 1 – 16	Pg. 78-80	Steel Products	Hinges, Bolts, Locks, steel handles, kick plates, door closers, louvres, etc.	100%
Section 2, Bill No. 9: 18 – 20	Pg. 80	Steel Products	"Hygiene Systems" or equal approved	100%
Section 2, Bill No. 9: 21	Pg. 81	Textiles, Leather, Clothing and Footwear	Fabric Blinds	100%
Section 2, Bill No. 10: 1 – 9	Pg. 84	Steel Products	Welded columns, beams, supports in single lengths with flat base, cap, bearer, and connection plates, bolted to concrete or brick work	100%
Section 2, Bill No. 10: 10 – 12	Pg. 85	Steel Products	High tensile steel chemical anchor bolts drilled 60mm deep into existing brickwork or concrete to fasten structural steel work onto existing brickwork or concrete surfaces	100%
Section 2, Bill No. 10: 13 – 14	Pg. 85	Steel Products	Welded mild steel	100%
Section 2, Bill No. 11: 1 - 3	Pg. 88	Steel Products	Welded screens and gates to cage stores	100%
Section 2, Bill No. 10: 6 – 10	Pg. 89-90	Steel Products	Pressed steel door frames	100%
Section 2, Bill No. 10: 11 - 12	Pg. 90	Steel Products	Steel Shelving and burglar bars	100%
Section 2, Bill No. 12: 2 – 3	Pg. 94	Cement	Cement plaster screed wood floated on concrete	100%

Section 2, Bill No. 12: 4	Pg. 95	Cement	Two coat (1:4) cement plaster 15mm thick on brickwork finished to a smooth and even steel trowelled surface	100%
Section 2, Bill No. 12: 5	Pg. 95	Cement	Cement plaster steel trowelled, on concrete	100%
Section 2, Bill No. 14: 1 - 2	Pg. 104	Steel Products	Stainless steel sink and prep bowl	100%
Section 2, Bill No. 14: 7	Pg. 105	Steel Products	"Franke" or equal and approved grade 304 (18/10) stainless steel	100%
Section 2, Bill No. 14: 8	Pg. 105	Plastic Pipes	PVC-U soil and vent pipes	100%
Section 2, Bill No. 14: 9 – 13	Pg. 105	Plastic Pipes	Extra over PVC-U soil and vent pipes for fittings	100%
Section 2, Bill No. 14: 24	Pg. 107	Plastic Pipes	PVC 38mm "P" or "S" trap	100%
Section 3, Bill No. 1: 30 – 45	Pg. 119 - 121	Electrical Cables	Installation of new Low Voltage: 600/1000V PVC/ SWA / ECC/ PVC	90%

All the sectors indicated above are designated as per below thresholds:

- Steel Products and Components **(100%)**
- Plastic Pipes **(100%)**
- Electrical Cables- LV Cables **(90%)**
- Textiles, Clothing, Leather and Footwear **(100%)**
- Cement **(100%)**

Bidders are to declare any or additional item part of the scope of works that falls within the above designated sectors on Local content Annexures C, D, and E.

25.12 How to apply for exemption:

The exemption request must be on your signed company's letterhead and cover the following:

- The procuring entity/government department/state owned company,
- Tender/bid number,

- Closing date,
- Item(s) for which the exemption is being requested for,
- Description of the goods, services or works for which the requested exemption item will be used for and the local content that can be met,
- Reason(s) for the request,
- Attach specification issued by the procuring entity, and
- Supporting letters from local manufacturers/sub-suppliers (if applicable).

Attention to:

Dr. Tebogo Makube
Chief Director: Industrial Procurement Unit
The Department of Trade and Industry
Private Bag X84,
Pretoria,
Gauteng, 0001

26 SUB-CONTRACTING

26.1 A tenderer will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than **25%** of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for, unless the intended sub-contractor is an exempted micro enterprise that has the capability and ability to execute the sub-contract.

26.2 A tenderer awarded a contract may not sub-contract more than **25%** of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an exempted micro enterprise that has the capability and ability to execute the sub-contract.

27 ADDITIONAL TERMS AND CONDITIONS

- 27.1** A tenderer shall not assume that information and/or documents supplied to CSIR, at any time prior to this request, are still available to CSIR, and shall consequently not make any reference to such information document in its response to this request.
- 27.2** Copies of any affiliations, memberships and/or accreditations that support your submission must be included in the tender.
- 27.3** In case of proposal from a joint venture, the following must be submitted together with the proposal:
- Joint venture Agreement including split of work signed by both parties;
 - The original or certified copy of the B-BBEE certificate of the joint venture;
- 27.4** An omission to disclose material information, a factual inaccuracy, and/or a misrepresentation of fact may result in the disqualification of a tender, or cancellation of any subsequent contract.
- 27.5** Failure to comply with any of the terms and conditions as set out in this document will invalidate the proposal.

28 CSIR RESERVES THE RIGHT TO

28.1 Extend the closing date;

28.2 Verify any information contained in a proposal;

28.3 Request documentary proof regarding any tendering issue;

28.4 Give preference to locally manufactured goods;

28.5 Appoint one or more service providers, separately or jointly (whether or not they submitted a joint proposal);

28.6 Award this RFP as a whole or in part;

28.7 Cancel or withdraw this RFP as a whole or in part.

29 DISCLAIMER

This RFP is a request for proposals only and not an offer document. Answers to this RFP must not be construed as acceptance of an offer or imply the existence of a contract between the parties. By submission of its proposal, tenderers shall be deemed to have satisfied themselves with and to have accepted all Terms & Conditions of this RFP. The CSIR makes no representation, warranty, assurance, guarantee or endorsements to tenderer concerning the RFP, whether with regard to its accuracy, completeness or otherwise and the CSIR shall have no liability towards the tenderer or any other party in connection therewith.

DECLARATION BY TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFP No: 3507/18/03/2022

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / proposal specifications stipulated in **RFP No. 3507/18/03/2022** at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the proposal.

I confirm that I am satisfied with regards to the correctness and validity of my proposal; that the price(s) and rate(s) quoted cover all the services specified in the proposal documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this proposal as the principal liable for the due fulfilment of this proposal.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT)

CAPACITY

SIGNATURE

NAME OF FIRM

DATE

WITNESSES	
1
2
DATE:	

31 SCHEDULE OF BIDDER'S REFERENCE INFORMATION (NB- To be submitted with technical proposal)

The bidder must provide details of the bidder's current experience in providing similar services.

Company Name	Contact Person and contact details (email and telephone number)	Nature Of Work (Description of service performed and extent of Bidder's responsibilities)	Value of contract (Inclusive of VAT)	Contract duration (Start and End Dates)

32 APPENDIX A: FUNCTIONAL EVALUATION CRITERIA SCORING SHEET

Functional Factor	Criteria Description	Weight (%)	Scoring
Company profile	<p>Profile (not more than 10 pages) indicating the :</p> <ul style="list-style-type: none"> Age, resources and capability of the company 	10	<ul style="list-style-type: none"> No submission - 0 0 to 3 years - 3 4 to 5 years – 5 6 to 8 years - 7 > 8 years – 10
Company Experience	<ul style="list-style-type: none"> List of similar projects executed between 2011 and 2021 e.g. company name, contact person, email address, telephone number, nature of work, value of contract, contract duration (as per the table in paragraph 31). NB – The list must be relevant to the project 	45	<ul style="list-style-type: none"> No list of projects – 0 List of projects are not relevant-3 1 to 5 list of relevant projects - 5 6 to 8 list of projects relevant to the scope – 7 > 8 list of projects relevant to the scope – 10
Staff capability	<ul style="list-style-type: none"> CV of a construction supervisor / site manager (with relevant experience, relevant qualifications in the built environment and relevant professional registration). The construction supervisor / site manager must be available on site full time 	25	<ul style="list-style-type: none"> < 5 years experience - 0 6 to 8 years experience - 3 9 to 11 years experience - 5 12 to 14 years experience - 7 More than 14 years experience - 10
	<ul style="list-style-type: none"> CV of a construction health and safety specialist (with relevant experience, relevant qualifications in the built environment and relevant professional registration) 	10	<ul style="list-style-type: none"> < 5 years experience - 0 6 to 8 years experience - 3 9 to 11 years experience - 5 12 to 14 years experience - 7 More than 14 years experience - 10
Construction programme	<ul style="list-style-type: none"> Construction programme (CP) of not more than 14 weeks clearly showing activities and dependencies NB: The CP must be submitted on MS project format. 	10	<ul style="list-style-type: none"> No CP - 0 CP is not relevant - 3 CP that is more than 12 weeks – 5 CP that is 12 weeks – 7 CP that is between 10 and 11 weeks - 10
TOTAL POINTS FOR FUNCTIONALITY		100	

33 RETURNABLE DOCUMENTS AND FILING GUIDE

Description (please label your file dividers according to this table so that it becomes easier to trace your documents)		Submitted (Please tick)	
		Yes	No
1	Company profile (not more than 10 pages) clearly stipulating the number of years rendering a project of similar scope		
2	Proposed Construction Team organogram and CV(s) of site construction manager / supervisor and the construction safety specialist		
3	Letter of good standing with the Department of Employment and Labour (COIDA) or with a private assurer		
4	Proof of all risk insurance cover of a minimum of R 10m or Letter of Intent for cover from a registered financial policy insurer		
5	Proof of active and valid CIDB registration with 5GB or 5ME and higher CIDB grading		
6	Proof of active and valid Central Supplier Database (CSD) summary report		
7	Declaration by Tenderer		
8	Technical Schedule		
9	SBD 1		
10	Local Content Declaration Certificate SBD 6.2		
11	Local Content Declaration Annexes C, D, and E		
	PART B: FINANCIAL PROPOSAL ONE ELECTRONIC COPY Returnable Schedules that will be incorporated into the Contract		
1	Cover Letter		

2	Proposed cost/ commercial offer as per		
3	Valid B-BBEE Certificate or Copy of Sworn		
#	Proposal from a joint venture (folder 4)	Applicable	Not applicable
1	In case of proposal from a joint venture, the following must be submitted together with the	Yes	No
2	Joint venture Agreement including split of work signed by both parties		
3	The original or certified copy of the B-BBEE certificate of the joint venture		
4	The Tax Clearance Certificate of each joint venture member		
5	Proof of ownership/shareholder certificates/copies		
6	Company registration certificates		



Section 2 - Notes to Tenderers



2.1 Conditions of Tender

Conditions of Tender

1. Definitions of the meanings of some words in this documentation

In the Principal Building Agreement "Agreement" is a list of the definitions/meanings of some words that are common to such Agreement documents and the bills of quantities. The definitions/ meanings given in the Agreement apply with equal force and effect in the bills of quantities.

In addition to this, the following words are hereby deemed to have the following meanings, for the purposes of the bills of quantities:

A "Tender" shall mean a firm and binding offer to undertake, and complete, the Works in accordance with the conditions contained in the Agreement and the bills of quantities and as represented by the submission of the completed Contract Data [CE] and Contract Data [EC]. A "Tenderer" shall mean any person (whether a private or juristic person) who submits a Tender in accordance with this Tender Document.

"Tender Documentation" shall mean the bills of quantities and associated documentation described therein, the drawings, schedules and other documentation described on the CONTENTS page of the Tender Document, and the documentation submitted by the Tenderer with his Tender, insofar as it is acceptable in terms of the conditions and requirements described in the bills of quantities.

2. Tender documentation

The Tender Documents comprise the pages and annexures as listed on the Contents page/s. Tenderers are to check the numbers of the pages and annexures and should any be missing or duplicated, or the reproduction be indistinct, or if any doubt exists as to the full intent and meaning of any description, or if this document contains any errors, the Tenderer shall notify the Quantity Surveyor at once for rectification. No liability whatsoever will be admitted in respect of errors in any tender due to the aforementioned causes.

3. Works and site information

3.1. Works identification and description:

Tenderers are required to study the nature and extent of the work embodied in this contract by visiting the existing site, and examining the tender documents and all the drawings which are included as part of this tender document.

In general terms the works comprise the following: the complete renovation of the existing facility with minor alterations to incorporate a new proposed lab, metrology lab, disabled toilet and offices. A back-up generator is also required and the civil work comprises mainly the construction of plinths for new equipment. Tenderers are to take cognisance of the heritage status of the facility. The bills of quantities, therefore, allows for a provisional sum for external work to the building - the scope of which will be determined by the Architect during the course of the contract.

3.2. Site description:

The site is situated on the CSIR campus, building 16, on the Pretoria site.

GPS Co-ordinates: -25.744996291625984, 28.281390959153434



3.3. Site restrictions:

Tenderers must take cognisance of existing buildings and not cause damage to existing facilities and services. Adjacent buildings are to be sufficiently protected against noise and dust emissions resulting from construction activities. High traffic volumes are not expected, however, CSIR personnel need to be granted full access to adjacent building entrances and parking areas during construction.

4. Site inspection meeting

The tenderer shall be deemed to have inspected the site and to be fully informed as to the nature and degree of complexity of the project, the constructional problems related thereto, the conditions under which the work is to be carried out, the means of access to the site and generally of all matters which may influence his Tender. No claim of any nature whatsoever will be considered after the submission of Tenders, due to failure on the part of the Tenderer to fulfill his obligation.

Tenderer's are to refer to the Request for Proposal for details of the explanatory site meeting.

Attendance at this meeting is compulsory and the failure by any Tenderer to attend may lead to rejection of his tender.

5. Model preambles for trades

Except where otherwise stated the Quotation for the works must be prepared in accordance with the Model Preambles for Trades 2017 Edition as recommended and published by the Association of South African Quantity Surveyors. Tenderers are advised to study these Model Preambles before pricing for the works.

6. Method of measurement

Except where otherwise stated, item descriptions in the bills of quantities have been prepared in accordance with the Seventh Edition of the Standard System of Measuring Builder's Work 2015, issued by the Association of South African Quantity Surveyors, and hereinafter termed the Standard System. Wherever the terms "shall be included in the description", "shall be stated" or words having the same effect appear in the Standard System, it shall be deemed that the bills of quantities for the works incorporates such inclusions and statements.

7. Fluctuations in building costs

This contract price will be fixed and firm throughout the duration of the project.

8. Drawings, Specifications, etc

The following drawings and specifications are issued with and form part of the Tender Document:

Architect

- CP-100-Rev H - Ground & First Floor Plan
- LA-400-Rev 001 - Door Schedule

Civil/ Structural Engineer

- AFR1145-STR-DET-001-PRE-00-Layout1
- AFR1145-STR-DET-002-PRE-00-Layout1
- AFR1145-STR-DET-003-PRE-00-Layout1

Electrical Engineer

- 12964-EE-100 Bulk Power Supply Arrangement Layout
- 12964-EE-101 Oxygen Sensor layout
- 12964-EE-102 Generator Plinth Layout
- 12964-EE-200 Ground Floor Small Power Layout
- 12964-EE-201 First Floor Small Power Layout
- 12964-EE-300 Ground Floor Lighting Layout
- 12964-EE-301 First Floor Lighting Layout
- 12964-EE-500 Fire Detection
- 12964-EE-700 Single Line Diagram
- 12964-EE-701 Distribution Board

Mechanical Engineer

- CSIR-GROUND FLOOR HVAC PLAN LAYOUT-12964-ME001
- CSIR-FIRST FLOOR HVAC PLAN LAYOUT-12964-ME002

Specifications

- Architectural Specification
- Civil Work Specification
- Electrical & Electronic Engineering Services Technical Specification
- Mechanical Services Specification
- Occupational Health & Safety & COVID Specification
- Environmental Management Plan

9. Pricing of rates

All prices submitted for this tender, unless otherwise stated, shall include for materials, duty, taxes other than Value Added Tax (VAT), making conveyance and delivery, unloading, storing, unpacking, hoisting, labour setting, fitting in position, cutting and waste, patterns, models and

templates, plant, temporary works, return of packings, establishment charges, profit and all other obligations arising from the Principal Building Agreement.

10. Tender submissions

Tenderers must submit their bid responses in accordance with the CSIR Request for Proposals.

11. Returnable documentation

Tenderers must submit their bid responses in accordance with the response format specified in the CSIR Request for Proposals.

12. Contract duration

The tenderer is referred to page 24, item 32 of the preliminaries and general section of the bills of quantities under heading “contract data” for the contract duration.



2.2 Special Conditions of Tender

Special Conditions of Tender

1. Ambiguity or Discrepancy

If any ambiguity or discrepancy in any of the documents forming part of the contract is found, then the contract data and or amendments/the special conditions of tender herein shall prevail in cases of conflict between any of the documents.

2. Procurement

Bidders to note that the invitation to bid for this contract does not necessarily mean that bidders have prequalified or are pre approved. All bidders will be adjudicated for all requirements in terms of the bid document.

3. Sufficiency of Bid Documents

Bidders to identify and notify the Principal Agent of any insufficient or lack of information, specification, detail and/or contract documents preventing the bidder from submitting a complete price. The bid will otherwise be deemed complete.

4. Bills of Quantities

4.1. Clause 5.4 amended to read 'The priced document shall not be used as a specification for material and goods and the quantities should not be used for procurement purposes.'

4.2. All procurement of material will be based on actual site measurements and not on drawings, specifications or the bill of quantities.

4.3. The Architectural and Engineering Specification Documents must be read thoroughly in conjunction with the Bills of Quantities, drawings and other contract related documents.

4.4. Pricing of Preliminary and General Items (P&G)

4.4.1. Bidders are required to price all individual items in the preliminary and general section of the bill of quantities and not to include the items into a single sum or amount. The fully priced schedule must be included as part of the priced bill of quantities returnable with tender submission. Items priced as zero shall be deemed to be included in other items in the contract price.

4.4.2. The distinction between fixed, variable and time related cost must be made where applicable.

4.5. In general, bidders shall ensure that their bid price includes for the provision of all requirements in terms of the construction regulations, health and safety requirements and COVID-19 requirements. No claims for additional cost will be entertained.

4.6. Resources and Supervision - The successful contractor shall ensure that the contract is adequately resourced with the requisite skilled and experienced supervision, plant and equipment necessary to undertake and complete the works within the requirements of the contract and within the anticipated contract duration on or before the practical completion date.

4.7. **Insurances**

Clause 10.1 shall be supplemented with: 'the contractor shall be responsible for effecting and maintaining the contract works insurance for the full duration of the contract period. The insured amount for the full scope of works shall be 120% of the contract amount.'

4.8. **Site and Access and Working Hours**

The contractor shall be briefed on the restrictions of movement, servitudes, access control, buildings in use, security requirements and security clearances, working hours due to the right being occupied and under the employers control at all times. The contractor shall not extend his operations into any restricted or undefined areas.

Work shall be carried out during normal working hours. Any extended times or approval or overtime work shall be considered and approved by the principal agent.

The contractor shall comply with the employer's rules for the control of delivery of materials and goods into the site and for the removal of such items from the site.

The fully priced bill quantities must accompany the tender submission

5. Scope of Work

5.1. The scope of the works has been generally defined.

5.2. The proposed refurbishments include only a minor component of civil work. The engineer has recently undertaken geotechnical investigations to establish the ground conditions required to determine the extent of any re-engineering of the layerworks that may be required.

- 5.3. The successful contractor together with the principal agent shall ensure that photographs are taken for individual buildings both during and after the completion of works so as to ensure efficient valuations as well as to serve as proof of work completed. The photographs will be submitted on a monthly basis to the professional team in an agreed format and filing structure. This procedure will further assist to minimise potential disputes on completion of the works.

6. Site Access and Security

- 6.1. Bidders are obliged to adhere to the site's security requirements during the construction period.
- 6.2. Specific entrance points available to the successful contractor for the use of deliveries and such related activities will be identified on site.
- 6.3. The successful contractor will be responsible for their own security on the site.
- 6.4. All personnel entering the site including subcontractors and labour that will be involved in the works will be vetted by the CSIR security.

7. Programming and Sequence of Works

Bidders to programme and include for:

- 7.1. All multiple site visits that may be required by specialist subcontractors
- 7.2. The employers suppliers and subcontractors activities.
- 7.3. The daily penalty that may be applicable has been based on the estimated contract sum.

7.4. Adverse Weather Conditions

The contract duration includes a monthly allowance of 3 working days for adverse weather conditions [23.1.1] during which rainfall exceeds 10mm per day. These days shall be reflected on the critical path of the construction programme. Where the programmed delays for adverse weather conditions exceed the actual delays incurred the date for practical completion will not be adjusted. Where the actual delays incurred for adverse weather conditions exceed the programmed delays and such delays have impacted on the critical path of the construction programme, the date for practical completion may be adjusted should the requirements of Clause 23.0 be satisfied.

7.5. Substitution of materials, goods and or workmanship

The removal or substitution of any materials, goods and/or workmanship which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [17.1.8; 23.1 & 2]

7.6. Compliance with Law and Regulations:

The contractor is expected to carry out all works in compliance with all applicable Law and Regulations. The Contractor must submit all relevant compliances, warranties, guarantees and test documentation for:

- Electrical & Mechanical Installation
- Plumbing and drainage
- Lightning protection
- Soil poisoning and weedkiller
- Concrete test and cube results
- Waterproofing guarantee
- TR1 and TR2 prefabricated roof trusses
- Soil compaction
- Fire Compliance
- SANS 10400-A:2010 compliances
- Any other requirement as per the latest National Building Regulation
- Bidders are expected to include in the rates, prices and the tendered total of the prices for all inspections, tests, analysis, commissioning and other associated compliance items, as listed above, payable by the contractor.

8. Access to and coordination of Employers Subcontractors

Bidders must allow for access to the employer's subcontractors and suppliers for the installation of services and goods that are excluded from this contract, if and when applicable.

The Principal Agent will provide the details of all such services to the successful contractor for programming and planning purposes where applicable.

9. Storage of Materials and Goods Recovered or Credit for Old Materials

- 9.1. The contractor will be required to return all reusable and surplus material and goods removed from existing buildings, or installations to the employer.
- 9.2. Bidders shall, in their pricing allow for the loading, delivery, offloading of such items to the employer's storage facility. Tenderers shall also allow for all

temporary storage and protection of these items on the site of the works until such items are returned to the employer's designated storage facility on the site of the works, wherever applicable.

- 9.3. A schedule of all recoverable items expected to be returned to the employer shall be agreed between the employer's representative and the contractor at the site handover. Items not included in such a schedule shall be deemed to be the contractor's property upon demolition.
- 9.4. Any credits to the employer for material from demolitions and installations not returned to the employer shall be priced under the relevant section for credits in the bill of quantities.
- 9.5. A record of these items will be captured on a schedule maintained by the principal agent and the quantity surveyor.

10. Payment of Preliminaries (P&G)

- 10.1. In the event that the contractor, due to causes of his own making, fails to achieve the targets set out in his construction programme and his performance is not in accordance with the contract, payment of the time related P&G will be paid in proportion to the value of the monthly progress payment and not in accordance with the projected cash flow for this item. The Principal Agent shall review the status quo and revert to paying the Contractor in accordance with the contract once the Contractor has demonstrated improvement of their performance and the Principal Agent is satisfied that the contractor is performing diligently.
- 10.2. Similarly the full amount of the fixed portion of the P&G will be paid only once the successful contractor has fully complied with deliverables under this section.
- 10.3. Execution of the scope of work will be not phased and sectional completion will not apply.
- 10.4. Any payments requested as deposits to subcontractors and or suppliers will not be certified for payment unless covered by an approved advance payment guarantee, at the discretion of the Employer and/or Employer's Agent.
- 10.5. **Waiver of Lien** - Clause 11.10 is amended to read 'The contractor shall waive his lien and rights of continuing possession of the works. The employer will not provide a payment guarantee.'

11. Employment of Local Labour

The employer is committed to job creation initiatives involving local labour and suppliers. There are no predetermined targets in relation to the allocation of work to local subcontractors,

suppliers and local labour, however the successful contractor is encouraged to allocate work to local subcontractors, suppliers and local labour.

12. Alternative Offers

Alternative design proposals/ offers will not be considered during the tender stage but may be considered during the construction stage only if the overall programme for completion of the works is not affected and substantial financial savings are achieved and is subject to approval by the Engineer, Architect and any other relevant agents.

13. Retention and Maintenance Period

The maintenance period, after practical completion is achieved, shall be 12 months. An amount equal to 5% of the final contract amount shall be held as retention for the maintenance period.

14. Payment Terms

- 14.1. Clause 25.10 amended to read 'The employer shall pay to the contractor the amount certified in an issued interim and/ or final payment certificate within forty five (45) calendar days of the date of issue of the payment certificate or the contractor's tax invoice whichever is the later date.' The part regarding default and compensatory interest remains unchanged.
- 14.2. Cessions for payments to suppliers and subcontractors will not be allowed but may be considered by the employer under special circumstances.

15. Direct Contractors

In the event that the Hot Isostatic Press (HIP) machine is either scheduled to be and/or is physically delivered to the contract site, at a time when the appointed contractor would already have completed or would have been in a position to complete their contractual scope of works within the allocated contract time, had it not been for the late delivery of the HIP machine, into or from which the contractor is required to connect or terminate any services, including but not limited to, electrical, mechanical, gas, water, drainage or data services, the contractor must, notwithstanding the late delivery and despite the possibility that they may have already de-established from site, still execute the required connections or terminations, and which work shall include availing at least 1 appropriately qualified and experienced personnel for each service during the initial start-up as well as the entire testing, commissioning and acceptance of the HIP machine, specifically, as well as any other contract works, by the employers agents. The employer or employers' agents shall have the sole discretion to determine the commissioning programme, acceptance criteria and required qualifications and experience of the contractors' personnel, the details of which shall be communicated to the contractor in advance. Such work shall neither give rise to nor shall it form the basis of an extension of time claim or any claim for

any form of remuneration or compensation whatsoever, other than that which is a direct result of and solely incurred upon the contractor availing the required personnel to the project site. Consequently, the contractor must provide a firm and fixed lump sum price for the provision of each of the following personnel, and which rates shall include the cost of transport to and from site, sustenance, tools and consumables. This item is to be priced in "clause 16 - direct contractors" of the P&G.

BIDDERS NAME: _____

BIDDERS ADDRESS: _____

PRINT FULL NAMES

SIGNATURE

(Duly authorised to sign on behalf of the tenderer)

DATE

WITNESS 1:

PRINT FULL NAMES

SIGNATURE

DATE

WITNESS 2:

PRINT FULL NAMES

SIGNATURE

DATE

(This document must be signed and witnessed and returned with the bid submission as a returnable documents. Failure to do so may disqualify the submission)



Section 3 - JBCC Principal Building Agreement and Contract Data



PRINCIPAL BUILDING AGREEMENT

Project

Employer

Contractor

Contract Date

File Code

Association of Arbitrators (Southern Africa) NPC



41
years



On application, we nominate and appoint competent and experienced arbitrators, adjudicators and mediators from our roll of certified Fellows;



We provide distance learning courses including our Arbitration Certificate Course, our Fellowship Course, our Accelerated Fellowship Course and our Specialisation in Construction Law Course;



We offer membership on Associate and Fellowship levels.

Our Faculty is receiving registration applications for our 2021 Arbitration Courses and Specialisation in Construction Law Course.

Click on this logo for our membership application forms



For Nominations,
please contact Happiness (ADR Admin Manager):
nominations@arbitrators.co.za

Click on this logo for our course brochures and registration forms



For Membership and Courses,
please contact Mandisa
(Course and Member Manager):
coursecoordinator@arbitrators.co.za



The Joint Building Contracts Committee® - NPC Principal Building Agreement Edition 6.2 – May 2018

JBCC®

The Joint Building Contracts Committee® NPC (JBCC®) is representative of building owners and developers, professional consultants and general and specialist contractors who contribute their knowledge and experience to the compilation of the JBCC® documents. The JBCC® documents portray the consensus view of the constituent members and are published in the interests of standardisation and good practice with an equitable distribution of contractual risk

For more information about the JBCC®, frequently asked questions, where documents may be purchased as well as training courses visit www.jbcc.co.za. The JBCC® does not sell directly to users but may be contacted at info@jbcc.co.za

Principal Building Agreement structure

The agreement clauses follow the project execution sequence. The documents aim to set out clear, balanced and enforceable procedures, rights and obligations which, when competently managed and administered, protect the employer, contractor and subcontractors alike. The following additional documents form part of the suite of contract agreements

- The JBCC® Principal Building Agreement - Contract Data that incorporates specific employer and contractor requirements;
- The JBCC® General Preliminaries that generally covers all aspects of preliminaries for most types of projects;
- The JBCC® Nominated/Selected Subcontract Agreement that replicates the JBCC® Principal Building Agreement with common clauses retaining the same numbering; and
- A comprehensive set of certificate forms and support documents for use in the administration of the agreement

Warning!

The JBCC® Principal Building Agreement Edition 6.2 has been coordinated with the JBCC® Nominated/Selected Subcontract Agreement Edition 6.2, the JBCC® General Preliminaries and the JBCC® certificate forms and support documents. Forms from previous editions are not compatible with the JBCC® Principal Building Agreement Edition 6.2

Persons entering into or preparing contracts using the JBCC® suite of contract agreements and support documents are warned of the dangers inherent in modifying any part of it

Experience has shown that changes drafted by others, including members of the building professions, often have unintended results that may be prejudicial to either, or both, parties

Disclaimer

While the JBCC® aims to ensure that its publications represent best practice, it does not accept or assume any liability or responsibility for any events or consequences which derive from the use of the JBCC® documents

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Actions by the parties / principal agent within a given time

Clause	Time period	Party	Purpose
2.4	1WD-7 CD	parties or principal agent	notices deemed to be received
6.4	5 WD	contractor > principal agent	non-performance of an agent i.t.o. this agreement
6.5	10 WD	employer	appoint another agent/contractor may object
10.6	10 WD notice	contractor > employer	failure to insure - notice – insure + recover expense
11.1	15 WD	contractor	provide guarantee for construction
11.2.1	20 WD	contractor	replace securities
11.5.1-2	15/20 WD	employer	provide / replace guarantee for payment
11.6	10 WD notice	contractor > employer	no security, contractor notice to suspend works
11.8	10 WD	parties	return original/replacement security forms
12.2.2	15 WD	contractor	submit priced document
12.2.6	15 WD	contractor	submit programme
14.4.2	15 WD guarantee	contractor > subcontractor	provide guarantee for payment to nominated subcontractor
14.5	5 WD proof payment	employer (principal agent)	pay nominated subcontractor on default by contractor
14.6	5 WD notice	contractor + subcontractor	termination of subcontractor appointment on default
15.4.2	15 WD guarantee	contractor > subcontractor	provide guarantee for payment to selected subcontractor
15.5	5 WD proof payment	employer (principal agent)	pay selected subcontractor on default by contractor
17.3	5 WD	contractor	proceed with a contract instruction, where practical
19.2.2	5 WD	contractor > principal agent	works ready for inspection
19.4	5+5 WD	contractor > principal agent	no 'list' > notice > deemed practically complete
19.6	5+agreed WD	principal agent > contractor	employer occupies portion of the works, list for completion, fix defects
21.3.1	10 WD	contractor	inspect before expiry of defects liability period
21.3.2	5 WD	contractor > principal agent	invite PA to inspect list for completion
21.5	5 WD notice	contractor > principal agent	inspect > list for final completion > certificate
21.6	10 WD notice	principal agent > contractor	no list for final completion > notice > complete
21.7.3	5 WD notice	principal agent > contractor	inspect > list for final completion > certificate
21.9	5+5 WD	contractor > principal agent	no list for final completion / deemed final completion
23.4.2*	20 WD notice	contractor > principal agent	notice of a possible delay, no details yet
23.5	40 WD claim	contractor > principal agent	delay ceased, details of delay and expenses
23.7	20 WD award	principal agent > contractor	assess claim – accept/reduce/reject
25.2	date [CD]	principal agent > contr/empl	issue payment certificate and support forms
25.10	14 CD payment	employer pay contractor	make payment from date of payment certificate
25.11	21 CD	contractor pay employer	make payment i.t.o. schedule from principal agent
25.13	7 CD payment	contractor pay subcontractor	pay subcontractors i.t.o. schedule from principal agent
25.14	5 WD notice	contractor > employer	no/partial payment > suspend etc
25.15	7 CD payment	principal agent > contractor	final payment certificate after acceptance of final account
26.5*	20 WD notice	contractor > principal agent	notice of possible expense and loss
26.6	40 WD claim	contractor > principal agent	substantiated claim
26.7	20 WD award	principal agent > contractor	assess claim = accept/reduce/reject
26.10	60 WD issue FA	principal agent > contractor	issue final account
26.11	30 WD accept FA	contractor > principal agent	accept final account
26.12	10 WD notice	contractor + principal agent	agree final account or deemed acceptance
27.2.9	5 WD notice	notice to contractor	remedy default before next recovery statement
28.1	10 WD notice	contractor > employer	list of defaults to be remedied > suspend works
28.2	notice	contractor > employer	suspension of works where defaults not remedied
29.2	10 WD	employer > contractor	intention to terminate if defaults not remedied
29.3	notice	employer > contractor	default not remedied, termination forthwith
29.14	notice	contractor > employer	intention to terminate if guarantee for payment not provided/maintained
29.15	10 WD notice	contractor > employer	intention to terminate if defaults not remedied
29.16	forthwith	contractor > employer	default not remedied, termination forthwith
29.17.1	forthwith	contractor > subcontractor	termination where PBA terminated
29.17.2	10 WD notice	contractor	remove construction equipment, temporary works, etc
29.21	10 WD	either party	intention to terminate > impossible to complete
29.24.3	10 WD	contractor	remove construction equipment
29.25.2	20 WD	principal agent	prepare status report
29.25.4	60 WD	principal agent	complete final account
30.2	10 WD	either party	disagreement not resolved > dispute
30.3	10 WD	aggrieved party	refer to adjudication
30.6.4	10 WD	aggrieved party	dissatisfied with adjudication
30.6.5	10 WD	aggrieved party	no adjudication/not accept adjudication ruling > arbitration

Abbreviations: WD = working days CD = calendar days, *No notice, forfeits the opportunity to claim

PRINCIPAL BUILDING AGREEMENT

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INTERPRETATION

1.0 DEFINITIONS and INTERPRETATION

1.1 Definitions

A word or phrase in bold type in this agreement shall have the meaning assigned to it in these definitions
A word or phrase not in bold type shall be interpreted in the context of its usage

AGENT: An entity [CD] appointed by the **employer** to deal with specific aspects of the **works**

AGREEMENT: The completed **JBCC**[®] Principal Building Agreement and **JBCC**[®] **contract data**, the **contract drawings**, the **priced document** and any other documents reduced to writing and signed by the authorised representatives of the **parties**

BILLS OF QUANTITIES: The document drawn up in accordance with the measuring system [CD]

BUDGETARY ALLOWANCE: An amount included in the **contract sum** for work intended for execution by the **contractor**, the extent of which is identified but not detailed

CALENDAR DAYS: Twenty-four (24) hour days commencing at midnight (00:00) which include Saturdays, Sundays, proclaimed public holidays and recorded **contractor's** annual holiday periods [CD]

CERTIFICATE OF FINAL COMPLETION: A certificate issued by the **principal agent** to the **contractor** with a copy to the **employer** stating the date on which **final completion** of the **works**, or of a **section** thereof, was achieved

CERTIFICATE OF PRACTICAL COMPLETION: A certificate issued by the **principal agent** to the **contractor** with a copy to the **employer** stating the date on which **practical completion** of the **works**, or of a **section** thereof, was achieved

COMPENSATORY INTEREST: Interest due to the **contractor** at the ruling rate of **interest** on amounts certified after thirty-one (31) **calendar days** of the date of **practical completion**, compounded monthly until the date of payment

CONSTRUCTION EQUIPMENT: Equipment and/or plant provided by or belonging to the **contractor** and/or **subcontractors** and used during the **construction period**

CONSTRUCTION INFORMATION: All information issued by the **principal agent** and/or **agents** including this **agreement**, specifications, drawings, schedules, **notices** and **contract instructions** required for the execution of the **works**

CONSTRUCTION PERIOD: The period commencing on the intended date [CD] of possession of the **site** by the **contractor** and ending on the date of **practical completion**

CONTRACT DATA: The document listing the project specific information

[CD]: The notation used where project specific information is recorded in the **contract data**

CONTRACT DRAWINGS: The drawings listed [CD]

CONTRACT INSTRUCTION: A written instruction issued by or under the authority of the **principal agent** to the **contractor** that may include drawings, photographs and other **construction information**

CONTRACT SUM: The accepted tender amount inclusive of **tax** [CD], not subject to adjustment

CONTRACT VALUE: A monetary value initially equal to the **contract sum**, subject to adjustment in terms of this **agreement**

CONTRACTOR: The **party** [CD] contracting with the **employer** for the execution of the **works**

DEFAULT INTEREST: Interest at six (6) percentage points per annum above the ruling rate of **interest** where payment has not been received within the stipulated period, compounded monthly from the due date for payment until the date of payment

DEFECT: Any aspect of materials and workmanship forming part of the **works** that does not conform to the **agreement** and/or **construction information**

DIRECT CONTRACTOR: An entity appointed under separate agreement by the **employer** to do work on **site** prior to **practical completion** [CD]

EMPLOYER: The **party** [CD] contracting with the **contractor**

FINAL ACCOUNT: The document prepared by the **principal agent** that reflects the final **contract value** of the **works** at **final completion** or termination

FINAL COMPLETION: The stage of completion as certified by the **principal agent** where the **works**, or a **section** thereof, has been completed and is free of **defects**

FINAL PAYMENT CERTIFICATE: The certificate issued by the **principal agent** after the issue of the **certificate of final completion** and after the **final account** has been agreed

FORCE MAJEURE: An exceptional event or circumstance that:

- Could not have been reasonably foreseen
- Is beyond the control of the **parties**, and
- Could not reasonably have been avoided or overcome

Such an event may include but is not limited to:

- Acts of war (declared or not), invasion and/or hostile acts of foreign enemies
- Insurrection, rebellion, revolution, military or usurped power and terrorism
- Civil commotion, disorder, riots, strike, lockout by persons other than the **contractor's** employees or his **subcontractors**
- Sonic shock waves caused by aircraft or other aerial devices and ionising or radioactive contamination
- Explosive materials, except where attributable to the **contractor's** use of such technology
- Natural catastrophes including earthquakes, floods, hurricanes or volcanic activity

FREE ISSUE: Materials and goods provided at no cost to the **contractor** by the **employer** for inclusion in the **works** [CD]

GUARANTEE FOR ADVANCE PAYMENT: A **security** in terms of the **JBCC®** Guarantee for Advance Payment form, obtained by the **contractor** from an institution approved by the **employer**

GUARANTEE FOR CONSTRUCTION: A **security** in terms of the **JBCC®** Guarantee for Construction form, obtained by the **contractor** from an institution approved by the **employer** [CD]

GUARANTEE FOR PAYMENT: A **security** in terms of the **JBCC®** Guarantee for Payment form, obtained by the **employer** from an institution approved by the **contractor** [CD]

INTEREST: The bank rate applicable from time to time to registered banks borrowing money from the Central or Reserve Bank of the country [CD]. The ruling bank rate on the first **calendar day** of each month shall be used in calculating the interest due for such month

JBCC®: The Joint Building Contracts Committee® NPC

LATENT DEFECT: A **defect** that an inspection of the **works** by the **principal agent** and/or **agents** would not reasonably have revealed

LAW: The law of the country [CD]

LIST FOR COMPLETION: A list that may include marked up drawings and photographs issued by the **principal agent** where **practical completion** has been certified, listing **defects** and/or outstanding work to be completed

LIST FOR FINAL COMPLETION: A **list for completion** that may include marked up drawings and photographs issued by the **principal agent** after the inspection of the **works** for **final completion**, where **final completion** has not been achieved, listing **defects** and/or outstanding work to be completed to achieve **final completion**

LIST FOR PRACTICAL COMPLETION: A comprehensive and conclusive list that may include marked up drawings and photographs issued by the **principal agent** after the inspection of the **works** for **practical completion**, where **practical completion** has not been achieved, listing the **defects** and/or outstanding work to be completed to achieve **practical completion**

MATERIALS AND GOODS: Unfixed materials, goods and/or items fabricated for inclusion in the **works** whether stored on or off the **site** or in transit

NOTICE: A written communication, excluding social media, issued by either **party**, the **principal agent** and/or **agents** to the other **party**, the **principal agent** and/or **agents** to, inter alia, record an event, request outstanding **construction information**, or where **suspension** or resumption of the **works** and/or termination of this **agreement** is contemplated

N/S SUBCONTRACT AGREEMENT: The completed **JBCC**[®] Nominated/Selected Subcontract Agreement (NSSA) and **JBCC**[®] NSSA contract data, the subcontract drawings, the subcontract priced document and any other documents reduced to writing and signed by the authorised representatives of the **contractor** and of the **subcontractor**

PARTY: The **employer** or the **contractor** and 'parties' shall refer to both of them

PAYMENT CERTIFICATE: A certificate issued at regular agreed intervals [CD] by the **principal agent** to the **parties** certifying the amount due and payable in terms of the **JBCC**[®] Payment Certificate format

PENALTY: The stipulated amount per **calendar day** [CD] payable by the **contractor** to the **employer** where the date or the revised date for **practical completion**, whichever is the later, has not been met

PRACTICAL COMPLETION: The stage of completion as certified by the **principal agent** where the **works**, or a **section** thereof, has been completed and is free of patent **defects** other than minor **defects** identified in the **list for completion** and can be used for the intended purpose [CD]

PRELIMINARIES: The **JBCC**[®] General Preliminaries and/or the items listed in the preliminaries section of the **priced document**

PRICED DOCUMENT: The document incorporating quantities and/or rates used in the compilation of the **contract sum** such as **bills of quantities**, **preliminaries** and schedules of rates

PRIME COST AMOUNT: An amount included in the **contract sum** for the delivered cost of **materials and goods** obtained from a supplier as instructed by the **principal agent**

PRINCIPAL AGENT: The entity [CD] appointed by the **employer** with full authority and obligation to act in terms of this **agreement**

PROGRAMME: A diagrammatic representation of the planned execution of units of work or activities by the **contractor** and **subcontractors** indicating the dates for commencement and completion prepared and maintained by the **contractor**

PROVISIONAL SUM: An amount included in the **contract sum** for the supply and installation of work by a **subcontractor**

RECOVERY STATEMENT: The statement prepared and issued in conjunction with each **payment certificate** by the **principal agent** in terms of the **JBCC**[®] Recovery Statement format

SECTION: An identified portion of the **works** for which **practical completion** is required by a date earlier than that required for the **works** as a whole [CD]

SECURITY: A monetary guarantee [CD] provided by the **employer** to the **contractor**, or vice versa, in terms of this **agreement** from which either **party** may recover expense and loss in the event of default

SITE: The land or place where the **works** is to be executed [CD]

STATUS REPORT: A report compiled by the **principal agent** and/or **agents** in the event of termination of the **agreement**, or where the **works** has been suspended due to a **force majeure** event, or in the event of termination of a **n/s subcontract agreement** by the **contractor**, to record the state of completion or otherwise of the **works** or the n/s subcontract works. Such **status report** may include marked up drawings and photographs

SUBCONTRACTOR: A nominated or a selected subcontractor appointed in terms of the **n/s subcontract agreement** by the **contractor** in accordance with a **contract instruction** for the supply and installation of work for which a **provisional sum** has been included in the **contract sum**

SUSPENSION: The temporary cessation of the **works** by the **contractor**

TAX: Value-added tax, general sales tax or similar consumption tax applicable by **law**

WORKING DAYS: **Calendar days** which exclude Saturdays, Sundays, proclaimed public holidays and recorded **contractor's** annual holiday periods [CD]

WORKS: The extent of work to be executed by the **contractor** described in the **agreement** and **contract instructions**, which includes **free issue** and **materials and goods**. Work or installations to be executed by **direct contractors** and others responsible to the **employer** are excluded [CD]

1.2 Interpretation

- 1.2.1 In this document, unless inconsistent with the context, the words “accept, allow, appoint, approve, authorise, certify, decide, demand, designate, grant, inform, instruct, issue, list, **notice**, notify, object, record, reduce, refuse, request, state” and their derivatives require such acts to be in writing
- 1.2.2 The masculine gender includes the feminine and neuter genders and vice versa, the singular includes the plural and vice versa and a person includes juristic or artificial persons
- 1.2.3 The headings of clauses are for information only and shall not be used in interpretation
- 1.2.4 Reference to a clause number written as clause [54.3.2] means that specific clause; or clause [54.3.2-4] means sub-clauses 2 to 4 inclusively; or clause [54.3.2 & 4] means sub-clauses 2 and 4 only
- 1.2.5 The word “deemed” shall be conclusive that something is fact, regardless of the objective truth

2.0 LAW, REGULATIONS AND NOTICES

- 2.1 The **contractor** shall comply with the **law** [CD], obtain permits, licences and approvals required and pay related charges for the execution of the **works** [17.1.4]. The **employer** shall comply with the **law** [CD], obtain permits, planning, building or similar permissions and pay charges for the **works** other than those which are the responsibility of the **contractor** [26.4.1]
- 2.2 All communication or **notices** between the **parties** shall be in the language of this **agreement** and in a format that can be read, copied and recorded
- 2.3 Legal processes arising out of or concerning this **agreement** may validly be delivered to and served on the **parties** at the physical address of the **parties** recorded in this **agreement**. Either **party** may, at any time, by **notice** to the other, change his physical address provided it is in the same country as the original address
- 2.4 **Notices** given in terms of this **agreement** shall be deemed to have been received where:
 - 2.4.1 Delivered by hand - on the day of delivery
 - 2.4.2 Sent by electronic mail, excluding social media - within one (1) **working day**
 - 2.4.3 Sent by registered post - within seven (7) **calendar days** after posting

3.0 OFFER AND ACCEPTANCE

- 3.1 The objective of this **agreement** is the execution of and payment for the **works** for which there has been an offer by the **contractor** and an acceptance by the **employer**
- 3.2 The currency applicable to this **agreement** is as recorded [CD]
- 3.3 This **agreement** shall come into force on the date of acceptance by the **employer** and continue to be of force and effect until the end of the **latent defects** liability period [22.0] notwithstanding termination [29.0] or the certification of **final completion** [21.0] and final payment [25.0]
- 3.4 Should any provision of this **agreement** be unenforceable the **parties** shall act in good faith to agree alternative provisions in terms of this **agreement**
- 3.5 Failure or omission by a **party** to enforce any provision of this **agreement** shall not constitute a waiver of such provision or affect such **party's** rights to require the performance of such provision in the future

4.0 CESSION AND ASSIGNMENT

- 4.1 Neither **party** shall cede rights or assign rights and obligations under this **agreement** without the prior written consent of the other **party**, which consent shall not be unreasonably withheld
- 4.2 The **contractor** shall not consent to a nominated **subcontractor** ceding rights or assigning rights and obligations under this **agreement** without obtaining the prior written consent of the **principal agent**
- 4.3 Notwithstanding the above, where a **party** cedes any right to any monies due or to become due under this **agreement** as security in favour of a financial institution, consent shall not be required provided **notice** of such cession is timeously given to the other **party**

5.0 DOCUMENTS

- 5.1 Documents referred to in this **agreement** shall mean the current edition thereof with all amendments thereto as at the date of submission of the **contractor's** tender
- 5.2 The **parties** shall sign the original **agreement** and shall each be issued with a copy thereof by the **principal agent**. The original signed **agreement** shall be held by the **principal agent** [CD]
- 5.3 Persons authorised to act on behalf of the **parties** and/or **agents** appointed by the **employer** shall be identified in the **construction information**. Such authorised persons may be changed by **notice** to the other **party**
- 5.4 The **priced document** shall not be used as a specification of **materials and goods** or methods
- 5.5 The content of this **agreement** shall not be published or disclosed or used for any purpose other than that specified in this **agreement** by one **party** without the prior written consent of the other **party**
- 5.6 The **principal agent** and/or **agents** shall timeously provide the number of copies [CD] of drawings, un-priced **bills of quantities** and other **construction information** at no cost to the **contractor**

6.0 EMPLOYER'S AGENTS

- 6.1 The **employer** warrants that the **principal agent** has full authority and obligation to act on behalf of and bind the **employer** in terms of this **agreement**. The **principal agent** has no authority to amend this **agreement**
- 6.2 The **employer** may appoint **agents** to deal with specific aspects of the **works** in terms of this **agreement** [CD]. The **principal agent** shall give **notice** to the **contractor** where such authority is delegated to **agents** to issue **contract instructions** and perform duties for specific aspects of the **works**. An **agent** appointed in terms of this clause shall not be entitled to subdelegate his authority without the prior written consent of the **employer** and **notice** to the **contractor**
- 6.3 The **principal agent** and/or **agents** shall declare any interest or involvement in the **works** other than a professional interest, where applicable [CD]
- 6.4 Where the **principal agent** fails to act in terms of this **agreement** and/or an **agent** fails to act in terms of delegated authority, the **contractor** shall give **notice** to the **principal agent**, with a copy to the **employer**, to rectify such default within five (5) **working days**. Where such default has not been rectified, the **contractor** may give **notice** to suspend the **works** [28.0]
- 6.5 Where the **principal agent** and/or an **agent** fails to act or is unable to act or ceases to be the **principal agent** or an **agent** in terms of this **agreement**, the **employer** shall appoint another **principal agent** and/or an **agent** within ten (10) **working days** of the date of such **notice** from the **contractor**. The **employer** shall not appoint a **principal agent** and/or an **agent** against whom the **contractor** makes reasonable objection within five (5) **working days** of receipt of **notice** of intention to make such an appointment
- 6.6 The **employer** shall not interfere with or prevent the **principal agent** and/or **agents** from exercising fair and reasonable judgement when performing their obligations in terms of this **agreement**

7.0 DESIGN RESPONSIBILITY

- 7.1 The **contractor** shall not be responsible for the design of the **works** other than the **contractor's** and **subcontractors'** temporary works. The **contractor** shall not be responsible for the coordination of design elements
- 7.2 Any design responsibility undertaken by a **subcontractor** shall not devolve on the **contractor**. All contractual or other rights the **contractor** has against such **subcontractor** arising from any design responsibility undertaken shall be ceded to the **employer** on the date of **final completion** or the date of termination of this **agreement** [9.2.3]
- 7.3 The **contractor** shall be responsible for the timely submission of design documentation by a selected **subcontractor** for acceptance and coordination by the **principal agent** and/or **agents** [23.2.8]

INSURANCES AND SECURITIES

8.0 WORKS RISK

- 8.1 The **contractor** shall take full responsibility for the **works** from the date on which possession of the **site** is given to the **contractor** and up to the date of issue of the **certificate of practical completion** or deemed achievement of **practical completion** for the **works** as a whole, or a **section** thereof. Thereafter responsibility for the **works** as a whole, or a **section** thereof, shall pass to the **employer**
- 8.2 The **contractor** shall make good physical loss and repair damage to the **works** caused by or arising from:
- 8.2.1 Any cause before the date of **practical completion** [19.0]
- 8.2.2 Any act or omission of the **contractor** in the course of any work carried out in pursuance of the **contractor's** obligations after the date of **practical completion**
- 8.3 The liability of the **contractor** in respect of any loss or damage shall include, but not be limited to:
- 8.3.1 The cost of making good such physical loss and repairing damage to the **works** including clearing away and removing all debris and any other costs to reinstate the **works**
- 8.3.2 The new replacement value of **free issue** [12.1.10]
- 8.3.3 The cost of additional professional services
- 8.4 Notwithstanding subclause 8.3, the limit of the **contractor's** liability shall not exceed the amount of the contract works insurance [10.1.1] [CD]
- 8.5 The **contractor** shall not be liable for the cost of making good physical loss and repairing damage to the **works** caused by or arising from:
- 8.5.1 The use or occupation of any part of the **works** by the **employer**, the **employer's** employees and/or **agents** and those for whose actions they are responsible
- 8.5.2 An act or omission of the **employer**, the **employer's** employees and/or an **agent** and those for whose actions they are responsible
- 8.5.3 An act or omission by a **direct contractor**
- 8.5.4 The use or occupation of any part of the **works** by a **direct contractor**
- 8.5.5 The design of the **works** for which the **contractor** is not responsible [7.1]
- 8.5.6 A **defect** in **free issue** or **materials and goods** specified by trade name where the **contractor** has no right of substitution. The **contractor** hereby cedes any right of action to the **employer** that may exist against the supplier and/or manufacturer of such **free issue** and/or **materials and goods**
- 8.5.7 **Force majeure**

- 8.6 Where the **contractor** is not liable for the cost of making good physical loss or repairing damage [8.5] such making good and/or expense and/or loss shall be measured and valued and included in the **contract value** by the **principal agent** [17.1.10]
- 8.7 The **contractor** shall immediately give **notice** to the **principal agent** on becoming aware of physical loss or damage to the **works**

9.0 INDEMNITIES

- 9.1 The **contractor** indemnifies and holds harmless the **employer**, the **employer's** employees and/or **agents** from all claims or proceedings for damages, expense and/or loss including legal fees and expenses in respect of or arising from:
- 9.1.1 Death or bodily injury or illness of any person or physical loss or damage to any property other than the **works** arising out of or due to the execution of the **works** or presence on and/or occupation of the **site** by the **contractor**. Should such an event occur, the **contractor** shall forthwith give **notice** to the **principal agent**
- 9.1.2 Non-compliance by the **contractor** with the **law**, regulation or bylaw of any local or other authority and the failure by the **contractor** to obtain any permit, licence or approval that the **contractor** is required to obtain in terms of this **agreement** [2.1]
- 9.1.3 Physical loss or damage to **construction equipment** or other property belonging to the **contractor** or the **contractor's subcontractors** but excluding **direct contractors'** equipment or property
- 9.2 The **employer** indemnifies and holds the **contractor** harmless from all claims or proceedings for damages, expense and/or loss, including legal fees and expenses, in respect of or arising from:
- 9.2.1 An act or omission of the **employer**, the **employer's** employees and/or **agents** and those for whose actions they are responsible
- 9.2.2 An act or omission of a **direct contractor** [16.0]
- 9.2.3 Design of the **works** [7.2] where the **contractor** is not responsible for such design
- 9.2.4 The use or occupation of any part of the **works** by the **employer**, tenants, **direct contractors** or others authorised by the **employer**
- 9.2.5 Proceeding with the **works** on instruction from the **employer** without the **employer** obtaining the required permission under the **law** in terms of this **agreement** [2.1]
- 9.2.6 Interference with any servitude or other right not recorded in **construction information** issued to the **contractor** that is the unavoidable result of the execution of the **works** including the removal of or weakening of or interference with the support of land and property adjacent to or within the **site** unless resulting from any negligent act or omission by the **contractor** or his **subcontractors**. Should such an event occur, the **contractor** shall forthwith give **notice** to the **principal agent**
- 9.2.7 Physical loss or damage to an existing structure and the contents thereof where this **agreement** is for alterations or additions to an existing structure. Should such an event occur, the **contractor** shall forthwith give **notice** to the **principal agent**
- 9.2.8 A **defect in free issue**
- 9.2.9 Physical loss or damage to the **works** where a **certificate of practical completion** has been issued [19.0] or **practical completion** has been deemed to have been achieved
- 9.2.10 Advance payments certified by the **principal agent** and paid by the **contractor** to **subcontractors** [27.1.8; 27.2.4]

10.0 INSURANCES

- 10.1 The **party** responsible shall effect and keep the respective insurances [CD] in force in the joint names of the **parties** from the date of possession of the **site** until the issue of the **certificate of practical completion** with an extension to cover the **contractor's** obligations after the date of **practical completion** [8.2.2]:
- 10.1.1 Contract works insurance [CD] for the **works** that shall make provision for **direct contractors** [CD], **free issue** [CD], **materials and goods**, professional fees, temporary works, clearing away and removing of all debris and any other costs to reinstate the **works** and where required, damage to **employer** owned surrounding property [CD] where not covered under the removal of lateral support insurance
- 10.1.2 Supplementary insurance [CD] for the **works** against loss or damage caused by civil commotion, riot, strike, labour disturbance and lockout to the extent not insured under the contract works insurance
- 10.1.3 Public liability insurance [CD] providing indemnity in respect of accidental death or injury to any person and accidental loss of or physical damage to tangible property, to remain in force until the date of **final completion**
- 10.1.4 Removal of lateral support insurance [CD] where the **employer** considers that the execution of the **works** could cause the removal of or weakening of or interference with the support of land or property adjacent to or within the **site** (also including **employer** owned surrounding property) and the consequences thereof. The **employer** shall appoint an **agent** to design and monitor appropriate support structures for use in excavations and/or in existing property that form part of the **works** and/or the **site**
- 10.1.5 Other insurances [CD]
- 10.2 Where **practical completion** in **sections** is required [20.0], or where the **works** is for alterations and additions, the **employer** shall effect and keep in force contract works insurance [10.1.1], supplementary insurance [10.1.2], public liability insurance [10.1.3] and where applicable, removal of lateral support insurance [10.1.4] and other insurances [10.1.5] in the joint names of the **parties** until the date of **final completion**
- 10.3 The **party** responsible for effecting insurances [10.1.1-5; 10.2] shall provide proof of the insurances effected to the other **party** before the commencement of the **construction period** and, where required, provide proof of extension or renewal of such insurances before their expiry. Upon request the **party** responsible for effecting insurances shall provide the other **party** with the entire policy wording of such insurances
- 10.4 The **contractor** shall be responsible for the deductible amounts [CD] other than where a claim against an insurance cover is due to default of the **employer**, the **employer's** employees and/or **agents** and those for whose actions they are responsible
- 10.5 The **employer** may, at his expense, require the cover of the contract works insurance [10.1.1] to be increased. The **party** responsible for effecting insurances shall provide written proof of such adjustment
- 10.6 Where the **employer** fails to effect the required insurances within ten (10) **working days** after **notice** to do so the **contractor** may, on expiry of the notice period, suspend the **works** until such insurances have been effected [28.1.4]
- 10.7 Where this **agreement** is terminated [29.0] and the **contractor** is not required to make good the physical loss or repair damage to the **works**, the right to the proceeds of an insurance claim shall vest solely in the **employer**. The **party** responsible for the insurances shall give **notice** to the insurer to clarify the status of the insurance cover and/or further insurance obligations applicable to the **works**, public liability insurance, supplementary insurance and removal of lateral support insurance
- 10.8 Any amounts not recovered from insurers shall be borne by the **employer** or **contractor** in accordance with their respective obligations under this **agreement**
- 10.9 The **party** responsible for effecting the insurances shall keep insurers informed of any relevant changes in respect of this **agreement**
- 10.10 The **parties** shall at their discretion effect insurances for aspects not insured such as **construction equipment** and work by **direct contractors** after **practical completion**

11.0 SECURITIES

- 11.1 The **contractor** shall provide to the **employer** a **guarantee for construction** within fifteen (15) **working days** of acceptance of the **contractor's** tender and choose:
- 11.1.1 A **guarantee for construction** – (variable) initially equal to ten per cent (10%) of the **contract sum** and keep such **security** valid and enforceable until the **final payment certificate** has been issued to the **contractor** [25.15]
- or ...
- 11.1.2 A **guarantee for construction** - (fixed) equal to five per cent (5%) of the **contract sum** and a payment reduction of five per cent (5%) of the value of each **payment certificate** up to a maximum of five per cent (5%) of the **contract sum** [25.3.3; 25.12]. The **contractor** shall keep such **security** valid and enforceable until the only or last **certificate of practical completion** has been issued
- 11.2 The **contractor** shall:
- 11.2.1 Maintain and/or replace a **guarantee for construction** - (variable or fixed) [11.1.1-2] at least twenty (20) **working days** before such **security** is due to expire
- 11.2.2 Provide a **guarantee for advance payment** where an advance payment is required. The **contractor** shall keep such **security** valid and enforceable until the advance payment is repaid [11.3]
- 11.3 The amount of the **guarantee for advance payment** shall be reduced by the amount repaid by the **contractor** as certified by the **principal agent** in **payment certificates**. If the advance payment is not repaid by the date a **certificate of practical completion** is issued or deemed achievement of **practical completion** or by the date of termination by the **employer** due to **contractor** default [29.9.3], the entire outstanding amount shall immediately become due and payable
- 11.4 Where the **contractor** fails to provide the specified **guarantee for construction** the **employer** may:
- 11.4.1 Hand over the **site** to the **contractor** and withhold an amount in interim **payment certificates** to the **contractor** until the total amount withheld is equal to ten per cent (10%) of the **contract sum**. The amount withheld shall be reduced at **practical completion** [19.0] to two and one half per cent (2.5%) of the **contract sum** and to zero per cent (0%) in the **final payment certificate** [25.9; 25.15]
- or ...
- 11.4.2 Terminate this **agreement** [29.1.1; 29.2]
- 11.5 The **employer** shall:
- 11.5.1 Provide to the **contractor** a **guarantee for payment** where required in the accepted tender [CD] within fifteen (15) **working days** of acceptance of the **contractor's** tender
- 11.5.2 Keep such **guarantee for payment** valid and enforceable in terms of the **security** form and/or provide a replacement **guarantee for payment** at least twenty (20) **working days** before such **security** is due to expire
- 11.6 Where the **employer** fails to provide the **guarantee for payment** [CD], or such **security** has expired, the **contractor** may, after giving ten (10) **working days** notice, where such default has not been remedied, forthwith suspend the **works** until such **security** has been provided [12.1.1; 28.1.1] or by further **notice** terminate this **agreement** [29.14.2; 29.15]
- 11.7 Where the **contract value** exceeds the **contract sum** by more than ten per cent (10%) the **guarantee for payment** shall be adjusted at the **employer's** expense. The **employer** shall provide written proof of such adjustment
- 11.8 The original or the replacement **security** form(s) shall be returned to the other **party** within ten (10) **working days** after the expiry date
- 11.9 Where a **party** makes an unjustified call on a **security**, the amount paid and **default interest** shall be paid to the other **party** [27.1.2; 27.1.5]
- 11.10 The **contractor** shall waive his lien or right of continuing possession of the **works** on receipt of a **guarantee for payment** from the **employer**

EXECUTION

12.0 OBLIGATIONS OF THE PARTIES

12.1 The **employer** shall:

- 12.1.1 Provide a **guarantee for payment** [11.5], where applicable [CD]
- 12.1.2 Record specific requirements [CD] where the existing premises will be in use and occupied during the execution of the **works** including restriction of working hours [CD]
- 12.1.3 Record and describe relevant natural features and known services [CD] where the **contractor** shall be responsible for their preservation
- 12.1.4 Define any restrictions to the **site** or areas that the **contractor** may not occupy [CD]
- 12.1.5 Give possession of the **site** to the **contractor** on the agreed date [CD]
- 12.1.6 Effect and keep in force insurances in the joint names of the **parties**, where the **employer** is responsible for providing insurances [CD]
- 12.1.7 Make payments by the due date [25.10] [CD]
- 12.1.8 Make advance payments, where required [CD]
- 12.1.9 Permit reasonable access to the **works** by the **contractor** and/or **subcontractors** subsequent to **practical completion** to fulfil outstanding obligations [17.1.17; 19.7]
- 12.1.10 Supply **free issue** [CD] to suit the **programme**
- 12.1.11 Define the extent of work to be carried out by **direct contractors** [CD]
- 12.1.12 Ensure that the **principal agent** and/or **agents** provide adequate **construction information** timeously to the **contractor**
- 12.1.13 At the **employer's** discretion make direct payment where the **contractor** has failed to honour a n/s subcontract payment advice after **notice** of default by a **subcontractor** to the **principal agent**, the **employer** and the **contractor** [14.5 and/or 15.5]

12.2 The **contractor** shall:

- 12.2.1 Have inspected the **site** and any existing structures and be thoroughly acquainted with the conditions under which the **works** is to be executed including means of access and any matters which may influence the execution and/or the pricing of the **works**
- 12.2.2 Within fifteen (15) **working days** of acceptance of the **contractor's** tender submit to the **principal agent** the **priced document** with items priced to include all costs, overheads and profit, extended and cast. Where the **priced document** contains errors or discrepancies and/or prices considered by the **principal agent** to be imbalanced or unreasonable the **principal agent** and the **contractor** shall adjust such prices without any change to the **contract sum**
- 12.2.3 Provide a **guarantee for construction** [11.1; 11.2.1]
- 12.2.4 Provide a **guarantee for advance payment** [11.2.2], where applicable [CD]
- 12.2.5 Effect and keep in force insurances in the joint names of the **parties** where the **contractor** is responsible for providing insurances [10.0] [CD]
- 12.2.6 Prepare and submit to the **principal agent** within fifteen (15) **working days** of receipt of **construction information a programme** for the **works** in sufficient detail to enable the **principal agent** to monitor the progress of the **works**
- 12.2.7 On being given possession of the **site** commence the **works** and proceed with due diligence, regularity, expedition, skill and appropriate resources to bring the **works** to **practical completion** and to **final completion** [21.12]
- 12.2.8 Provide everything necessary for the proper execution of the **works** in compliance with the **agreement**

- 12.2.9 Coordinate the **programme** with **subcontractors'** and **direct contractors'** **programmes**
- 12.2.10 Regularly update the **programme** to illustrate progress of the **works** and revise the **programme** where the **principal agent** has revised the date for **practical completion**
- 12.2.11 Regularly submit to the **principal agent** a progress report and a schedule of outstanding **construction information** to avoid delays to the **works**
- 12.2.12 Cooperate with the **principal agent** in the preparation of cash flow projections and the compilation of **payment certificates** [25.1]
- 12.2.13 Designate a competent person to continuously administer and control the **works** and to receive and implement **notices** and **contract instructions** on behalf of the **contractor**
- 12.2.14 Maintain daily records of categories of persons and **construction equipment** employed on the **works** and regularly provide copies to the **principal agent**
- 12.2.15 Keep on **site** a copy of all **construction information** required for execution of the **works** to which the **employer** and **principal agent** and/or **agents** shall have reasonable access
- 12.2.16 Allow the **employer** and **principal agent** and/or **agents** reasonable access to the **works**, workshops and other places where work is being prepared, executed and/or stored
- 12.2.17 Give **notice** forthwith to the **principal agent** and/or the **employer** where items of **free issue** have been received damaged prior to storage or, where on unpacking, are found not to be in good order before installing such items
- 12.2.18 Provide, maintain and remove on **practical completion** all temporary structures, **construction equipment** and notice boards
- 12.2.19 On achievement of **practical completion** hand over to the **principal agent** all information for the preparation of 'as built' documentation and applicable statutory and/or regulatory approval certificates as well as all operating and instruction manuals and the like
- 12.2.20 Cede to the **employer** on the date of issue of the **certificate of final completion** any guarantees, product warranties or indemnities pertaining to the **works**. This cession shall not prejudice any other rights that the **employer** may have [21.11]
- 12.2.21 Forthwith notify all **subcontractors** where a **certificate of practical completion** and/or a **certificate of final completion** has been issued by the **principal agent** for the **works**, or a **section** thereof
- 12.3 The **principal agent** and the **contractor** shall hold regular meetings to monitor progress of the **works** and to deal with technical and coordination matters. The **principal agent** shall record and timeously distribute the minutes of such meetings

13.0 SETTING OUT

- 13.1 The **principal agent** and/or an **agent** with delegated authority shall:
 - 13.1.1 Point out boundary pegs or beacons identifying the **site** and the datum level
 - 13.1.2 Define the setting out points and levels required for the execution of the **works**
- 13.2 The **contractor** shall:
 - 13.2.1 Be responsible for accurate setting out of the **works** notwithstanding checking by others
 - 13.2.2 Be responsible for the preservation and the reinstatement of boundary pegs, beacons and other survey information and, where disturbed or destroyed, replace such items at his expense
 - 13.2.3 Not be responsible for incorrect setting out if incorrect information was issued to the **contractor**. In such event the **contractor** may be entitled to a revision of the date for **practical completion** [23.2.5] and/or an adjustment of the **contract value** [26.0]
 - 13.2.4 Immediately suspend affected work to an appropriate extent where encroachments of adjoining structures occur and where undocumented services, natural features, articles of value or relics are uncovered on **site** and forthwith give **notice** to the **principal agent** who shall issue a **contract instruction** on how to proceed with the **works**. Any relics or other articles of value found on the **site** shall remain the property of the **employer**

14.0 NOMINATED SUBCONTRACTORS

14.1 The **principal agent** and/or **agents** shall:

14.1.1 Prepare tender documents in conformity with the **n/s subcontract agreement** and this **agreement** for work intended to be executed by a nominated **subcontractor**

14.1.2 Call for tenders

14.1.3 Scrutinise the received tenders for compliance with the tender documents in consultation with the **contractor**, where appointed

14.1.4 Nominate a **subcontractor** and instruct the **contractor** [17.1.14] to appoint such **subcontractor** as a nominated **subcontractor** in terms of the **n/s subcontract agreement** and other tender requirements

14.1.5 Inform the **contractor** where an advance payment is to be made to the **subcontractor** for an amount included in the accepted tender and that a **guarantee for advance payment** shall be provided by the **subcontractor** for the amount stated [NSSA-CD]

14.2 The **contractor** may refuse to appoint such **subcontractor**:

14.2.1 Against whom the **contractor** makes a reasonable objection

14.2.2 Who refuses or fails to enter into a **n/s subcontract agreement** and/or to comply with other tender requirements

14.2.3 Who has failed to provide a required security [NSSA-CD]

14.3 Where such **subcontractor** is not appointed by the **contractor** for the reasons stated [14.2], or where the appointment of a **subcontractor** has been terminated, another **subcontractor** shall be nominated and appointed in accordance with a **contract instruction** issued by the **principal agent**

14.4 Where the **subcontractor** has complied with the tender requirements, in accordance with a **contract instruction** issued by the **principal agent** [17.1.14], the **contractor** shall:

14.4.1 Appoint the **subcontractor** as a nominated **subcontractor** and forward a copy of the signed **n/s subcontract agreement** to the **principal agent**

14.4.2 Provide a **guarantee for payment** in the amount stated within fifteen (15) **working days** of such appointment, where required in the **n/s subcontract agreement** [CD]

14.4.3 Forward the **subcontractor**'s regular payment claims to the **principal agent** and/or **agents** by the date stated [NSSA-CD]

14.4.4 Issue to each **subcontractor** (with a copy to the **principal agent**) a **JBCC**[®] **n/s subcontract payment advice** and a **JBCC**[®] **n/s subcontract recovery statement** to reconcile the amount due for payment with the amount stated in the **JBCC**[®] **n/s subcontract payment notification** issued by the **principal agent**

14.4.5 Pay the **subcontractor** the amount certified by the date stated in the **JBCC**[®] **NSSA contract data** [25.13]

14.5 Where the **contractor** fails to provide proof of payment to the **subcontractor** within five (5) **working days** of a **notice** by the **principal agent**, the **employer** may instruct the **principal agent** to certify direct payment to the **subcontractor** and recover such amount from the **contractor** [27.2.7]

14.6 Where a nominated **subcontractor** has been declared insolvent, or where, after notification by the **contractor**, the **principal agent** agrees that a nominated **subcontractor** is in default of a material term of the **n/s subcontract agreement**, the **principal agent** shall instruct the **contractor** to give **notice** to the **subcontractor** to rectify such default. The **principal agent** shall instruct the **contractor** to terminate the **n/s subcontract agreement** should such default continue for five (5) **working days** after such **notice** [17.1.15]

14.7 Where a **n/s subcontract agreement** with a nominated **subcontractor** is terminated:

14.7.1 Due to default or insolvency of the **subcontractor** [23.2.10], or default of the **employer**, the **principal agent** and/or **agents** [23.2.11] any variation in the cost of completing such subcontract works shall be for the account of the **employer**

14.7.2 Due to default or insolvency of the **contractor** any variation in the cost of completing such subcontract works shall be for the account of the **contractor**. The **employer** may recover expense and/or loss [27.2.8]

- 14.7.3 The **principal agent** shall instruct the **contractor** to appoint another nominated **subcontractor** [14.1.4] to complete the subcontract works
- 14.8 There shall be no privity of contract between the **employer** and a **subcontractor** appointed by the **contractor**

15.0 SELECTED SUBCONTRACTORS

- 15.1 The **principal agent** and/or **agents** shall:
- 15.1.1 Prepare tender documents in conformity with the **n/s subcontract agreement** and this **agreement** for work intended to be executed by a selected **subcontractor** in consultation with and to the reasonable approval of the **contractor**
- 15.1.2 Call for tenders from a list of tenderers agreed between the **contractor** and the **principal agent**
- 15.1.3 Scrutinise the received tenders for compliance with the tender documents in consultation with the **contractor**
- 15.1.4 In consultation with the **contractor**, choose the compliant tenderer to be appointed as a selected **subcontractor** in terms of the **n/s subcontract agreement**
- 15.1.5 Inform the **contractor** where an advance payment is to be made to the **subcontractor** for an amount included in the accepted tender and that a **guarantee for advance payment** shall be provided by the **subcontractor** for the amount stated [NSSA-CD]
- 15.2 The **contractor** may refuse to appoint such **subcontractor**:
- 15.2.1 Who refuses or fails to enter into a **n/s subcontract agreement** and/or to comply with other tender requirements
- 15.2.2 Who has failed to provide a required security [NSSA-CD]
- 15.2.3 Against whom the **contractor** makes a reasonable objection where circumstances have changed
- 15.3 Where such **subcontractor** is not appointed by the **contractor** for the reasons stated [15.2], or where the appointment of a **subcontractor** has been terminated, another **subcontractor** shall be chosen in consultation with the **contractor** and appointed in accordance with a **contract instruction** issued by the **principal agent**
- 15.4 Where the **subcontractor** has complied with the tender requirements, in accordance with a **contract instruction** issued by the **principal agent** [17.1.14], the **contractor** shall:
- 15.4.1 Appoint the **subcontractor** as a selected **subcontractor** and forward a copy of the signed **n/s subcontract agreement** to the **principal agent**
- 15.4.2 Provide a **guarantee for payment** in the amount stated within fifteen (15) **working days** of such appointment, where required in the **n/s subcontract agreement** [CD]
- 15.4.3 Forward the **subcontractor**'s regular payment claims to the **principal agent** and/or **agents** by the date stated [NSSA-CD]
- 15.4.4 Issue to each **subcontractor** (with a copy to the **principal agent**) a **JBCC**[®] n/s subcontract payment advice and a **JBCC**[®] n/s subcontract recovery statement to reconcile the amount due for payment with the amount stated in the **JBCC**[®] n/s subcontract payment notification issued by the **principal agent**
- 15.4.5 Pay the **subcontractor** the amount certified by the date stated in the **JBCC**[®] NSSA contract data [25.13]
- 15.5 Where the **contractor** fails to provide proof of payment to a **subcontractor** within five (5) **working days** of a **notice** by the **principal agent**, the **employer** may instruct the **principal agent** to certify direct payment to the **subcontractor** and recover such amount from the **contractor** [27.2.7]
- 15.6 Where the selected **subcontractor** is in default of a material term of the **n/s subcontract agreement**, the decision of whether or not to terminate the **n/s subcontract agreement** is that of the **contractor**
- 15.7 Where a **n/s subcontract agreement** with a selected **subcontractor** is terminated:

- 15.7.1 Due to default of the **employer**, the **principal agent** and/or **agents** any variation in the cost of completing such subcontract works shall be for the account of the **employer** [25.3.7]
- 15.7.2 Other than due to the default by the **employer**, the **principal agent** and/or **agents** any variation in the cost of completing the subcontract works shall be for the account of the **contractor** [25.3.7]
- 15.7.3 The **principal agent** shall instruct the **contractor** to appoint another selected **subcontractor** [15.1.4] to complete the subcontract works
- 15.8 There shall be no privity of contract between the **employer** and a **subcontractor** appointed by the **contractor**

16.0 DIRECT CONTRACTORS

- 16.1 The **contractor** shall:
- 16.1.1 In accordance with a **contract instruction** [17.1.16] permit **direct contractors** [CD] to execute and/or install work as part of the **works**. Such access to the **works** shall not constitute deemed achievement of **practical completion** or occupation by the **employer** [19.6]
- 16.1.2 Make reasonable allowance in the **programme** for such work or installation
- 16.1.3 Be entitled to claim expense and/or loss caused by **direct contractors** [23.2.9; 27.1.7]
- 16.2 Payment of **direct contractors** shall be the responsibility of the **employer** outside this **agreement**
- 16.3 There shall be no privity of contract between the **contractor** and a **direct contractor** appointed by the **employer**

17.0 CONTRACT INSTRUCTIONS

- 17.1 The **principal agent** may issue **contract instructions** to the **contractor** regarding:
- 17.1.1 Rectification of discrepancies, errors in description or quantity or omission of items in the **agreement** other than in the **JBCC®** Principal Building Agreement
- 17.1.2 Alteration to design, standards or quantity of the **works** provided that such **contract instructions** shall not substantially change the scope of the **works**
- 17.1.3 The **site** [13.0]
- 17.1.4 Compliance with the **law**, regulations and bylaws [2.1]
- 17.1.5 Provision and testing of samples of **materials and goods** and/or of finishes and assemblies of elements of the **works**
- 17.1.6 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]
- 17.1.7 Removal or re-execution of work
- 17.1.8 Removal or substitution of any **materials and goods**
- 17.1.9 Protection of the **works**
- 17.1.10 Making good physical loss and repairing damage to the **works** [23.2.2]
- 17.1.11 Rectification of **defects** [21.2]
- 17.1.12 A **list for practical completion** specifying outstanding or defective work to be rectified to achieve **practical completion**, a **list for completion** and a **list for final completion** specifying outstanding or defective work to be rectified to achieve **final completion**
- 17.1.13 Expenditure of **budgetary allowances**, **prime cost amounts** and **provisional sums**
- 17.1.14 Appointment of a **subcontractor** [14.0; 15.0]

- 17.1.15 Termination of a nominated **n/s subcontract agreement** [14.6]
- 17.1.16 Work by **direct contractors** [16.0]
- 17.1.17 Access by others or previous contractors to remedy defective work
- 17.1.18 Removal from the **site** of any person employed on the **works**
- 17.1.19 Removal from the **site** of any person not engaged on or connected with the **works**
- 17.1.20 On **suspension** or termination, protection of the **works**, removal of **construction equipment** and surplus **materials and goods** [29.0]
- 17.2 The **contractor** shall comply with and duly execute all **contract instructions**
- 17.3 Should the **contractor** fail to proceed with a **contract instruction** with due diligence, the **principal agent** may give **notice** to the **contractor** to proceed within five (5) **working days** of receipt of such **notice**. Where the **contractor** remains in default, the **employer** may engage others to carry out such **contract instruction** and recover expense and/or loss incurred [27.2.3]
- 17.4 The **contractor** shall not be obliged to execute **contract instructions** for additional work issued after the certified or deemed date of **practical completion**
- 17.5 Oral instructions shall be of no force or effect

COMPLETION

18.0 INTERIM COMPLETION

- 18.1 This clause applies only to the **n/s subcontract agreement** and is included to retain the same clause numbers between the two agreements

19.0 PRACTICAL COMPLETION

- 19.1 The **principal agent** shall:
 - 19.1.1 Inspect the **works** at appropriate intervals to give the **contractor** interpretations and direction on the standard of work and the state of completion of the **works** required of the **contractor** to achieve **practical completion** [CD]
 - 19.1.2 Issue a **contract instruction** [17.1] consequent on each such inspection, where necessary
- 19.2 The **contractor** shall:
 - 19.2.1 Inspect the **works** in advance of the anticipated date for **practical completion** to confirm that the standard of work required and the state of completion of the **works** for **practical completion** has been achieved
 - 19.2.2 Give at least five (5) **working days notice** to the **principal agent** of the anticipated date for the inspection for **practical completion** of the **works** to meet the anticipated date for **practical completion**
- 19.3 The **principal agent** shall inspect the **works**, or a **section** thereof, within the period stated [CD] and forthwith issue to the **contractor**:
 - 19.3.1 A comprehensive and conclusive **list for practical completion** [17.1.12] where the **works** has not reached **practical completion** specifying the **defects** to be rectified and work to be completed to achieve **practical completion**
 - 19.3.2 An updated **list for practical completion** limited to items on the **list for practical completion** that have not been attended to satisfactorily. The **contractor** shall repeat the procedure until all items on the **list for practical completion** have been attended to satisfactorily before the **certificate of practical completion** is issued by the **principal agent**

or ...

- 19.3.3 A **certificate of practical completion** with a copy to the **employer** stating the date on which **practical completion** of the **works**, or a **section** thereof, was achieved
- 19.3.4 A **list for completion** with a copy to the **employer**
- 19.4 Should the **principal agent** not issue a **list for practical completion** or the updated list within five (5) **working days** after the inspection period, or the **certificate of practical completion** [19.3], the **contractor** shall give **notice** to the **employer** and the **principal agent**. Should the **principal agent** not issue such list within a further five (5) **working days** of receipt of such **notice**, **practical completion** shall be deemed to have been achieved on the date of such **notice** and the **principal agent** shall issue the **certificate of practical completion** forthwith
- 19.5 On issue of the only or last **certificate of practical completion** the **employer** shall be entitled to possession of the **works** and the **site** subject to the **contractor's** lien or right of continuing possession of the **works** where this has not been waived. On issue of the **certificate of practical completion** for a **section**, the **employer** shall be entitled to possession of such **section**
- 19.6 Where the **employer** takes possession of the whole or a portion of the **works** by agreement with the **contractor**, **practical completion** shall be deemed to have occurred. The **principal agent** shall after inspection of the **works** [19.3] issue a **certificate of practical completion** to the **contractor** with a copy to the **employer** within five (5) **working days** of the date of possession of the whole or a portion of the **works** by the **employer** and the **list for completion** of items to be rectified and work to be completed within a period agreed between **the parties**
- 19.7 On issue of the **certificate of practical completion** of the **works**, or a **section** thereof, where the **principal agent** instructs that installation work is to be executed by others, the **employer** and/or **contractor** shall allow access for such installations

20.0 COMPLETION IN SECTIONS

- 20.1 Where completion in **sections** is required [CD] the terms and conditions applicable to the **works** as a whole shall apply to each **section**
- 20.2 The **principal agent** shall for each **section** issue:
- 20.2.1 A **certificate of practical completion** [19.3]
- 20.2.2 A **certificate of final completion** indicating where applicable, if it is for the last **section** to reach **final completion** [21.6.2]

21.0 DEFECTS LIABILITY PERIOD AND FINAL COMPLETION

- 21.1 The defects liability period for the **works** shall commence on the **calendar day** following the date of **practical completion** and end at midnight (00:00) ninety (90) **calendar days** from the date of **practical completion** [CD] or when work on the **list for completion** has been satisfactorily attended to [21.6], whichever is the later
- 21.2 Where **defects** become apparent during the defects liability period the **principal agent** may instruct the **contractor** [17.1.11] to progressively attend to such items, whilst at all times minimising inconvenience to the occupants
- 21.3 The **contractor** shall:
- 21.3.1 Inspect and forthwith rectify all items on the **list for completion** no later than ten (10) **working days** before the expiry of the defects liability period [19.3.4]
- 21.3.2 Give **notice** to the **principal agent** to inspect the **works** within five (5) **working days** of receipt of such **notice**
- 21.4 Where items on the **list for completion** have not been attended to the **principal agent** shall give **notice** to the **contractor** of such outstanding items. The process [21.3] shall be repeated until all items on the **list for completion** have been attended to

- 21.5 The **contractor** shall give **notice** to the **principal agent** when the outstanding items on the **list for completion** have been attended to. The **principal agent** shall inspect the **works** within five (5) **working days** of receipt of such **notice**
- 21.6 On the expiry of the ninety (90) **calendar days** defects liability period [21.1] or when all items on the **list for completion** have been attended to and on receipt of the **contractor's notice** to the **principal agent**, whichever is the later, the **principal agent** shall inspect the **works** and within ten (10) **working days** either:
- 21.6.1 Issue a **list for final completion** detailing all outstanding work or **defects** that must be attended to, or rectified to achieve **final completion**
- or ...
- 21.6.2 Issue the **certificate of final completion** to the **contractor** with a copy to the **employer**
- 21.7 Where the **principal agent** issues a **list for final completion**:
- 21.7.1 The **contractor** shall forthwith complete all outstanding work and rectify all the **defects**
- 21.7.2 The **contractor** shall give **notice** to the **principal agent** when all outstanding work has been completed and all the **defects** have been rectified
- 21.7.3 The **principal agent** shall, within five (5) **working days** of receipt of the **contractor's notice(s)** [21.7.2] give **notice** to the **contractor** either that the items on the **list for final completion** have been completed, or issue an updated **list for final completion** of the items not completed and of any further **defects** that have become evident since the last inspection
- 21.8 Where the **principal agent** gives **notice** to the **contractor** of items on the **list for final completion** or an updated **list for final completion** specifying all outstanding work to be completed and/or **defects** to be rectified to achieve **final completion** the process [21.7.2-3] shall be repeated until all items on the (updated) **list for final completion** have been completed. On completion of all items on the (updated) **list for final completion** the **principal agent** shall forthwith issue the **certificate of final completion** to the **contractor** with a copy to the **employer**
- 21.9 Where the **principal agent** has not issued the **list for final completion** or the updated list within five (5) **working days** after the inspection period [21.6], the **contractor** shall forthwith give **notice** to the **employer** and the **principal agent**. Should the **principal agent** not issue such list within a further five (5) **working days** of receipt of such **notice**, **final completion** shall be deemed to have been achieved on expiry of such **notice** period and the **principal agent** shall forthwith issue the **certificate of final completion**
- 21.10 Where a **subcontractor's** defects liability period extends beyond the **contractor's** defects liability period:
- 21.10.1 The **contractor's** obligations and liability concerning the **subcontractor's defects** shall end on the date of issue of the **certificate of final completion**
- 21.10.2 The remaining portion of the **subcontractor's** defects liability period shall be ceded to the **employer** on the date of issue of the **certificate of final completion**
- 21.11 Where the **contractor**, a **subcontractor** or a supplier is required to give a guarantee, warranty or indemnity, other than a **security** to the **contractor**, the rights and obligations under such guarantee, warranty or indemnity shall be ceded to the **employer** on the date of issue of the **certificate of final completion**. This cession shall not prejudice any other rights the **employer** may have [12.2.20]
- 21.12 A **certificate of final completion** shall be conclusive as to the sufficiency of the **works** and that the **contractor's** obligations [12.2.7] have been fulfilled other than for **latent defects**

22.0 LATENT DEFECTS LIABILITY PERIOD

- 22.1 The **latent defects** liability period for the **works** shall commence at the start of the **construction period** and end five (5) years from the certified date of **final completion**
- 22.2 The **contractor** shall make good all **latent defects** that appear up to the date of expiry of the **latent defects** liability period [3.3]
- 22.3 Where termination of this **agreement** occurs before the date of **final completion**, the **latent defects** liability period shall end:

- 22.3.1 Five (5) years from the date of termination [29.10] for the completed portion of the **works** only
or ...
- 22.3.2 On the date of termination where execution of the **works** has become impossible due to circumstances beyond the control of either **party** [29.20], or on the date of termination by the **contractor** due to default by the **employer**, the **principal agent** and/or **agents** [29.17.3; 29.23]

23.0 REVISION OF THE DATE FOR PRACTICAL COMPLETION

- 23.1 The **contractor** is entitled to a revision of the date for **practical completion** by the **principal agent** without an adjustment of the **contract value** for a delay to **practical completion** caused by one or more of the following events:
- 23.1.1 Adverse weather conditions
- 23.1.2 Inability to obtain **materials and goods** where the **contractor** has taken reasonable steps to avoid or reduce such a delay
- 23.1.3 Making good physical loss and repairing damage to the **works** [8.2] where such risk is beyond the reasonable control of the **parties**
- 23.1.4 Late supply of a **prime cost amount** item where the **contractor** has taken reasonable steps to avoid or reduce such delay
- 23.1.5 Exercise of statutory power by a body of state or public or local authority that directly affects the execution of the **works**
- 23.1.6 **Force majeure**
- 23.2 The **contractor** is entitled to a revision of the date for **practical completion** by the **principal agent** with an adjustment of the **contract value** [26.7] for a delay to **practical completion** caused by one or more of the following events:
- 23.2.1 Delayed possession of the **site** [12.1.5]
- 23.2.2 Making good physical loss and repairing damage to the **works** [8.5] where the **contractor** is not at risk
- 23.2.3 **Contract instructions** [17.1-2] not occasioned by the **contractor's** default
- 23.2.4 Opening up and testing of work and **materials and goods** where such work is in accordance with the **agreement** [17.1.6]
- 23.2.5 Late or incorrect issue of **construction information** [12.1.12; 13.2.3]
- 23.2.6 Late supply of **free issue, materials and goods** for which the **employer** is responsible [12.1.10]
- 23.2.7 Late appointment of a **subcontractor** in terms of the agreed **programme** where the **contractor** has taken reasonable steps to avoid or reduce such delay [14.4.1; 15.4.1]
- 23.2.8 Late acceptance by the **principal agent** and/or **agents** of a design undertaken by a selected **subcontractor** where the **contractor's** obligations have been met [7.3]
- 23.2.9 An act or omission by a nominated **subcontractor** [14.0] or a **direct contractor** [16.0]
- 23.2.10 Insolvency or termination of a nominated **subcontractor** [14.7.2]
- 23.2.11 **Suspension** or termination by a **subcontractor** due to default of the **employer**, the **principal agent** and/or **agents**
- 23.2.12 Execution of additional work for which the quantity in the **bills of quantities** is not sufficiently accurate
- 23.2.13 **Suspension** of the **works** [28.0]

- 23.3 Further circumstances for which the **contractor** may be entitled to a revision of the date for **practical completion** and an adjustment of the **contract value** are delays to **practical completion** due to any other cause beyond the **contractor's** reasonable control that could not have reasonably been anticipated and provided for. The **principal agent** shall adjust the **contract value** where such delay is due to the **employer** and/or **agents**
- 23.4 Should a listed circumstance occur [23.1-3] which could cause a delay to the date for **practical completion**, the **contractor** shall:
- 23.4.1 Take reasonable steps to avoid or reduce such delay
- 23.4.2 Within twenty (20) **working days** of becoming aware, or ought reasonably to have become aware of such delay, give **notice** to the **principal agent** of the intention to submit a claim for a revision to the date for **practical completion**, failing which the **contractor** shall forfeit such claim
- 23.5 The **contractor** shall submit a claim for the revision of the date for **practical completion** to the **principal agent** within forty (40) **working days**, or such extended period as the **principal agent** may allow, from when the **contractor** is able to quantify the delay in terms of the **programme**
- 23.6 Where the **contractor** submits a claim for a revision of the date for **practical completion** the claim shall in respect of each circumstance separately state:
- 23.6.1 The relevant clause [23.1-3] on which the **contractor** relies
- 23.6.2 The cause and effect of the delay on the current date for **practical completion**, where appropriate, illustrated by a change to the critical path on the current **programme**
- 23.6.3 The extension period claimed in **working days** and the calculation thereof
- 23.7 The **principal agent** shall, within twenty (20) **working days** of receipt of the claim, grant in full, reduce or refuse the **working days** claimed, and:
- 23.7.1 Determine the revised date for **practical completion** as a result of the **working days** granted
- 23.7.2 Identify each event and the reference clause for each revision granted or amended
- 23.7.3 Give reasons where such claim is refused or reduced
- 23.8 Where the **principal agent** fails to act within the period [23.7] such claim shall be deemed to be refused. The **contractor** may give **notice** of a disagreement [30.1] where the **principal agent** refuses a claim, alternatively reduces a claim, or fails to act

24.0 PENALTY FOR LATE OR NON-COMPLETION

- 24.1 Where the **contractor** fails to bring the **works**, or a **section** thereof, to **practical completion** by the date for **practical completion** [CD], or the revised date for **practical completion**, the **contractor** shall be liable to the **employer** for the **penalty** [CD]
- 24.2 Where the **employer** elects to levy such **penalty** the **employer**, or the **principal agent** on instruction from the **employer**, shall give **notice** thereof to the **contractor**. The **principal agent** shall determine the **penalty** due from the later of the date for **practical completion** [CD], or the revised date for **practical completion**, up to and including the earlier of:
- 24.2.1 The actual or deemed date of **practical completion** of the **works**, or a **section** thereof [23.7.1]
- 24.2.2 The date of termination [29.8]
- 24.3 The **principal agent** shall include the **penalty** in regular interim **payment certificates** from the date on which the **employer's** entitlement to **penalties** commences

PAYMENT

25.0 PAYMENT

- 25.1 The **contractor** shall cooperate with and assist the **principal agent** in the preparation of cash flow statements and payment valuations by providing all required documents and quantified amounts of work duly executed. Where the **contractor** has not provided such information the **principal agent** shall make a fair estimate of the work executed
- 25.2 The **principal agent** shall regularly by the due date [CD] issue **payment certificates** to the **contractor** with a copy to the **employer** until and including the issue of the **final payment certificate**. A **payment certificate** may be for a nil or negative amount
- 25.3 Each **payment certificate** shall separately include:
- 25.3.1 A fair estimate of the value of work executed
 - 25.3.2 A fair estimate of the value of **materials and goods** [25.4; 25.5]
 - 25.3.3 **Security** adjustment [11.1.2; 11.4.1]
 - 25.3.4 Cost fluctuations, if applicable
 - 25.3.5 The gross amount certified
 - 25.3.6 The amount previously certified
 - 25.3.7 Amounts due to either **party** in the **recovery statement** [27.1]
 - 25.3.8 **Tax**
 - 25.3.9 Interest amounts included in the **recovery statement**
 - 25.3.10 Other non-taxable amounts
 - 25.3.11 The net amount certified due to the **contractor** or the **employer**
- 25.4 The value of **materials and goods** [25.3.2] (excluding **materials and goods** off **site** or in transit) shall be included in the amount certified only where:
- 25.4.1 Not prematurely delivered or offered for delivery in terms of the **programme**
 - 25.4.2 Stored and suitably protected against loss and damage
 - 25.4.3 Covered by insurances [10.0]
- 25.5 The value of **materials and goods** [25.3.2] stored off **site** and/or in transit shall be included in the amount certified only where covered by a **guarantee for advance payment** or such other **security** acceptable to the **employer**
- 25.6 **Materials and goods** when certified [25.4] and paid for shall become the property of the **employer** and shall not be removed without the written authority of the **principal agent**
- 25.7 The **principal agent** shall concurrently with each **payment certificate** issue:
- 25.7.1 To the **employer** and the **contractor** a **recovery statement** showing the amounts due to either **party** in the current **payment certificate**
 - 25.7.2 To the **contractor** a statement showing the amount certified for each **subcontractor**
 - 25.7.3 To each **subcontractor** a n/s subcontract payment notification showing the amount included in the **payment certificate** and its date of issue
 - 25.7.4 The determination of **default interest**
 - 25.7.5 The determination of **compensatory interest**

- 25.8 An interim **payment certificate** shall not be evidence that the **works and materials and goods** are in terms of the **agreement**
- 25.9 The **principal agent** shall certify one hundred per cent (100%) of the amount of the **final account** including adjustments [26.0; 27.0] in the **final payment certificate**
- 25.10 The **employer** shall pay the **contractor** the amount certified in an issued **payment certificate** within fourteen (14) **calendar days** of the date for issue of the **payment certificate** [CD] including **default interest** and/or **compensatory interest**
- 25.11 The **contractor** shall pay the **employer** the amount certified in an issued **payment certificate** within twenty-one (21) **calendar days** of the date of issue of the **payment certificate** [CD] including **default interest**
- 25.12 Where a **guarantee for construction** (fixed) and payment reduction [11.1.2] has been chosen the value of the **works** [26.0] and **materials and goods** [25.3.2] that exceeds the **contract sum** and any contract price adjustments (cost fluctuations) [25.3.4; 26.9.5] [CD] shall be certified in full. The value certified that does not exceed the **contract sum** shall be subject to the following percentage adjustments:
- 25.12.1 Ninety-five per cent (95%) of such value in interim **payment certificates** issued up to the date of **practical completion**
- 25.12.2 Ninety-seven and one half per cent (97.5%) of such value in interim **payment certificates** issued up to but excluding the **final payment certificate**
- 25.12.3 One hundred per cent (100%) of such value in the **final payment certificate**
- 25.13 The **contractor** shall pay all **subcontractors** within seven (7) **calendar days** of the due date for payment by the **employer** [CD] and on request provide proof thereof to the **principal agent** within seven (7) **calendar days** of a request to do so
- 25.14 Where the **employer** has made a partial or no payment of the amount due in an issued **payment certificate** by the due date or where the **principal agent** fails to issue a **payment certificate**, the **contractor** may give five (5) **working days notice** to comply, failing which the **contractor** may:
- 25.14.1 **Suspend the works** [28.1.3]
- 25.14.2 Exercise the lien or right of continuing possession of the **works** where this has not been waived
- 25.14.3 Call up the **guarantee for payment** [11.5]
- 25.15 The **principal agent** shall issue the **final payment certificate** to the **contractor** with a copy to the **employer** within seven (7) **calendar days** of acceptance of the **final account** by the **contractor**, but not before the issue of the **certificate of final completion**, other than on termination [26.11; 29.0]
- 25.16 Where the **contractor** disputes the correctness of the **final account** within the period allowed [26.12], the **principal agent** shall issue interim **payment certificates** to the **contractor** with a copy to the **employer** by the due date [CD] for the undisputed amount(s)
- 25.17 For the purposes of provisional sentence in relation to a **payment certificate** only, the **parties** consent to the jurisdiction of any court of **law** of the country [CD]

26.0 ADJUSTMENT OF THE CONTRACT VALUE AND FINAL ACCOUNT

- 26.1 The **principal agent** shall determine the value of adjustments to the **contract value** in cooperation with the **contractor** in the preparation of the **final account**. Where such adjustments require measurement on **site**, the **contractor** shall have the right to be present
- 26.2 Adjustments to the **contract value** resulting from a **contract instruction** [17.1] shall be determined as follows:
- 26.2.1 Work of a similar character executed under similar conditions shall be priced at the rates in the **priced document**
- 26.2.2 Work not of a similar character shall be priced at rates based on those in the **priced document** and adjusted to suit the changed circumstances
- 26.2.3 If the above methods do not apply, work shall be priced at rates based on the necessary use of labour, **construction equipment** and/or **materials and goods** for executing the work plus an allowance of ten per cent (10%) mark-up

- 26.2.4 Work omitted shall be valued at the rates in the **priced document**, but where the omission of such work alters the circumstances under which the remaining work is carried out, the value of the remaining work shall be determined by the above methods
- 26.3 Where work is identified as provisional in the **priced document** the **principal agent** shall omit such value from the **contract value** and add the value of work as executed to the **contract value**
- 26.4 Where the **contractor** has made payment for items not included in the **priced document** in accordance with a **contract instruction** with the approval of the **principal agent**, the actual amounts paid plus a ten per cent (10%) mark-up shall be added to the **contract value** limited to:
- 26.4.1 Charges by authorities [2.1]
- 26.4.2 The cost of opening up and testing [17.1.6], where the work is according to this **agreement**
- 26.4.3 The cost of insurances [10.0], where applicable [CD]
- 26.5 The **contractor** shall give **notice** to the **principal agent** within twenty (20) **working days** of becoming aware, or ought reasonably to have become aware of expense and/or loss for which provision was not required in the **contract sum** failing which such claim shall be forfeited
- 26.6 Following **notice** [26.5], the **contractor** shall submit a detailed and substantiated claim for the adjustment of the **contract value** to the **principal agent** within forty (40) **working days**, or such additional period as the **principal agent** may allow
- 26.7 The **principal agent** shall make a fair assessment of the claim [26.6] and adjust the **contract value** within twenty (20) **working days** of receipt of such details
- 26.8 Where the **principal agent** fails to act within such period [26.7] the claim shall be deemed to be refused. The **contractor** may give **notice** of a disagreement [30.1] where no assessment is received
- 26.9 The **principal agent** shall:
- 26.9.1 Omit **prime cost amounts** and **budgetary allowances** [17.1.13] from the **contract sum** and determine the actual value of such work to be added to the **contract value**
- 26.9.2 Omit **provisional sums** [17.1.13] from the **contract sum** and determine the actual value of such **subcontractors'** work to be added to the **contract value**
- 26.9.3 Prorate the **contractor's** allowances for profit and attendance on **provisional sums** and **prime cost amounts** excluding any allowance for cost fluctuations
- 26.9.4 Adjust the **preliminaries** amounts in accordance with the method selected [CD]
- 26.9.5 Adjust the **contract value** to include contract price adjustments (cost fluctuations), if applicable [CD]
- 26.9.6 Rectify discrepancies, errors in description or quantity or omission of items in this **agreement** other than in the **JBCC®** Principal Building Agreement [17.1.1]
- 26.10 The **principal agent** shall prepare and issue the **final account** to the **contractor** within sixty (60) **working days** of the date of **practical completion**
- 26.11 The **contractor** shall accept the **final account** within thirty (30) **working days** of receipt thereof or give **notice** of non-acceptance with reasons failing which the **final account** shall be deemed to be accepted
- 26.12 Should the reasons for non-acceptance of the **final account** [26.11] not be resolved within ten (10) **working days** of the **notice** of non-acceptance, or within such extended period as the **principal agent** may allow on request from the **contractor**, the **contractor** may give **notice** of a disagreement
- 26.13 The **principal agent** shall issue the **final payment certificate** to the **contractor** within seven (7) **calendar days** of acceptance of the **final account**

27.0 RECOVERY OF EXPENSE AND/OR LOSS

- 27.1 The **principal agent** shall issue a **recovery statement** with each **payment certificate** to the **parties** with explanatory documentation to support the calculation of amounts due to:

The **employer** resulting from:

- 27.1.1 **Penalty** [24.3]
- 27.1.2 **Default interest** [25.7.4]
- 27.1.3 Expense and/or loss [27.2]

The **contractor** resulting from:

- 27.1.4 **Default interest** [25.7.4]
- 27.1.5 **Compensatory interest** [25.7.5]
- 27.1.6 Damages
- 27.1.7 Expense or loss caused by a **direct contractor** [16.1.3]
- 27.1.8 Advance payments [9.2.10; 12.1.8]
- 27.1.9 Termination of a **n/s subcontract agreement** due to default of the **employer**, the **principal agent** and/or **agents** [14.7.1; 15.7.1]

27.2 The **employer** may recover expense and/or loss incurred or to be incurred resulting from:

- 27.2.1 Paying charges [2.1]
- 27.2.2 Effecting insurances due to the **contractor's** default [10.0]
- 27.2.3 Work executed by others due to the **contractor's** default [17.3]
- 27.2.4 Recoupment of advance payments [9.2.10; 11.3]
- 27.2.5 The **contractor** not paying amounts due to the **employer** [25.3.7]
- 27.2.6 Termination of this **agreement** by the **employer** [29.1]
- 27.2.7 Amounts paid directly to **subcontractors** on default by the **contractor** [14.5; 15.5]
- 27.2.8 Termination of a **n/s subcontract agreement** [14.7.2; 15.7.2]
- 27.2.9 Default by the **contractor** where not less than five (5) **working days notice** detailing such default has been given before the issue of the next **recovery statement** to allow the **contractor** the opportunity to remedy such default
- 27.2.10 Adjustment of the n/s subcontract preliminaries due to the **subcontractor** as a result of a default by the **contractor**

27.3 Where an amount is due to either **party** and has not been paid, the other **party** may recover the amount from any of the following:

- 27.3.1 Subsequent **payment certificates** [25.0]
- 27.3.2 A demand in terms of the **security** [11.0]
- 27.3.3 The defaulting **party** as a debt

27.4 Where either **party** has been liquidated, or this **agreement** terminated, the other **party** may exercise rights in terms of the **security** [11.0]

SUSPENSION AND TERMINATION

28.0 SUSPENSION BY THE CONTRACTOR

- 28.1 The **contractor** may give ten (10) **working days notice** to the **employer** and the **principal agent** of the intention to suspend the **works** where the **employer** or the **principal agent** has failed to:
- 28.1.1 Provide and/or maintain a **guarantee for payment**, where required [11.5-6]
- 28.1.2 Issue a **payment certificate** by the due date [25.2] [CD]
- 28.1.3 Make payment in full of an amount certified in an interim **payment certificate** by the due date [25.10] [CD]
- 28.1.4 Effect insurances [10.1.1-5; 10.2], where applicable [CD]
- 28.1.5 Appoint another **principal agent** and/or another **agent**, where applicable [6.5] or where an **agent** has failed to act in terms of delegated authority [6.4]
- 28.2 Where the **employer** has not remedied a default in terms of a **notice** the **contractor** may suspend execution of the **works** until such default has been remedied without prejudice to any rights the **contractor** may have
- 28.3 Where the **works** is suspended the **contractor** shall instruct each **subcontractor** to suspend the n/s subcontract works forthwith
- 28.4 Where the **works** has been suspended by the **contractor** [23.2.13] the **principal agent** shall revise the date for **practical completion** on resumption of the **works** with an adjustment of the **contract value**

29.0 TERMINATION

Termination by the employer

- 29.1 The **employer** may give **notice** of intention to terminate this **agreement** where the **contractor** has failed to:
- 29.1.1 Provide and maintain a **guarantee for construction** [CD]
- 29.1.2 Proceed with the **works** [12.2.7]
- 29.1.3 Comply timeously with a **contract instruction** [17.0]
- 29.2 Where the **employer** contemplates terminating this **agreement** the **employer** or the **principal agent** on instruction from the **employer** shall give **notice** thereof to the **contractor** of a specified default [29.1.1-3], to be remedied within ten (10) **working days** of the date of receipt of such **notice**
- 29.3 Where the **contractor** has not remedied a specified default within such period [29.2] the **employer** may forthwith give **notice** to the **contractor** of termination of this **agreement**
- 29.4 The **employer** may employ others to safeguard the **works**, complete the outstanding work and rectify defects in that portion of the **works** executed by the **contractor** [27.2.3]. The **contractor** shall be liable to the **employer** for such costs that shall be included in the **final account** [26.10]
- 29.5 The **employer** may use **materials and goods** and temporary structures on the **site** for which payment shall be included in the **final account**
- 29.6 Should the **contractor** default on removing temporary structures or **construction equipment** from the **site** the **employer**, without being responsible for any loss or damage, may have such items belonging to the **contractor** removed or sold. Resulting costs and/or income shall be included in the **final account**
- 29.7 The **employer**, on **notice** to the **contractor**, may recover damages from the **contractor** from the date of termination including, but not limited to, additional costs incurred in the completion of the remaining work [25.3.7; 27.1.3]
- 29.8 The **employer** may apply the **penalty** [24.0] up to the date of termination where the initial or revised date for **practical completion** has passed

- 29.9 The **employer** has the right of recovery against the **contractor**, where applicable, [CD] from:
The **guarantee for construction** (variable) until the final payment has been made; or
The **guarantee for construction** (fixed) until the date of **practical completion**; or
The payment reduction until the final payment is made; or
The **guarantee for advance payment** until the outstanding balance has been repaid to the **employer**
- 29.10 The **latent defects** liability period for the completed portion of the **works** shall end [22.3.1] five (5) years from the date of termination
- 29.11 Where this **agreement** is terminated, the **contractor** shall forthwith give **notice** of termination of the **n/s subcontract agreement** to each **subcontractor**
- 29.12 Termination of the **works** shall not prejudice any rights the **employer** may have
- 29.13 The right to terminate may not be exercised where the **employer** is in material breach of this **agreement**

Termination by the contractor

- 29.14 The **contractor** may give **notice** of intention to terminate this **agreement** where:
- 29.14.1 The **employer** has failed to provide and maintain a **guarantee for payment**, where applicable [CD]
- 29.14.2 The **employer** has failed to give possession of the **site** to the **contractor** [12.1.5]
- 29.14.3 The **employer** has failed to allow the **principal agent** and/or **agents** to exercise fair and reasonable judgement as contemplated by this **agreement** [6.6]
- 29.14.4 The **employer** has failed to effect insurances, where applicable [CD]
- 29.14.5 The **employer** has failed to pay the amount certified by the due date [25.10]
- 29.14.6 The **employer** has failed to appoint another **principal agent** and/or **agents**, where applicable [6.5]
- 29.14.7 The **principal agent** has failed to issue a **payment certificate** to the **contractor** by the due date [25.2]
- 29.15 Where the **contractor** contemplates terminating this **agreement**, the **contractor** shall give **notice** to the **employer** and/or the **principal agent** of a specified default [29.14.1-7], to be remedied within ten (10) **working days** of the date of receipt of such **notice**
- 29.16 Where a specified default has not been remedied within such period [29.15] the **contractor** may forthwith give **notice** to the **employer** and the **principal agent** of the termination of this **agreement**
- 29.17 Where this **agreement** is terminated by the **contractor**:
- 29.17.1 The **contractor** shall forthwith give **notice** of termination of the **n/s subcontract agreement** to each **subcontractor**
- 29.17.2 The **contractor** shall remove temporary structures, **construction equipment** and, on **notice**, surplus **materials and goods** from the **site** within ten (10) **working days**, or such period agreed by the **principal agent**
- 29.17.3 The **latent defects** liability period shall end on the date of termination [22.3.2]
- 29.17.4 The **contractor** may be entitled to recover damages [27.1.6]
- 29.17.5 The **guarantee for construction** shall expire on the date of termination
- 29.17.6 The **guarantee for advance payment**, where applicable [CD], shall expire on repayment of amounts due to the **employer**
- 29.17.7 The **guarantee for payment** [11.5-6], where applicable [CD], shall expire on payment of the **final payment certificate** or on payment in full of the guaranteed sum or on the **security** expiry date, whichever is the earlier
- 29.18 Termination of the **works** shall not prejudice any rights the **contractor** may have
- 29.19 The right to terminate may not be exercised where the **contractor** is in material breach of this **agreement**

Termination by either party

- 29.20 Either **party** may give **notice** of intention to terminate this **agreement** where:
- 29.20.1 The **works** is for alterations and/or additions to (an) existing building(s), or a new building, which has been substantially destroyed regardless of the cause other than by the **party** seeking termination
- 29.20.2 Progress of the **works** has ceased for a continuous period of ninety (90) **calendar days**, or an intermittent period totalling one hundred and twenty (120) **calendar days** as a result of a **force majeure** event or the exercise of statutory power by a body of state or public or local authority that directly affects the execution of the **works**
- 29.21 The **party** contemplating termination of this **agreement** shall give ten (10) **working days notice** to the other **party**. Where this **agreement** is terminated by either **party**:
- 29.21.1 The **contractor** shall forthwith give **notice** of termination of the **n/s subcontract agreement** to each **subcontractor**
- 29.21.2 The **party** responsible for insurance [CD] shall inform the insurer and the other **party** of the date of termination of the **agreement**
- 29.21.3 The **guarantee for payment**, where applicable [CD], shall expire on payment of the **final payment certificate** or on payment in full of the guaranteed sum or on the **security** expiry date, whichever is the earlier
- 29.21.4 The **guarantee for construction** shall expire on the date of termination
- 29.21.5 The **guarantee for advance payment** [11.2.2; 11.3], where applicable [CD], shall expire on repayment of amounts due to the **employer**
- 29.22 Neither **party** shall be liable to the other **party** for expense and/or loss resulting from the termination
- 29.23 The **latent defects** liability period for the **works** shall end on the date of termination [22.3.2]

Termination procedure by the employer, the contractor or by the parties

- 29.24 On termination of this **agreement** the **contractor** shall:
- 29.24.1 Cease work and ensure that the **works** is safe in terms of the **law**
- 29.24.2 Remain responsible for the **works** [8.1] until possession is relinquished to the **employer**
- 29.24.3 Remove temporary structures, **construction equipment** and, on **notice** from the **principal agent**, surplus **materials and goods** from the **site** within ten (10) **working days**, or such period agreed by the **principal agent**
- 29.25 On termination of this **agreement** the **principal agent** shall:
- 29.25.1 Prepare and hand over to the **employer** all compliance certificates, as built drawings and product warranties in conjunction with **agents**, the **contractor** and **subcontractors**
- 29.25.2 In consultation with the **contractor** where possible, compile and issue to the **parties** a **status report** recording completed and incomplete work on the date of termination of the **works** within twenty (20) **working days** of such date
- 29.25.3 Continue to certify the value of the work executed and **materials and goods** for payment by the **employer** or the **contractor** until the issue of the **final payment certificate** [25.15]
- 29.25.4 Prepare and issue the **final account** to the **contractor** within sixty (60) **working days** of the date of termination including the cost of **materials and goods** and those ordered before termination that the **contractor** is bound to accept and make payment for
- 29.26 Termination shall take effect after completion of the procedure [29.24.1]
- 29.27 The **employer** shall arrange appropriate insurances to suit the stage of completion of the **works**
- 29.28 This clause shall, to the extent necessary to fulfil its purpose, exist independently of this **agreement**

DISPUTE RESOLUTION

30.0 DISPUTE RESOLUTION

Settlement by the parties

- 30.1 Should any disagreement arise between the **employer** (or the **principal agent** or an **agent**) and the **contractor** arising out of or concerning the action or inaction of the **employer** (or the **principal agent** or an **agent**) or the **contractor**, or any other matter concerning this **agreement** (including the validity thereof), either **party** may give **notice** of a disagreement to the other. The **parties** shall attempt to resolve such disagreement between them and record such resolution in writing signed by them
- 30.2 Where the disagreement is not resolved within ten (10) **working days** of receipt of the **notice** of disagreement, the disagreement shall be deemed to be a dispute
- 30.3 The dispute shall be referred to adjudication within ten (10) **working days** of the expiry of the period [30.2] by means of a **notice** of adjudication by the **party** (the referring party) which gave the **notice** of disagreement
- 30.4 The **notice** of adjudication shall clearly define the scope of the dispute and the relief sought by adjudication
- 30.5 Failure to comply with the procedure described [30.3-4] shall cause the dispute to be resolved by arbitration and not by adjudication

Adjudication

- 30.6 Where a dispute is referred to adjudication:
- 30.6.1 The adjudicator shall be nominated by the nominating body [CD] and shall be deemed to have been appointed by the **parties**
- 30.6.2 The applicable rules shall be stated [CD] or shall be by agreement between the **parties** and the adjudicator, failing which the rules shall be determined by the adjudicator. Neither **party** shall be entitled to legal representation, unless otherwise agreed in writing by the **parties**
- 30.6.3 A determination given by the adjudicator shall be immediately binding upon and implemented by the **parties** notwithstanding that either **party** may give **notice** to refer the dispute to arbitration
- 30.6.4 Where the adjudicator has given a determination, either **party** may give notice of dissatisfaction to the other **party** and to the adjudicator within ten (10) **working days** of receipt of the determination, or an extended time period provided in the applicable rules for adjudication whereafter such dispute shall be referred to arbitration
- 30.6.5 Where the adjudicator has not given a determination within the time period allowed or extended time period provided in the applicable rules for adjudication either **party** may give **notice** to the other **party** and to the adjudicator that if such determination is not received within ten (10) **working days** of receipt of this **notice** his appointment is thereupon automatically terminated and such dispute shall be referred to further adjudication or arbitration, at the option of the referring **party**
- 30.6.6 The adjudicator shall not be eligible for subsequent appointment as the arbitrator

Arbitration

- 30.7 Where the dispute is referred to arbitration:
- 30.7.1 Arbitration shall not be construed as a review or appeal of an adjudicator's determination. Any determination by the adjudicator shall remain in force and continue to be implemented unless and until overturned by an arbitration award
- 30.7.2 The resolution of the dispute shall commence anew
- 30.7.3 The referring **party** in the adjudication shall be the claimant in the arbitration
- 30.7.4 The arbitrator shall be nominated by the nominating body [CD] and shall be deemed to have been appointed by the **parties**

- 30.7.5 The applicable rules shall be stated [CD] or shall be by agreement between the **parties** and the arbitrator, failing which the rules shall be determined by the arbitrator
- 30.7.6 The arbitrator shall have the authority to finally determine the dispute including the authority to make, open up and revise any certificates, opinion, decision, determination, requisition or **notice** relating to the dispute as if no such certificate, opinion, decision, determination, requisition or **notice** had been issued or given
- 30.7.7 The arbitrator's award shall be final and binding on the **parties**

Mediation

- 30.8 Notwithstanding the provisions relating to adjudication and arbitration the **parties** may, by agreement and at any time, refer a dispute to mediation, in which event:
- 30.8.1 The provisions relating to adjudication and/or arbitration shall be deemed to be suspended from the time of such agreement until **notice** by either **party** that they be resumed
- 30.8.2 The appointment of a mediator, the procedure, and the status of the outcome shall be agreed between the **parties**
- 30.8.3 Regardless of the outcome of a mediation the **parties** shall bear their own costs concerning the mediation and equally share the costs of the mediator and related expenses

General

- 30.9 The **employer** consents to the joining of any **subcontractor** with the **contractor** as a party to any proceedings
- 30.10 Where the **parties** fail to specify a body to nominate the adjudicator [30.6.1] or the arbitrator [30.7.4] the referring **party** shall have the right to choose a local recognised body to suggest one or more persons with appropriate skills to be appointed as an adjudicator or an arbitrator. Such nomination shall be binding on the **parties**
- 30.11 The **parties** shall continue to perform their obligations in terms of this **agreement**, notwithstanding any disagreement or dispute that exists between them
- 30.12 This clause shall, to the extent necessary to fulfil its purpose, exist independently of this **agreement**

Hot Isostatic Press (HIP) Facility - 27 August 2021

AGREEMENT

The **agreement** comprises the entire contract between the **parties**. No representations, terms, conditions or warranties not contained in this **agreement** shall be binding on the **parties**. No agreement or addendum varying, adding to, deleting or terminating this **agreement** including this clause shall be effective unless reduced to writing and signed by the duly authorised representatives of the **parties**

The contracting **parties**

The parties	Employer	Contractor
Business name		
Business type		
Business registration		
Tax number (VAT/GST)		
Contact person		
Telephone		
Mobile number		
E-mail		
Address: Building name		
Address: Street		
Address: Suburb		
Address: City		
Address: P O Box		
Address: Post Office		
Address: Province		
Address: Country		
Project name		
Project location		
Currency		
Accepted contract sum including tax		
Accepted contract sum including tax in words		
Signed: who by signature hereto warrants authority		
Name of signatory		
Signed: Date		
Signed: Location		
Signed: Witness		
Name of witness		



PRINCIPAL BUILDING AGREEMENT: CONTRACT DATA

Project

Employer

Contractor

Contract Date

File Code

Association of Arbitrators (Southern Africa) NPC



41
years

- ✓ On application, we nominate and appoint competent and experienced arbitrators, adjudicators and mediators from our roll of certified Fellows;
- ✓ We provide distance learning courses including our Arbitration Certificate Course, our Fellowship Course, our Accelerated Fellowship Course and our Specialisation in Construction Law Course;
- ✓ We offer membership on Associate and Fellowship levels.

Our Faculty is receiving registration applications for our 2021 Arbitration Courses and Specialisation in Construction Law Course.

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For Nominations,
please contact Happiness (ADR Admin Manager):
nominations@arbitrators.co.za

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(Course and Member Manager):
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Cell: 27834158023

The Joint Building Contracts Committee® - NPC
CONTRACT DATA
Principal Building Agreement
Edition 6.2 - May 2018

JBCC®

The Joint Building Contracts Committee® NPC (JBCC®) is representative of building owners and developers, professional consultants and general and specialist contractors who contribute their knowledge and experience to the compilation of the JBCC® documents. The JBCC® documents portray the consensus view of the constituent members and are published in the interests of standardisation and good practice with an equitable distribution of contractual risk

Application of JBCC® agreements

The definitions contained in the JBCC® Principal Building Agreement apply to this document. A word or phrase in bold type in the text has the same meaning assigned to it in the definitions of such agreement. Where a word or phrase is not in bold type it has the meaning consistent with the context of its use

This contract data contains unique requirements applicable to the project and variables referred to in the JBCC® Principal Building Agreement and the JBCC® General Preliminaries. The information provided in this document by the principal agent is complete and accurate at the time of calling for tenders. Where additional information becomes available, all tenderers will be informed in writing. Reference to clause numbers in the JBCC® Principal Building Agreement are shown in [square brackets] in this contract data eg [3.2.1]. Spaces requiring information must be filled in, or marked as 'not applicable' but not left blank

This contract data, when completed and submitted by the contractor, becomes the form of tender. Where the contractor is appointed, the contract documents comprise the signed JBCC® Principal Building Agreement, this completed contract data, the priced document, drawings and other listed documents

Warning!

The JBCC® Principal Building Agreement Edition 6.2 has been coordinated with the JBCC® Nominated/Selected Subcontract Agreement Edition 6.2, the JBCC® General Preliminaries and the JBCC® certificate forms and support documents. Forms from previous editions are not compatible with the JBCC® Principal Building Agreement Edition 6.2

Persons entering into or preparing contracts using the JBCC® suite of contract agreements and support documents are warned of the dangers inherent in modifying any part of it

Experience has shown that changes drafted by others, including members of the building professions, often have unintended results that may be prejudicial to either, or both, parties

Disclaimer

While the JBCC® aims to ensure that its publications represent best practice it does not accept or assume any liability or responsibility for any events or consequences which derive from the use of JBCC® documents

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A PROJECT INFORMATION

A 1.0 Works [1.1]

Project name	
Reference number	
Works description	

A 2.0 Site [1.1]

Erf / stand number	
Township / Suburb	
Site address	
Local authority	

A 3.0 Employer [1.1]

Name			
Legal entity of above		Contact person	
Business registration number		Telephone number	
VAT/GST number		Mobile number	
Country		E-mail	
Postal address		Postal code	
Physical address		Postal code	

A 4.0 Principal agent [1.1]

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address		Postal code	
Physical address		Postal code	

A 5.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 6.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 7.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 8.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 9.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 10.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 11.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

A 12.0 Agent [1.1; 6.2]

Discipline	
------------	--

Name			
Legal entity of above		Contact person	
Practice number		Telephone number	
		Mobile number	
Country		E-mail	
Postal address			
		Postal code	
Physical address			
		Postal code	

B 5.0 Employer's agents [6.0]

Authority is delegated to the following agents to issue contract instructions and perform duties for specific aspects of the works [6.2]

Principal agent's and agents' interest or involvement in the works other than a professional interest [6.3]

B 6.0 Insurances [10.0]

Insurances by employer		Amount including tax	Deductible amount including tax
Contract works insurance:			
	New works [10.1.1] (contract sum or amount)		
or	Works with practical completion in sections [10.2] (contract sum or amount)		
or	Works with alterations and additions [10.3] (reinstatement value of existing structures with or including new works)		
	Direct contractors [10.1.1; 10.2] where applicable, to be included in the contract works insurance		X
	Free issue [10.1.1; 10.2] where applicable, to be included in the contract works insurance		X
	Escalation, professional fees and reinstatement costs if not included above		X
Total of the above contract works insurance amount			X
Supplementary insurance [10.1.2; 10.2]			
Public liability insurance [10.1.3; 10.2]			
Removal of lateral support insurance [10.1.4; 10.2]			
Other insurances [10.1.5]			
Yes/no?		If yes, description 1	
Yes/no?		If yes, description 2	

and/or

Insurances by contractor		Amount including tax	Deductible amount including tax
Contract works insurance:			
	New works [10.1.1] (contract sum or amount)		
	Direct contractors [10.1.1; 10.2] where applicable, to be included in the contract works insurance		
	Free issue [10.1.1; 10.2] where applicable, to be included in the contract works insurance		
	Escalation, professional fees and reinstatement costs if not included above		
Total of the above contract works insurance amount			
Supplementary insurance [10.1.2]			
Public liability insurance [10.1.3]			
Removal of lateral support insurance [10.1.4]			
Other insurances [10.1.5]:			
Yes/no?		If yes, description 1	
Yes/no?		If yes, description 2	

B 7.0 Obligations of the employer [12.1]

Existing premises will be in use and occupied [12.1.2]		Yes/no?	
If yes, description			
Restriction of working hours [12.1.2]		Yes/no?	
If yes, description			
Natural features and known services to be preserved by the contractor [12.1.3]		Yes/no?	
If yes, description			
Restrictions to the site or areas that the contractor may not occupy [12.1.4]		Yes/no?	
If yes, description			
Supply of free issue [12.1.10]		Yes/no?	
If yes, description			

B 8.0 Nominated subcontractors [14.0]

Specialisation 1	
Specialisation 2	
Specialisation 3	
Specialisation 4	
Specialisation 5	

B 9.0 Direct contractors [16.0]

Extent of work [12.1.11]	
Extent of work [12.1.11]	
Extent of work [12.1.11]	
Extent of work [12.1.11]	
Extent of work [12.1.11]	

B 10.0 Description of sections [20.1]

Section 1	
Section 2	
Section 3	
Section 4	
Section 5	
Section 6	
Section 7	
Section 8	
Section	Remainder of the works

B 11.0 Possession of site [12.1.5], practical completion [19.0;20.0] and penalties [24.0]

Practical completion for the works as a whole	Intended date of possession of the site [12.1.5]	Period for inspection by the principal agent [19.3]	Date for practical completion [12.2.7; 24.1]	Penalty [24.1]
	Date	working days	Date	Penalty amount per calendar day excl. TAX

or where **sections** are applicable

Practical completion of a section of the works	Intended date of possession of a section [12.1.5]	Period for inspection by the principal agent [19.3]	Date for practical completion [12.2.7; 24.1]	Penalty [24.1]
	Date	working days	Date	Penalty amount per calendar day excl. TAX
Section 1				
Section 2				
Section 3				
Section 4				
Section 5				
Section 6				
Section 7				
Section 8				
Remainder of the works				

Criteria to achieve practical completion not covered in the definition of practical completion
<p style="color: yellow; font-size: 2em; transform: rotate(-45deg); opacity: 0.5;">Hot Isotonic Press (HIP) Facility - 27-August-2021</p>

B 12.0 Payment [25.0]

Date of month for issue of regular payment certificates [25.2]			
Cost fluctuations [25.3.4; 26.9.5]	Yes/no?		
If yes, method to calculate			

B 13.0 Dispute resolution [30.0]

Adjudication [30.6.1; 30.10] Name of nominating body	
Applicable rules for adjudication [30.6.2]	
Arbitration [30.7.4; 30.10] Name of nominating body	
Applicable rules for arbitration [30.7.5]	

B 14.0 JBCC® General Preliminaries – selections

Provisional bills of quantities [P2.2]		Yes/no?		
Availability of construction information [P2.3]		Yes/no?		
Previous work - dimensional accuracy - details of previous contract(s) [P3.1]				
Previous work - defects - details of previous contract(s) [P3.2]				
Inspection of adjoining properties - details [P3.3]				
Handover of site in stages - specific requirements [P4.1]				
Enclosure of the works - specific requirements [P4.2]				
Geotechnical and other investigations - specific requirements [P4.3]				
Existing premises occupied - details [P4.5]				
Services - known - specific requirements [P4.6]				
Water [P8.1]	By contractor	Yes/no?		
	By employer	Yes/no?		
	By employer – metered	Yes/no?		
Electricity [P8.2]	By contractor	Yes/no?		
	By employer	Yes/no?		
	By employer – metered	Yes/no?		
Ablution and welfare facilities [P8.3]	By contractor	Yes/no?		
	By employer	Yes/no?		
Communication facilities - specific requirements [P8.4]				
Protection of the works - specific requirements [P11.1]				
Protection / isolation of existing works and works occupied in sections - specific requirements [P11.2]				
Disturbance - specific requirements [P11.5]				
Environmental disturbance - specific requirements [P11.6]				

B 15.0 Changes made to JBCC® documentation

Reference may be made to other documents forming part of this **agreement**

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C TENDER CLOSING

Tender closing date		Time	
Tender submission address			
Tender may be submitted by e-mail	yes/no?		E-mail

D TENDERER'S SELECTIONS

D 1.0 Securities [11.0]

Guarantee for construction: Select Option A or B

Option A	Guarantee for construction (variable) by contractor [11.1.1]
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Option B	Guarantee for construction (fixed) by contractor [11.1.2]
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Guarantee for payment by employer [11.5.1; 11.10]	Amount	
----------------------------------------------------------	--------	--

Advance payment, subject to a guarantee for advance payment [11.2.2; 11.3]	Amount	
-----------------------------------------------------------------------------------	--------	--

D 2.0 Contractor's annual holiday periods during the construction period

Year 1 contractor's annual holiday period	start date		end date	
Year 2 contractor's annual holiday period	start date		end date	
Year 3 contractor's annual holiday period	start date		end date	

D 3.0 Payment of preliminaries [25.0]

Contractor's selection

Select Option A or B

Where the **contractor** does not select an option, Option A shall apply

Option A	The preliminaries shall be paid in accordance with an amount prorated to the value of the works executed in the same ratio as the amount of the preliminaries to the contract sum , which contract sum shall exclude the amount of preliminaries . Contingency sum(s) and any provision for cost fluctuations shall be excluded for the calculation of the aforesaid ratio
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Option B	The preliminaries shall be paid in accordance with an amount agreed by the principal agent and the contractor in terms of the priced document to identify an initial establishment charge, a time-related charge and a final dis-establishment charge. Payment of the time-related charge shall be assessed by the principal agent and adjusted from time to time as may be necessary to take into account the rate of progress of the works
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Lump sum contract

Where the amount of **preliminaries** is not provided it shall be taken as 7.5% (seven and a half per cent) of the **contract sum**, excluding contingency sum(s) and any provision for cost fluctuations

D 4.0 Adjustment of preliminaries [26.9.4]

Contractor's selection

Select Option A or B

Where the **contractor** does not select an option, Option A shall apply

Provision of particulars

The **contractor** shall provide the particulars for the purpose of the adjustment of **preliminaries** in terms of his selection. Where completion in **sections** is required, the **contractor** shall provide an apportionment of **preliminaries per section**

Option A	An allocation of the preliminaries amounts into Fixed, Value-related and Time-related amounts as defined for adjustment method Option A below, within fifteen (15) working days of the date of acceptance of the tender
Option B	A detailed breakdown of the preliminaries amounts within fifteen (15) working days of possession of the site . Such breakdown shall include, inter alia, the administrative and supervisory staff, the use of construction equipment , establishment and dis-establishment charges, insurances and guarantees, all in terms of the programme

Adjustment methods

The amount of **preliminaries** shall be adjusted to take account of the effect which changes in time and/or value have on **preliminaries**. Such adjustment shall be based on the particulars provided by the **contractor** for this purpose in terms of Options A or B, shall preclude any further adjustment of the amount of **preliminaries** and shall apply notwithstanding the actual employment of resources by the **contractor** in the execution of the **works**

Option A	<p>The preliminaries shall be adjusted in accordance with the allocation of preliminaries amounts provided by the contractor, apportioned to sections where completion in sections is required</p> <p>Fixed - An amount which shall not be varied</p> <p>Value-related - An amount varied in proportion to the contract value as compared to the contract sum. Both the contract sum and the contract value shall exclude the amount of preliminaries, contingency sum(s) and any provision for cost fluctuations</p> <p>Time-related - An amount varied in proportion to the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4]</p>
Option B	<p>The adjustment of preliminaries shall be based on the number of calendar days extension to the date of practical completion to which the contractor is entitled with an adjustment of the contract value [23.2; 23.3] as compared to the number of calendar days in the initial construction period [26.9.4]</p> <p>The adjustment shall take into account the resources as set out in the detailed breakdown of the preliminaries for the period of construction during which the delay occurred</p>

Failure to provide particulars within the period stated

Option A	<p>Where the allocation of preliminaries amounts for Option A is not provided, the following allocation of preliminaries amounts shall apply:</p> <p>Fixed - Ten per cent (10%) Value-related - Fifteen per cent (15%) Time-related - Seventy-five per cent (75%)</p> <p>Where the apportionment of the preliminaries per section is not provided, the categorised amounts shall be prorated to the cost of each section within the contract sum as determined by the principal agent</p>
Option B	Where the detailed breakdown of preliminaries amounts for Option B is not provided, Option A shall apply

Lump sum contract

Where the amount of **preliminaries** is not provided it shall be taken as 7.5% (seven and a half per cent) of the **contract sum**, excluding contingency sum(s) and any provision for cost fluctuations

E FORM OF TENDER

E 1.0 Tenderer's details

Name			
Legal entity of above		Contact person	
Business registration number		Telephone number	
VAT/GST number		Mobile number	
Country		E-mail	
Postal address			Postal code
Physical address			Postal code

E 2.0 Acceptance of tender conditions

By submission of this tender to the **employer** the tenderer offers and agrees to execute and complete the **works** and to remedy any **defects** in conformity with the specification for the tender amount stated

The tender shall remain in full legal force for forty-five (45) **calendar days** from the closing date of the tender. The tenderer accepts liability for loss or damages that may be suffered by the **employer** should the tender validity period not be honoured

The lowest or any tender will not necessarily be accepted by the **employer** nor will reasons be given for such a decision

E 3.0 Tender amount compilation

	Amount	
Tenderer's work excluding tax		
Tax		%
Total tender amount including tax		
Total tender amount including tax, in words		

Signature	Tenderer who by signature hereto warrants authority	Place		
Name		Capacity	Date	

Signature	Witness	Place		
Name		Date		

E 4.0 Tender qualifications



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Section 4 - Provisional Bills of Quantities



4.1 Bill No.1 - Preliminaries and General

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Item No	Quantity	Rate	Amount
<p><u>BILL NO. 1</u> <u>PRELIMINARIES</u></p> <p><u>BUILDING AGREEMENT AND PRELIMINARIES</u></p> <p>The JBCC Principal Building Agreement (Edition 6.2 - May 2018) prepared by the Joint Building Contracts Committee shall be the applicable building agreement, amended as hereinafter described</p> <p>The JBCC Principal Building Agreement contract data form an integral part of this agreement</p> <p>The JBCC General Preliminaries (May 2018) published by the Joint Building Contracts Committee for use with the JBCC Principal Building Agreement (Edition 6.2 - May 2018) shall be deemed to be incorporated in these bills of quantities, amended as hereinafter described</p> <p>The contractor is deemed to have referred to the abovementioned documents for the full intent and meaning of each clause</p> <p>The clauses in the abovementioned documents are hereinafter referred to by clause number and heading only</p> <p>Where any item is not relevant to this agreement such item is marked N/A signifying "not applicable"</p> <p>Where standard clauses or alternatives are not entirely applicable to this agreement such amendments, modifications, corrections or supplements as will apply are given under each relevant clause heading and such amendments, modifications, corrections or supplements shall take precedence notwithstanding anything to the contrary contained in the abovementioned documents</p>			
Carried to Collection			R
Section No. 1 Preliminaries Bill No. 1 Preliminaries and General Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

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PREAMBLES FOR TRADES

The General Preambles for Trades 2017 published by the Association of South African Quantity Surveyors shall be deemed to be incorporated in these **bills of quantities** and no claims arising from brevity of description of items fully described in the said General Preambles will be entertained

Supplementary preambles and/or specifications are incorporated in these **bills of quantities** to satisfy the requirements of this project. Such supplementary preambles and/or specifications shall take precedence over the provisions of the General Preambles

The **contractor's** prices for all items throughout these **bills of quantities** shall take account of and include where applicable for all of the obligations, requirements and specifications given in the General Preambles and in any supplementary preambles and/or specifications

STRUCTURE OF THIS PRELIMINARIES BILL

Section A : A recital of the headings of the individual clauses in the aforementioned **JBCC** Principal Building Agreement

Section B : A recital of the headings of the individual clauses in the aforementioned **JBCC** General Preliminaries

Section C : Any special clauses to meet the particular circumstances of the project

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PRICING OF PRELIMINARIES

Should the **contractor** select Option A in the **contract data** for the adjustment of **preliminaries**, the amounts entered against the relevant items in these **preliminaries** are to be divided into one or more of the three categories provided namely fixed (F), value related (V) and time related (T)

SECTION A: PRINCIPAL BUILDING AGREEMENT

Interpretation (A1-A7)

1 Clause 1.0 - Definitions and interpretation

Pricing of bills of quantities

The **contractor** is to allow opposite each item for all costs in connection therewith. All prices to include, unless otherwise stated, for all materials, fabrication, conveyance and delivery, unloading, storing, unpacking, hoisting, labour, setting, fitting and fixing in position, cutting and waste (except where to be measured in accordance with the standard system of measurement), patterns, models and templates, plant, temporary works, returning of packaging, duties, taxes (other than Value Added Tax), imposts, establishment charges, overheads, profit and all other obligations arising out of this **agreement**. Value Added Tax (VAT) is to be separately stated on the summary page of these **bills of quantities**

Items left unpriced will be deemed to be covered in prices against other items throughout these **bills of quantities** and no claim for any extras arising out of the **contractor's** omission to price any item will be entertained

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Prices for all **construction equipment**, temporary works, services and other items shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary

Abbreviated descriptions

The items in these **bills of quantities** utilise abbreviated descriptions. It is the intention that the abbreviated descriptions be fully described when read with the applicable measuring system and the relevant preambles and/or specifications. However, should the full intent and meaning of any description not be clear, the **contractor** shall, before submission of his tender, call for a written directive from the **principal agent**, failing which it shall be assumed that the **contractor** has allowed in his pricing for materials and workmanship in terms of international best practice

Legal status of contractor

If the **contractor** constitutes a joint venture, consortium or other unincorporated grouping of two or more persons then:

1. These persons are deemed to be jointly and severally liable to the **employer** for the performance of this **agreement**
2. These persons shall notify the **employer** of their leader who has assigned authority to bind the **contractor** and each of these persons
3. The **contractor** shall not alter its composition or legal status without the prior written consent of the **employer**

F:..... V:.....
T:.....

2 Clause 2.0 - **Law, regulations and notices**

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<p>NHBRC levies</p> <p>The employer shall allow for and pay any levies required by the National Home Builders Registration Council (NHBRC). The contractor warrants that he is registered and will maintain registration with the NHBRC for the duration of this agreement [2.1] - N/A</p> <p>N/A</p> <p>F:..... V:..... T:.....</p> <p>3 Clause 3.0 - Offer and acceptance</p> <p>F:..... V:..... T:.....</p> <p>4 Clause 4.0 - Cession and assignment</p> <p>F:..... V:..... T:.....</p> <p>5 Clause 5.0 - Documents</p> <p>Value Added Tax</p> <p>Provision is made in the summary page of these bills of quantities for the inclusion of Value Added Tax (VAT)</p> <p>Priced document as specification</p> <p>The priced document shall not be used as a specification of materials and goods or methods</p> <p>The principal agent shall decide which portion of the priced document may be used as a specification of materials and goods or methods, if any</p> <p style="text-align: right;">Carried to Collection</p> <p>Section No. 1 Preliminaries Bill No. 1 Preliminaries and General Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>				<p>Item</p> <p>Item</p> <p>Item</p> <p>R</p>
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	<p>Electronic issue of drawings</p> <p>All drawings for this project will be issued either electronically or hard copy, depending on the preference by the architect/ consultants and the contractor and the contractor shall be deemed to have received such drawings on the date that such drawings have been dispatched electronically, or on the date reflected on the drawing transmittal document in the case of hard copy submission [5.6].</p> <p>F:..... V:..... T:.....</p>			
6	<p>Clause 6.0 - Employer's agents</p> <p>Delegated authority</p> <p>The authority of the principal agent to issue contract instructions [17.1] and perform duties for specific aspects of the works is delegated to agents as per clause B 5.0 of the Contract Data [6.2]. This does not preclude the principal agent from issuing such contract instructions:</p> <p><i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i></p> <p>1. Architect</p> <p>1.1 Duties [6.2] :</p> <p>The architect is responsible for the architectural design, functional design and quality inspection of the works</p> <p>1.2 Contract instructions [6.2; 17.1] : The Principal Agent shall, in general, issue the instructions listed below, however, such authority may be delegated to the Architect from time to time as agreed by the Principal Agent, Architect and Employer.</p>	Item		
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1.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement			
1.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works			
1.2.3 The site [13.0]			
1.2.4 Compliance with the law , regulations and bylaws [2.1]			
1.2.5 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works			
1.2.6 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]			
1.2.7 Removal or re-execution of work			
1.2.8 Removal or substitution of any materials and goods			
1.2.9 Protection of the works			
1.2.10 Making good physical loss and repairing damage to the works [23.2.2]			
1.2.11 Rectification of defects [21.2]			
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<p>1.2.12 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>1.2.13 Expenditure of budgetary allowances, prime cost amounts and provisional sums</p> <p>1.2.14 Appointment of a subcontractor [14.0; 15.0]</p> <p>1.2.15 Work by direct contractors [16.0]</p> <p>1.2.16 On suspension or termination, protection of the works, removal of construction equipment and surplus materials and goods [29.0]</p>			
<p>2. <u>Quantity surveyor</u></p>			
<p>2.1 Duties [6.2] :</p>			
<p>The quantity surveyor is responsible for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions of the works</p>			
<p>2.2 Contract instructions [6.2; 17.1] :</p>			
<p>2.2.1 No contract instructions delegated to the quantity surveyor</p>			
<p>3. <u>Civil and structural engineer</u></p>			
<p><i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i></p>			
<p align="center">Carried to Collection</p>		<p align="center">R</p>	
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<p>3.1 Duties [6.2] :</p> <p>The civil and structural engineer is responsible for all aspects of civil and structural engineering design and quality inspection of the works</p> <p>3.2 Contract instructions [6.2; 17.1] :</p> <p>3.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement</p> <p>3.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>3.2.3 The site [13.0]</p> <p>3.2.4 Compliance with the law, regulations and bylaws [2.1]</p> <p>3.2.5 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>3.2.6 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>3.2.7 Removal or re-execution of work</p> <p>3.2.8 Removal or substitution of any materials and goods</p> <p>3.2.9 Protection of the works</p> <p>3.2.10 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>3.2.11 Rectification of defects [21.2]</p> <p style="text-align: right;">Carried to Collection</p>				
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3.2.12 A **list for practical completion** specifying outstanding or defective work to be rectified to achieve **practical completion**, a **list for completion** and a **list for final completion** specifying outstanding or defective work to be rectified to achieve **final completion**

3.2.13 Expenditure of **budgetary allowances**, **prime cost amounts** and **provisional sums where applicable**

4. Mechanical engineer

Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA

4.1 Duties [6.2] :

The mechanical engineer is responsible for all aspects of mechanical engineering design and quality inspection of the **works** and, where appointed by the **employer** for quantity surveying services in respect of the mechanical installations, for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions

4.2 **Contract instructions** [6.2; 17.1] :

4.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the **agreement** other than in the **JBCC** Principal Building Agreement

4.2.2 Alteration to design, standards or quantity of the **works** provided that such **contract instructions** shall not substantially change the scope of the **works**

4.2.3 Compliance with the **law**, regulations and bylaws [2.1]

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<p>4.2.4 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>4.2.5 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>4.2.6 Removal or re-execution of work</p> <p>4.2.7 Removal or substitution of any materials and goods</p> <p>4.2.8 Protection of the works</p> <p>4.2.9 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>4.2.10 Rectification of defects [21.2]</p> <p>4.2.11 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>4.2.12 Expenditure of budgetary allowances, prime cost amounts and provisional sums</p> <p>5. <u>Electrical engineer</u></p> <p><i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i></p>				
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<p>5.1 Duties [6.2] :</p> <p>The electrical engineer is responsible for all aspects of electrical engineering design and quality inspection of the works and, where appointed by the employer for quantity surveying services in respect of the electrical installations, for all measurements, valuations, financial assessments and all other quantity surveying and cost control functions</p> <p>5.2 Contract instructions [6.2; 17.1] :</p> <p>5.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement</p> <p>5.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>5.2.3 Compliance with the law, regulations and bylaws [2.1]</p> <p>5.2.4 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>5.2.5 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>5.2.6 Removal or re-execution of work</p> <p>5.2.7 Removal or substitution of any materials and goods</p> <p>5.2.8 Protection of the works</p> <p>5.2.9 Making good physical loss and repairing damage to the works [23.2.2]</p> <p style="text-align: right;">Carried to Collection</p>				
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<p>5.2.10 Rectification of defects [21.2]</p> <p>5.2.11 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>5.2.12 Expenditure of budgetary allowances, prime cost amounts and provisional sums</p>			
<p>6. <u>Wet services engineer - N/A</u></p> <p><i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i></p> <p>6.1 Duties [6.2] :</p> <p>The wet services engineer is responsible for all aspects of wet services engineering design and quality inspection of the works</p> <p>6.2 Contract instructions [6.2; 17.1] :</p> <p>6.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement</p> <p>6.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>6.2.3 Compliance with the law, regulations and bylaws [2.1]</p>			
<p align="right">Carried to Collection</p> <p>Section No. 1 Preliminaries Bill No. 1 Preliminaries and General Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>		<p align="right">R</p>	

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<p>6.2.4 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>6.2.5 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>6.2.6 Removal or re-execution of work</p> <p>6.2.7 Removal or substitution of any materials and goods</p> <p>6.2.8 Protection of the works</p> <p>6.2.9 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>6.2.10 Rectification of defects [21.2]</p> <p>6.2.11 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>6.2.12 Expenditure of budgetary allowances, prime cost amounts and provisional sums</p> <p>7. <u>Fire consultant - N/A</u></p> <p><i>Note that the contract instructions hereinafter are selected from those listed in clause 17.1 of the JBCC PBA</i></p> <p>7.1 Duties [6.2] :</p> <p>The fire consultant is responsible for all aspects of rational fire design and quality inspection of the works</p> <p>7.2 Contract instructions [6.2; 17.1] :</p>				
Carried to Collection				R
<p>Section No. 1 Preliminaries Bill No. 1 Preliminaries and General Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>				

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<p>7.2.1 Rectification of discrepancies, errors in description or quantity or omission of items in the agreement other than in the JBCC Principal Building Agreement</p> <p>7.2.2 Alteration to design, standards or quantity of the works provided that such contract instructions shall not substantially change the scope of the works</p> <p>7.2.3 Compliance with the law, regulations and bylaws [2.1]</p> <p>7.2.4 Provision and testing of samples of materials and goods and/or of finishes and assemblies of elements of the works</p> <p>7.2.5 Opening up of work for inspection, removal or re-execution [23.2.4; 26.4.2]</p> <p>7.2.6 Removal or re-execution of work</p> <p>7.2.7 Removal or substitution of any materials and goods</p> <p>7.2.8 Protection of the works</p> <p>7.2.9 Making good physical loss and repairing damage to the works [23.2.2]</p> <p>7.2.10 Rectification of defects [21.2]</p> <p>7.2.11 A list for practical completion specifying outstanding or defective work to be rectified to achieve practical completion, a list for completion and a list for final completion specifying outstanding or defective work to be rectified to achieve final completion</p> <p>7.2.12 Expenditure of budgetary allowances, prime cost amounts and provisional sums</p>				
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<p>8. <u>Health and safety consultant</u></p> <p>8.1 Duties [6.2] :</p> <p>The health and safety consultant is responsible for all aspects of health and safety of the works. Without derogating from the generality thereof, the health and safety consultant will perform the following specific functions and duties in respect of the health and safety aspects of the works. He shall:</p> <p>8.1.1 Act as the employer's agent in terms of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended</p> <p>8.1.2 Prepare and update the health and safety specification for the works</p> <p>8.1.3 Agree with the contractor the health and safety plan for the works</p> <p>8.1.4 Carry out regular audits to ensure adherence to the safety plan and compliance with the act and regulations</p> <p>8.1.5 Stop the execution of the works where the agreed specification or plan is not adhered to</p> <p>F:..... V:..... T:.....</p>			
<p>7 Clause 7.0 - Design responsibility</p> <p>F:..... V:..... T:.....</p>			
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	<u>Insurances and securities (A8-A11)</u>			
8	Clause 8.0 - Works risk			
	F:..... V:..... T:.....	Item		
9	Clause 9.0 - Indemnities			
	F:..... V:..... T:.....	Item		
10	Clause 10.0 - Insurances			
	F:..... V:..... T:.....	Item		
11	Clause 11.0 - Securities			
	Guarantee for payment			
	The employer shall NOT provide to the contractor a guarantee for payment [11.5.1]. The contractor shall waive his lien or right of continuing possession of the works [11.10]			
	Extension of waiver of lien			
	The contractor shall ensure that a waiver of lien is included in all subcontracts and that the works executed on the site are kept free of all liens and other encumbrances at all times [11.10]			
	F:..... V:..... T:.....	Item		
	<u>Execution (A12 - A17)</u>			
12	Clause 12.0 - Obligations of the parties			
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Office accommodation

The **contractor** shall provide, maintain and remove on **practical completion** air conditioned office accommodation with suitable tables and chairs for meetings to be held on the **site**. Such offices shall be kept clean and fit for use at all times [12.2.18]

Notice board

The **contractor** shall erect in a position approved by the **principal agent**, maintain and remove on **practical completion** a notice board recommended by the South African Institute of Architects and as approved by the **principal agent** listing the names and logos of the **employer**, the **contractor** and the professional consultants. No subcontractor or supplier notice boards may be erected unless permission is granted by the **principal agent** for such notice boards to be erected [12.2.18]

Statutory and other notices

The **contractor** shall submit and/or comply with all statutory and other notices that may be required by any local or other authority in order not to cause any delay to the commencement of the **works** by the **contractor**. The **contractor** shall pay all deposits or fees in this regard

It is, however, specifically recorded that the **employer** shall be responsible for the timeous approval of building plans by any local or other authorities and the payment of any fees or charges related thereto

F:..... V:.....
T:.....

13 Clause 13.0 - Setting out

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T:.....

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14	<p>Clause 14.0 - Nominated subcontractors</p> <p>F:..... V:..... T:.....</p>	Item		
15	<p>Clause 15.0 - Selected subcontractors</p> <p>F:..... V:..... T:.....</p>	Item		
16	<p>Clause 16.0 - Direct contractors</p> <p>Attendance on direct contractors</p> <p>In respect of direct contractors the contractor shall:</p> <ol style="list-style-type: none"> 1. Designate an area for the direct contractor to establish a temporary office and workshop and storage of equipment and materials 2. Allow the use of personnel welfare facilities, where provided 3. Provide water, lighting and single phase electric power to a position within 50m of the place where the direct contract work is to be carried out, other than fuel or power for commissioning of any installation 4. Permit the direct contractor to use erected scaffolding, hoisting facilities, etc provided by the contractor, in common with others having the like right, while it remains erected on the site [16.1] 			
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17	<p>5. Allow for a fixed lump sum cost for the following personnel, which shall include the cost of transport to and from site, sustenance, tools and consumables to assist the Hot Isostatic Press (HIP) machine installer with their commissioning of the HIP machine:</p> <p>5.1. Generator technician (minimum 5yrs experience, including Integrated Systems Testing)</p> <p>5.2. Electrician (must have a trade certificate, wiremans licence, and minimum 5yrs experience with 3-phase power and machines)</p> <p>5.3. Plumber (must have a trade certificate and minimum 5yrs experience)</p> <p>5.4. Gas technician (must have a trade certificate and minimum 5yrs experience)</p> <p>5.5. Data/Network technician (minimum 5yrs experience)</p> <p>5.6. Supervisor</p> <p>In addition, the contractor must ensure that their insurance cover remains in place and is valid up until the acceptance of the entire projects works and date of issue of a certificate of practical completion by the employers agents.</p> <p>F:..... V:..... T:.....</p>	Item	
18	<p>Clause 17.0 - Contract instructions</p> <p>Site instructions</p> <p>Instructions issued on site are to be recorded in a site instruction book which is to be supplied and maintained on site by the contractor</p> <p>F:..... V:..... T:.....</p> <p><u>Completion (A18 - A24)</u></p>	Item	
19	<p>Clause 18.0 - Interim completion</p>	N/A	
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20	<p>Clause 19.0 - Practical completion</p> <p>F:..... V:..... T:.....</p>	Item		
21	<p>Clause 20.0 - Completion in sections</p> <p>F:..... V:..... T:.....</p>	Item		
22	<p>Clause 21.0 - Defects liability period and final completion</p> <p>F:..... V:..... T:.....</p>	Item		
23	<p>Clause 22.0 - Latent defects liability period</p> <p>F:..... V:..... T:.....</p>	Item		
24	<p>Clause 23.0 - Revision of the date for practical completion</p> <p>Substitution of materials and goods</p> <p>The removal or substitution of any materials and goods which do not conform to the specification or the contract drawings shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value [17.1.8; 23.1 & 2]</p> <p>F:..... V:..... T:.....</p>	Item		
25	<p>Clause 24.0 - Penalty for late or non-completion</p> <p>F:..... V:..... T:.....</p>	Item		
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		Item		
	<p><u>Payment (A25 - A27)</u></p>			
26	<p>Clause 25.0 - Payment</p> <p>Prices submitted</p> <p>Where prices are submitted by the contractor or subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of this agreement and notwithstanding the fact that such prices may be used in an interim payment certificate, there is to be no presumption of acceptance. Should the principal agent wish to accept any such prices prior to the issue of the certificate of final completion, it shall be in writing</p> <p>F:..... V:..... T:.....</p>			
27	<p>Clause 26.0 - Adjustment of the contract value and final account</p> <p>Fluctuations in costs</p> <p>All fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor [26.9.5]</p> <p>Tenant installation/user requirements delayed</p> <p>There is a possibility that certain works related to tenant installation/ user requirements may have to be delayed and may consequently not be executed prior to practical completion</p>			
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Should the **contractor** be instructed to do so he shall execute this work under the conditions pertaining to this **agreement** on the basis that a separate amount for **preliminaries** appurtenant to this work (if applicable) is agreed to between the **contractor** and the **principal agent** and on condition that instruction to proceed with such work is given to him within a period of three (3) calendar months after the date of **practical completion** of the **works**

The **employer** reserves the right to omit such work without compensation to the **contractor** for loss of profit or any other loss which the **contractor** may suffer as a result of such omission

Cost of claims

All costs incurred by the **contractor** in the preparation of claims shall be borne by the **contractor**. This provision shall not preclude an adjudicator or an arbitrator appointed in terms of this **agreement** [30.6 & 7] from making a determination on costs

Claims from subcontractors

The **contractor** shall review, assess and adjudicate any claims received by him from any **subcontractor** and thereafter submit same to the **principal agent** with a recommendation in order to assist the **principal agent** in adjudicating the claim [26.6]

F:..... V:.....
T:.....

28 Clause 27.0 - Recovery of expense and/or loss

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T:.....

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Suspension and termination (A28 - A29)

29 Clause 28.0 - Suspension by the **contractor**

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	F:..... V:..... T:.....	Item		
30	Clause 29.0 - Termination			
	F:..... V:..... T:.....	Item		
	<u>Dispute resolution (A30)</u>			
31	Clause 30.0 - Dispute resolution			
	F:..... V:..... T:.....	Item		
32	<u>Agreement</u> The required information of the parties and the amount of the contract sum shall be inserted in the agreement for signature of the agreement by the parties			
33	<u>Contract data</u>	Item		
34	<u>Contract duration</u> The contract duration is fourteen (14) weeks (3.5 months) Tenderer's selections Before submission of his tender the contractor is to complete the tenderer's selections in the contract data			
	F:..... V:..... T:.....	Item		
	<u>SECTION B: GENERAL PRELIMINARIES</u>			
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<u>Definitions and interpretation (B1)</u>				
35	Clause 1.1 - Definitions F:..... V:..... T:.....	Item		
36	Clause 1.2 - Interpretation F:..... V:..... T:.....	Item		
<u>Documents (B2)</u>				
37	Clause 2.1 - Checking of documents F:..... V:..... T:.....	Item		
38	Clause 2.2 - Provisional bills of quantities These bills of quantities are provisionally measured and all subsequent trades are re-measurable F:..... V:..... T:.....	Item		
39	Clause 2.3 - Availability of construction information F:..... V:..... T:.....	Item		
40	Clause 2.4 - Ordering of materials and goods F:..... V:..... T:.....	Item		
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<u>Previous work and adjoining properties (B3)</u>				
41	Clause 3.1 - Previous work - dimensional accuracy F:..... V:..... T:.....	Item		
42	Clause 3.2 - Previous work - defects F:..... V:..... T:.....	Item		
43	Clause 3.3 - Inspection of adjoining properties F:..... V:..... T:.....	Item		
<u>The site (B4)</u>				
44	Clause 4.1 - Handover of site in stages F:..... V:..... T:.....	Item		
45	Clause 4.2 - Enclosure of the works <i>It is not envisaged that additional special hoarding will be required, however, the contractor/ tenderer is to familiarise himself with the hoarding requirements prior to the submission of the tender as no additional claims for hoarding other than allowed in 4.2 above will be entertained</i> F:..... V:..... T:.....	Item		
46	Clause 4.3 - Geotechnical and other investigations F:..... V:..... T:.....	Item		
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47	Clause 4.4 - Encroachments F:..... V:..... T:.....	Item	
48	Clause 4.5 - Existing premises occupied F:..... V:..... T:.....	Item	
49	Clause 4.6 - Services - known F:..... V:..... T:.....	Item	
<u>Management of contract (B5)</u>			
50	Clause 5.1 - Management of the works F:..... V:..... T:.....	Item	
51	Clause 5.2 - Progress meetings F:..... V:..... T:.....	Item	
52	Clause 5.3 - Technical meetings F:..... V:..... T:.....	Item	
<u>Samples, shop drawings and manufacturer's instructions (B6)</u>			
53	Clause 6.1 - Samples of materials F:..... V:..... T:.....	Item	
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54	Clause 6.2 - Workmanship samples F:..... V:..... T:.....	Item	
55	Clause 6.3 - Shop drawings F:..... V:..... T:.....	Item	
56	Clause 6.4 - Compliance with manufacturer's instructions F:..... V:..... T:.....	Item	
<u>Deposits and fees (B7)</u>			
57	Clause 7.1 - Deposits and fees F:..... V:..... T:.....	Item	
<u>Temporary services (B8)</u>			
58	Clause 8.1 - Water F:..... V:..... T:.....	Item	
59	Clause 8.2 - Electricity F:..... V:..... T:.....	Item	
60	Clause 8.3 - Ablution and welfare facilities F:..... V:..... T:.....	Item	
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61	<p>Clause 8.4 - Communication facilities</p> <p>F:..... V:..... T:.....</p> <p><u>Prime cost amounts (B9)</u></p>	Item	
62	<p>Clause 9.1 - Responsibility for prime cost amounts</p> <p><i>Where details of materials for which prime cost amounts are to be allowed <u>are</u> readily available, the quantity surveyor may elect to insert the relevant prime cost amounts in measured items, which measured items shall contain sufficient detail for the contractor to price for fixing and installation, waste, etc</i></p> <p>F:..... V:..... T:.....</p> <p><u>Attendance on subcontractors (B10)</u></p>	Item	
63	<p>Clause 10.1 - General attendance</p> <p><i>General attendance is defined as being the duties of the contractor in terms of clause 12.2 of the JBCC n/s subcontract agreement</i></p> <p>F:..... V:..... T:.....</p>	Item	
64	<p>Clause 10.2 - Special attendance</p> <p><i>The contractor/ tenderer is to allow for the extended use of scaffolding or other hoisting equipment for as long as n/s subcontractors or other subcontractors might require usage thereof, at no additional cost to the employer</i></p> <p>F:..... V:..... T:.....</p>	Item	
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General (B11)				
65	<p>Clause 11.1 - Protection of the works</p> <p>F:..... V:..... T:.....</p>	Item		
66	<p>Clause 11.2 - Protection/isolation of existing works and works occupied in sections</p> <p>F:..... V:..... T:.....</p>	Item		
67	<p>Clause 11.3 - Security of the works</p> <p>F:..... V:..... T:.....</p>	Item		
68	<p>Clause 11.4 - Notice before covering work</p> <p>F:..... V:..... T:.....</p>	Item		
69	<p>Clause 11.5 - Disturbance</p> <p>Disturbance</p> <p>All work is to be carried out in such a manner as to cause no unacceptable or unreasonable dust, noise, vibrations, nuisance, inconvenience, annoyance and the like to the public, others, other properties and traffic in so far as they exceed the permissible limitations set by government legislation or by the local authority. Any delays, stoppages and the like arising from or in order to comply with the above will not constitute grounds for an adjustment to the construction period or contract value whatsoever</p> <p>F:..... V:..... T:.....</p>	Item		
70	<p>Clause 11.6 - Environmental disturbance</p>			
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Controlling all forms of pollution			
The contractor shall be responsible for and take all precautions in controlling by whatever means necessary all forms of pollution emanating from the site during the construction period due inter alia to noise, artificial light, wind-blown sand, dust, deposits of mud, etc			
The contractor is to ensure that all roads which border the site and are used by the contractor during the execution of the works are kept clean and free of any dirt or debris caused by the execution of the works			
Environmental management plan			
The employer has prepared an environmental management plan (EMP) in this tender. The contractor shall price opposite this item for compliance with all the requirements of such EMP			
F:..... V:..... T:.....	Item		
71 Clause 11.7 - Works cleaning and clearing			
F:..... V:..... T:.....	Item		
72 Clause 11.8 - Vermin			
F:..... V:..... T:.....	Item		
73 Clause 11.9 - Overhand work			
F:..... V:..... T:.....	Item		
74 Clause 11.10 - Tenant installations			
F:..... V:..... T:.....	Item		
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75	<p>Clause 11.11 - Advertising</p> <p>F:..... V:..... T:.....</p> <p><u>SECTION C: SPECIFIC PRELIMINARIES</u></p>	Item		
76	<p>Warranties for materials and workmanship</p> <p>Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the entity supplying the materials and/or executing the work and shall deliver same to the principal agent on final completion of the contract</p> <p>The warranty shall state that workmanship, materials and installation are warranted for a specific period from the date of practical completion and that any defects that may arise during the specified period shall be made good at the expense of the entity supplying the materials and/or doing the work, upon written notice to do so</p> <p>The warranty will not be enforced if the work is damaged by defects in the execution of the works, in which case the responsibility for replacement shall rest entirely with the contractor</p> <p>F:..... V:..... T:.....</p>	Item		
77	<p>Overtime</p> <p>Should overtime be required to be worked for any reason whatsoever, the cost of such overtime is to be borne by the contractor unless the principal agent has specifically authorised, prior to execution thereof, that costs for such overtime are to be borne by the employer</p> <p>F:..... V:..... T:.....</p>	Item		
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78	<p>Cooperation of the contractor for cost management</p> <p>It is specifically agreed that the contractor accepts the obligation of assisting the principal agent in implementing proper cost management. The contractor will be advised by the principal agent of all cost management procedures which will be implemented to ensure that the contract value does not exceed the budget</p> <p>F:..... V:..... T:.....</p>	Item			
79	<p>Overloading</p> <p>The contractor shall take all necessary steps to ensure that no damage occurs due to overloading of any portion of the works or temporary works eg scaffolding, etc. The contractor shall submit details of his proposed loading, storage, plant erection, etc to the principal agent for approval prior to proceeding with such loading, storing or erecting and shall comply with and pay for the principal agent's requirements in connection with the provision of temporary support work, etc. Any damage caused to the works by overloading shall be made good by the contractor at his sole expense</p> <p>F:..... V:..... T:.....</p>	Item			
80	<p>Propping of floors below</p> <p>The contractor is advised that propping of floors below may be required if he wishes to use any areas of completed suspended reinforced concrete slabs for vehicle access, storage of materials and goods and location of plant, scaffolding, etc. The location of these areas and any necessary propping shall be approved by the principal agent and the cost thereof shall be borne by the contractor</p> <p>F:..... V:..... T:.....</p>	Item			
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81 Testing of flat roof waterproofing for watertightness

Flat roof waterproof areas shall be flooded and kept "ponded" for at least forty eight (48) hours as a test to ensure the watertightness of the waterproofing and before any further construction work is carried out above the waterproofing

F:..... V:..... T:.....

82 Health and safety

Without limiting the generality of the provisions of clause 2.0, the **contractor's** attention is drawn to the provisions of the Construction Regulations issued in terms of the Occupational Health and Safety Act, 1993 as amended. It is specifically stated that the **employer** shall prepare a documented health and safety specification for the **works** (a copy of the relevant specification has been annexed to this tender) and that the **employer** shall ensure that the **contractor** has made provision for the cost of health and safety measures during the execution of the **works**. The **contractor** shall price opposite this item for compliance with the act and the regulations and the provisions of the aforementioned health and safety specification [2.1].

The contractor shall also ensure that all COVID-19 regulations are adhered to and that the same has been priced for in this item. No claims for additional costs relating to OHSAS or COVID-19 will be entertained.

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	<p>The contractor shall:</p> <ol style="list-style-type: none"> 1. Comply with the health and safety specification for the works 2. Prepare and agree with the health and safety consultant the health and safety plan for the works 3. Cooperate with the health and safety consultant in all respects 4. Manage the compliance of all subcontractors with the regulations and with the health and safety plan and specification 5. Conform to the conditions contained in the employer's health and safety specification <p>F:..... V:..... T:.....</p>			
83	Green star building certification			Item
	F:..... V:..... T:.....			Item
84	Broad based black economic empowerment (BBBEE)			
	Tenders submitted will be evaluated taking into account their empowerment rating			
	The employer will be monitoring the broad based black economic empowerment (BBBEE) status of the contractor throughout the execution of the works			
	The contractor is to submit to the principal agent on an annual basis a schedule of spend, split into vendors engaged as subcontractors and suppliers indicating their BBBEE rating including proof of the said rating			
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85	<p>Advertising rights</p> <p>The employer may elect to contract with advertising agencies for the erection of advertising hoardings, banners, wraps or the like for the duration of the contract. The contractor shall not prevent such an arrangement and will assist in the facilitation of same. The position and type of advertising structure to be agreed with the principal agent so as not to hinder the contractor in meeting his obligations under this agreement</p> <p>F:..... V:..... T:.....</p>	Item		
86	<p>Confidentiality</p> <p>The contractor undertakes to maintain in confidence any and all information regarding this project and shall obtain appropriate similar undertakings from all subcontractors and suppliers. Such information shall not be used in any way except in connection with the execution of the works</p> <p>No information regarding this project shall be published or disclosed without the prior written consent of the employer</p> <p>F:..... V:..... T:.....</p>	Item		
87	<p>Media releases</p> <p>All rights of publication of articles in the media, together with any advertising relating thereto or in any way connected with this project, shall vest with the employer</p> <p>The contractor together with his subcontractors shall not, without the prior written consent of the employer, cause any statement or advertisement connected with this project to be printed, screened or aired by the media</p> <p>F:..... V:..... T:.....</p>	Item		
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<p>Section No. 1 Preliminaries Bill No. 1 Preliminaries and General Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>				

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4.2 Bill No.2 - Building Works

BILLS OF QUANTITIES
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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 1</u></p> <p><u>ALTERATIONS</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>View site</u></p> <p>Before submitting his tender the contractor shall visit the site and satisfy himself as to the nature and extent of the work to be done and the value of the materials contained in the buildings or portions of the buildings to be demolished. No claim for any variations of the contract sum in respect of the nature and extent of the work or of inferior or damaged materials will be entertained</p> <p><u>Explosives</u></p> <p>No explosives whatsoever may be used for demolition purposes unless otherwise stated</p> <p><u>General</u></p> <p>The contractor shall carry out the whole of the works with as little mess and noise as possible and with a minimum of disturbance to adjoining premises and their tenants. He shall provide proper protection and provide, erect and remove when directed, any temporary tarpaulins that may be necessary during the progress of the works, all to the satisfaction of the principal agent</p> <p style="text-align: right;">Carried to Collection</p>			R
	<p>Section No. 2 Building Works Bill No. 1 Alterations Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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Water supply pipes and other piping that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings, to the satisfaction of the principal agent

Doors, fanlights, fittings, frames, linings, etc which are to be re-used shall be thoroughly overhauled before refixing including taking off, easing and rehangng, cramping up, re-wedging as required and making good cramps, dowels, etc, and easing, oiling, adjusting and repairing ironmongery as necessary, replacing any glass damaged in removal or subsequently and stopping up all nail and screw holes with tinted plastic wood to match timber, unless otherwise described. Re-painting or re-varnishing is given separately

Prices for taking out of doors, windows, etc shall include for removal of all beads, architraves, ironmongery, etc

Prices for taking out and removing doors and frames shall include for removing door stops, cabin hooks, etc and making good floor and wall finishes to match existing

Prices for taking out and removing sanitary fittings shall include the removal of the necessary fitting and making good floor/wall finishes to match existing

With regard to building up of openings in existing walls, cement screeds and pavings, granolithic, tops of walls, etc, shall be levelled and prepared for raising of brickwork

Making good of finishes shall include making good of the brick and concrete surfaces onto which the new finishes are applied, where necessary

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The contractor will be required to take all dimensions affecting the existing buildings on the site and he will be held solely responsible for the accuracy of all such dimensions where used in the manufacture of new items (doors, windows, fittings, etc)

REMOVAL OF EXISTING WORK

Breaking up and removing unreinforced concrete

1	Steps and ramps	m3	1.15	
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Breaking down and removing brickwork etc

2	Half brick walls	m2	25.62	
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Taking out and removing doors, windows, etc from brickwork to be demolished

3	Timber single door and frame not exceeding 2,5m ²	No	3	
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Taking out and removing doors, windows, etc. including thresholds, sills, etc. (making good finishes elsewhere)

4	Timber single door and steel frame not exceeding 2.5m ²	No	2	
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Taking out and removing doors, windows, etc, including thresholds, sills, etc (building up openings and making good finishes elsewhere)

5	Glazed steel window not exceeding 2,5m ²	No	17	
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Taking down and removing roofs, floors, panelling, ceilings, partitions, etc

6	Gypsum plasterboard ceilings, including cornices, timber bandering, etc	m2	64.00	
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7	Insulation	m2	64.00	
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	<u>Taking out and removing sundry joinery work, fittings, etc</u>				
8	Blinds size 1200mm x 2200mm high	No	3		
9	Meranti skirtings	m	169.00		
10	Timber floor cupboard 1500 x 600 x 900mm high	No	1		
11	Timber floor cupboard 10300 x 600 x 900mm high	No	1		
	<u>Taking up and removing wood block floor coverings, vinyl floor coverings, carpets, etc and preparing screeds for new floor coverings</u>				
12	Vinyl floor tiles	m2	253.77		
13	Carpet floor covering	m2	43.00		
	<u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc</u>				
14	Ceramic floor tiles	m2	19.86		
	<u>Hacking up/off and removing granolithic screeds, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screed, plaster, tile finishes, etc</u>				
15	25mm Screed from floors (Proposed HIP machine room)	m2	172.00		
16	25mm Screed from floors (allowance for all other screeds, to be guided by Architect during construction)	m2	144.63		
17	Plaster to soffits of slabs	m2	10.00		
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	<u>Hacking up/off and removing ceramic tiles including removing mortar bed or adhesive from concrete or brickwork and preparing surfaces for new screed, plaster, tile finish, etc</u>				
18	Tiles to walls	m2	42.00		
	<u>Taking out and removing ironmongery</u>				
19	Door lock	No	14		
20	Door stops	No	17		
	<u>Taking out and removing piping, sanitary fittings, etc, including cutting off as necessary, disconnecting piping from fittings and making good floor and wall finishes (making good tiling and paintwork elsewhere)</u>				
21	150L geyser	No	1		
22	Elbow taps	No	2		
23	Toilet roll holder	No	2		
24	Sanitary bin	No	2		
25	Paper towel dispenser	No	2		
26	Wash hand basin including plumbing complete	No	2		
27	Single kitchen sink including cabinet and plumbing complete	No	2		
28	WC including plumbing complete	No	2		
29	Soap dispenser	No	2		
30	Water pipes	m	40.00		
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	<u>Taking out/off and removing glass and mirrors</u>				
31	Mirror	No	3		
	<u>Taking out and removing existing electrical conduits, wiring, sockets and light fittings including all accessories and making good any damages caused to existing ceilings, walls, etc. (installation of new light fittings and reticulation elsewhere measured)</u>				
32	Suspended fluorescent light fittings	No	24		
33	Trunking, conduits, etc.	m	202.00		
34	Sockets	No	30		
	<u>BUILDING UP OPENINGS</u>				
	<u>Brickwork in NFP bricks in class II mortar in building up openings, including bonding new to existing and making good cement plaster on both sides (making good paintwork elsewhere)</u>				
35	One brick walls	m2	16.20		
	<u>Sundries</u>				
36	Cutting toothings and bonding new brickwork to existing face brickwork	m2	37.41		
	<u>PREPARATORY WORK TO EXISTING SURFACES</u>				
37	Strip and clean down existing timber doors, etc to receive new paint	m2	223.31		
38	Chip away existing plaster including preparing existing plaster to receive wall tiles	m2	5.00		
	<u>MAKING GOOD OF FINISHES, ETC</u>				
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	<u>Making good gypsum plasterboard ceilings and timber brandering</u>				
39	Plasterboard ceilings in patches	m2	37.00		
	<u>Making good internal cement plaster</u>				
40	Walls in patches	m2	126.00		
41	Walls where half brick walls removed	m2	4.21		
42	Concrete ceilings in patches	m2	23.80		
	<u>OPENINGS THROUGH EXISTING WALLS ETC</u>				
	<u>Breaking out for and forming openings through brick walls for new doors and frames, including prestressed concrete lintels, making good cement plaster on both sides and into reveals and with 20 MPa concrete thresholds with steel trowelled finish (new doors and frames and making good paintwork elsewhere)</u>				
43	Opening for door with steel frame 813 x 2032mm high overall through one brick wall	No	1		
	<u>Breaking out for and forming plain openings through brick walls, including prestressed concrete lintels, making good cement plaster on both sides and into reveals and with 20 MPa concrete thresholds with steel trowelled finish (making good paintwork elsewhere)</u>				
44	Opening 1800 x 1200mm high through one brick wall	No	1		
	<u>Allowance for opening locked doors complete</u>				
45	Opening 5480 x 5790mm high double door	No	2		
46	Opening 813 x 2032mm high single door	No	2		
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	<u>Altering openings</u>				
47	Altering opening in one brick wall where 813 x 2032mm high single timber door and steel frame removed to form opening for new 1511 x 2032mm high door and steel frame by breaking out brickwork on one side for 700 x 2032mm high opening including making good in all trades, including prestressed concrete lintels.	No	2		
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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 2</u></p> <p><u>EARTHWORKS</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Nature of ground</u></p> <p>The nature of the ground is assumed to be loose sandy material, therefore "earth", but possibly interspersed with "hard rock" or "soft rock".</p> <p><u>Excavation</u></p> <p>The prices for all excavation are to include for excavating in earth as described and for trimming sides levelling, stepping, grading, shaping and consolidating the beds of excavations. Where trenches needs to be stepped the steppings shall be the thickness specified for the concrete footings but shall be adjusted downwards to conform with an exact number of brick courses where necessary. Any excavations taken out too deep shall be made up to the correct level with 20MPa concrete at the contractor's expense. Backfilling and ramming is not acceptable.</p>			
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	<p>Section No. 2 Building Works Bill No. 2 Earthworks (Provisional) Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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	<u>Excavation for working space in rock</u>				
	Excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be				
	<u>Carting away of excavated material</u>				
	Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
	<u>Filling</u>				
	Prices for filling and backfilling shall include for all selection and any multiple handling of material				
	<u>EXCAVATION, FILLING, ETC OTHER THAN BULK</u>				
	<u>EXCAVATIONS ETC</u>				
	<u>Excavation in earth or controlled gravel filling not exceeding 2m deep</u>				
1	Trenches	m3	6.60		
2	Holes	m3	9.00		
	<u>WORKING SPACE EXCAVATIONS</u>				
	<u>Extra over trench and hole excavations in earth for excavation in</u>				
3	Soft rock	m3	1.56		
4	Hard rock	m3	1.56		
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	<u>Extra over all excavations for carting away</u>				
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	8.00		
	<u>Risk of collapse of excavations</u>				
6	Sides of trench and hole excavations not exceeding 1,5m deep	m2	52.60		
	<u>Keeping excavations free of water</u>				
7	Keeping excavations free of water			Item	
	<u>FILLING ETC</u>				
	<u>Earth filling obtained from the excavations and/or prescribed stock piles on site, compacted to 93% Mod AASHTO density</u>				
8	Backfilling to trenches, holes, etc	m3	9.24		
	<u>Filling of natural gravel material G5 in accordance with SABS 1200 supplied by the contractor compacted in layers not exceeding 150mm to 98% Mod AASHTO density</u>				
9	Under surface beds, etc	m3	12.83		
	<u>Filling of gravel-soil material G7 in accordance with SABS 1200 DM supplied by the contractor compacted in layers not exceeding 150mm to 93% Mod AASHTO density</u>				
10	G7 material under floors in 150mm layers compacted to 95% Mod AASHTO	m3	12.83		
	<u>Compaction of surfaces</u>				
11	Compaction to bottom of foundations	m2	15.60		
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12	Compaction of natural or excavated ground surface under floors etc, including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 95% Mod AASHTO density	m2	85.53		
	<u>SOIL POISONING</u>				
	<u>Soil insecticide</u>				
13	Under surface beds	m2	74.80		
14	To bottoms and sides of trenches etc	m2	61.60		
	<u>SUNDRIES</u>				
	<u>GEOTECHNICAL INVESTIGATION</u>				
	<u>The following items have been identified by the civil engineer and are to be priced by the tenderer as a complete geotechnical investigation. In instances where items have been quantified as an item or sum, tenderers are to familiarise themselves with the site, procedure and general scope involved with such investigations, as no additional claims will be entertained during construction.</u>				
	<u>All tests, with exception to the DCP tests, have been quantified per test pit, regardless of the number of tests per pit required. Tenderers are to price as such.</u>				
15	Test pits 3m deep or to point of refusal excavated using a TLB	No	2		
16	DCP test	No	3		
17	Soil Profiling of and classification of the material found in the test pits	No	2		
18	Groundwater table level in each test pit	No	2		
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19	Grading analysis of different soil layer in each test pit	No	2		
20	Atterberg Limit analysis of different soil layer in each test pit	No	2		
21	CBR analysis of different soil layer found in each test pit(MDD, OMC, CBR)	No	2		
22	Site classification and the suitability of materials, road building material and pipe bedding			Item	
23	Estimated safe allowable bearing capacity recommendation taking into account the proposed foundation sizes			Item	
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Section No. 2 Building Works Bill No. 2 Earthworks (Provisional) Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 3</u></p> <p><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p>			
	Carried to Collection		R	
	<p>Section No. 2 Building Works Bill No. 3 Concrete, Formwork and Reinforcement Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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Formwork

Descriptions of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use. The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself.

Formwork to soffits of (solid) slabs etc shall be deemed to be to slabs not exceeding 250mm thick unless otherwise described. Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"

All formwork must be designed by the Contractor and the Contractor must submit fully detailed and dimensioned working drawings to the Principal Agent for checking purposes. Acceptance of the proposal shall not relieve the Contractor of the responsibility for the safety and stability of the formwork nor for loss or damage arising out of defective design, materials and/or workmanship.

UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES

15MPa/20mm concrete

1	Surface blinding under footings and bases	m3	0.78	
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REINFORCED CONCRETE

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	<u>30MPa/19mm concrete</u>				
2	Surface beds on waterproofing	m3	11.94		
3	Strip footings	m3	1.98		
4	Bases	m3	3.60		
5	Bund walls, etc	m3	0.71		
6	Ramps	m3	5.54		
	<u>TEST CUBES</u>				
7	Making and testing 150 x 150 x 150mm concrete strength test cubes (Provisional)	No	6.00		
	<u>CONCRETE SUNDRIES</u>				
	<u>Finishing top surfaces of concrete smooth with wood float finish</u>				
8	Surface beds, slabs, etc	m2	16.95		
	<u>Finishing top surfaces of concrete smooth with a power float</u>				
9	Surface beds, slabs, etc	m2	84.73		
	<u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u>				
	<u>Smooth formwork to sides</u>				
10	Edges not exceeding 300mm high	m	135.00		
11	Sides of ramps, etc	m2	8.07		
	<u>MOVEMENT JOINTS ETC</u>				
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	<u>"Sikaflex Pro 2HP" or similar approved high quality highplasticity polysulphide/polyurethane sealing compound includingbacking cord, bond breaker, primer etc</u>				
12	Silicon sealant	m	118.20		
	<u>REINFORCEMENT (PROVISIONAL)</u>				
	<u>Fabric reinforcement</u>				
13	Ref 395 fabric reinforcement in concrete surface beds, slabs, etc	m2	99.87		
	<u>Mild steel and high tensile steel reinforcing to structural concrete work.</u>				
14	Various diameter bars.	t	1.07		
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<p><u>BILL NO. 4</u></p> <p><u>MASONRY</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>BRICKWORK</u></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p><u>Linings to concrete</u></p> <p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p>			
	Carried to Collection		R
<p>Section No. 2 Building Works Bill No. 4 Masonry Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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Reinforced brick lintels

Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous

Face bricks

Bricks shall be ordered timeously to obtain uniformity in size and colour

Pointing

Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc

SAMPLES

Samples of all masonry building units, shall consist of a minimum of 6 units

PAVINGS

Quarry tiles, precast concrete, cement, terrazzo and similar tiles

Tiles shall be of approved manufacture, well burnt or cured, and uniform and true in size, shape and colour

Preparation of concrete floor beds, slabs, etc for pavings

Concrete surfaces shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. Surfaces shall then be wetted and kept damp for at least six hours before slushing with 1:2 cement/sand and while still wet, pavings, etc. shall be laid on a 1:4 cement mortar bed not exceeding 25mm thick. Sand shall be clean, sharp river sand

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<u>Jointing of pavings</u>					
Pavings, etc, shall, except for crazy paving, be laid with continuous joints in both directions					
<u>FOUNDATIONS</u>					
<u>Brickwork of clay bricks (14 MPa nominal compressive strength) in class 1 mortar</u>					
1	One brick walls	m2	11.00		
2	Piers	m3	0.52		
<u>SUPERSTRUCTURE</u>					
<u>Brickwork of NFP bricks in class II mortar</u>					
3	Half brick walls	m2	44.98		
4	One brick walls	m2	26.00		
5	One brick walls in beamfilling	m2	2.78		
6	Piers	m3	1.46		
<u>FACE BRICKWORK</u>					
<u>FBS Satin Grey (Platinum) face bricks pointed with recessed horizontal and vertical joints</u>					
7	Extra over brickwork for face brickwork	m2	9.00		
<u>BRICKWORK SUNDRIES</u>					
<u>Brickwork reinforcement</u>					
8	75mm Wide reinforcement built in horizontally	m	169.74		
9	150mm Wide reinforcement built in horizontally	m	275.86		
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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 5</u></p> <p><u>WATERPROOFING</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Waterproofing</u></p> <p>Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee by an approved applicator. Waterproofing to roofs shall be laid to even falls to outlets etc with necessary ridges, hips and valleys. Descriptions of sheet or membrane waterproofing shall be deemed to include additional labour to turn-ups and turn-downs</p> <p><u>DAMPPROOFING OF WALLS AND FLOORS</u></p> <p><u>One layer of 250 micron sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u></p>			
1	Under surface beds	m2	85.53	
	<p><u>One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course</u></p>			
2	In walls	m2	14.28	
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	<p>Section No. 2 Building Works Bill No. 5 Waterproofing Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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	<u>Primer and two coats heavy duty bitumen emulsion waterproofing coating</u>				
3	On brick walls	m2	50.00		
	<u>WATERSTOPS, SEALING STRIPS, JOINT SEALANTS, ETC</u>				
	<u>Two-part grey polysulphide sealing compound, including backing cord, bond breaker, primer, etc</u>				
4	6 x 10mm Around doors	m	124.58		
5	6 x 10mm Around windows	m	333.88		
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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 6</u></p> <p><u>CARPENTRY AND JOINERY</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Joinery</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p> <p><u>Decorative laminate finish</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><u>DOORS, ETC</u></p>			
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<u>Solid timber doors hardwood edged, hung to steel frames (frames elsewhere)</u>				
1	40mm Door size 813 x 2032mm high (D01, D03)	No	3.00	
2	40mm Double door size 1511 x 2032mm high (D04)	No	2.00	
<u>Solid timber doors hardwood edged, hung to steel frames (frames elsewhere)</u>				
3	40mm Door size 915 x 2032mm high (DP01, D02)	No	3	
4	Extra over for 400x400mm framed opening for metal louvre unit (louvre unit elsewhere)	No	3	
5	Extra over for 200x800mm glass viewing panel including cutout and installation into door (DP01)	No	2	
<u>CUPBOARDS TO KITCHENS, BEDROOMS, ETC</u>				
<u>SUPPLEMENTARY PREAMBLES</u>				
<u>General</u>				
<p>The following cupboard fittings are given as complete units i.e. the components of the units have not been given separately. Descriptions of such units shall, therefore, be deemed to include all components, assembling, housing, notching, glueing, blocking, planting-on and screwing with countersunk screws, edge strips, thermosetting plastic laminate, glass, ironmongery, metalwork, paint or varnish finishes, etc</p> <p>Prices are to include for all necessary filler pieces against walls etc</p>				
<u>References</u>				
<p>References given in descriptions refer to the respective types of fittings detailed on the architect's drawings annexed to these bills of quantities for tender purposes</p>				
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	<u>32mm Rustenburg granite worktops and counters with polished finish mechanically fixed including any necessary mortar bedding, etc</u>				
6	600mm Wide counter top with two polished bullnosed edges	m	15.00		
7	1000mm Wide counter top with two polished bullnosed edges	m	1.50		
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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 7</u></p> <p><u>CEILING, PARTITIONS AND ACCESS FLOORING</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as "bolted", the bolts are measured elsewhere</p> <p><u>Proprietary suspended ceilings</u></p> <p>Electric light fittings, diffusers, panels, etc generally are "lay in" units of the same dimensions as the suspension grid described and allowance shall be made accordingly for their support, inclusive of any flexibility in setting out that may be required (ceiling panels have not been deducted and pricing shall take cognisance thereof)</p>			
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	<p>Section No. 2 Building Works Bill No. 7 Ceilings, Partitions and Access Flooring Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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<u>Bulkheads</u>					
Bulkheads are those areas of the ceiling which occur at a level or plane differing from the general ceiling level or plane. Bulkheads will only be measured as such when the horizontal or vertical dimensions do not exceed 1 200mm. Where the vertical or horizontal dimensions exceed 1 200mm the horizontal and vertical ceilings are included in the general ceiling measurements.					
<u>CEILING TIMBERS, BEADS, INSULATION, ETC</u>					
<u>"Isotherm" polyester high density 7-10kg/m³ thermbonded insulation blanket</u>					
1	150mm Thick insulation fitted above ceilings	m ²	64.00		
<u>NAILED-UP CEILINGS</u>					
<u>SUPPLEMENTARY PREAMBLES</u>					
<u>Openings</u>					
Prices for openings for light fittings, ventilation grilles, air conditioning diffusers, etc are to include for any necessary additional support, trimming around, etc.					
All prices for nailed-up ceilings to include for 1x coat 2.5mm thick Rhinolite or similar approved.					
<u>6.4mm Thick "Gyproc" Rhinoboard or similar approved with rhinotape and all screw heads to be stopped and sanded level when dry including 1x coat 2.5mm thick Rhinolite or similar approved coating.</u>					
2	Ceilings including 38 x 38mm SA pine sawn softwood brander at 760mm centres and cross brander at 760mm centres fixed to roof timbers (flush plastered ceilings)	m ²	64.00		
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3	Ceilings including 38 x 38mm SA pine sawn softwood bandering at 760mm centres and cross bandering at 760mm centres suspended from concrete soffits (flush plastered ceilings)	m2	79.51	
4	Extra over ceiling for opening for 600mm diameter round air conditioning dummy diffuser including dummy diffuser powder coated white	No	18	
5	Extra over ceiling for 600 x 600mm trap door of 38 x 114mm wrought softwood rebated framing with one cross brander, covered with ceiling board and fitted flush in opening, including necessary trimmers around	No	1	
	<u>"Gyproc Rhinolite Quickcornice" cornices</u>			
6	Quickcornice No10 of similar approved coved cornices nailed at max 300mm centres	m	121.64	
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Item No		Quantity	Rate	Amount
	<u>BILL NO. 8</u>			
	<u>FLOOR COVERINGS, PLASTIC LININGS, ETC</u>			
	<u>PREAMBLES</u>			
	The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)			
	<hr/>			
	<u>NOTES: Attention is directed to the relevant sections of the Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors, which form part of this Bill of Quantities and must be read in conjunction therewith.</u>			
	<u>FLOOR COVERINGS</u>			
	<u>2mm thick Anti-static/ static dissipative vinyl floor sheeting code: SD 5110 laid on and including new self-levelling screed with screedbinder, and all other requisite consumables, welded joints, Polyflor approved adhesive, etc. as per the manufacturer's specification (Polyflor) - Floor finish FC-01</u>			
1	On floors	m2	100.51	
	<u>2mm thick Anti-static/ static dissipative coved vinyl floor skirting code: SD 5110 250mm wide including cove support and edge cap installed according to the manufacturer's specification (Polyflor) - Floor finish FC-01</u>			
2	Skirting	m	132.97	
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	<p><u>BILL NO. 9</u></p> <p><u>IRONMONGERY</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Proprietary items</u></p> <p>Where applicable the manufacturers' names or product catalogue titles are given in sub-headings preceding the items</p> <p>Prices are to be based on the specific products/articles specified. If tenderers wish to offer alternative products/articles for certain items, these items are to be clearly marked and the alternative specification given with supporting brochures etc clarifying the features of the products/articles offered</p> <p>On request returnable samples are to be provided to the principal agent for consideration</p>			
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Finishes to ironmongery

Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list:

- BS Satin bronze lacquered
- CH Chromium plated
- SC Satin chromium plated
- SE Silver enamelled
- GE Grey enamelled
- AN Anodised natural
- AS Anodised silver
- AB Anodised bronze
- AG Anodised gold
- ABL Anodised black
- PB Polished brass
- PL Polished and lacquered
- PT Epoxy coated
- SD Sanded

NOTES:Attention is directed to the relevant sections of the Model Preambles for Trades (2008 edition) as published by the Association of South African Quantity Surveyors, which form part of this Bill of Quantities and must be read in conjunction therewith.

LOCKS

Keys

Unless otherwise described locks shall have two keys each

"Ironmongery Warehouse" or equal approved

1	Cylinder lock with cylinder, S/S roller catch and S/S striker plate and 1 x pair S/S cylinder escutcheon	No	7
2	2-Lever mortice lockset	No	11
3	1x Pair WC indicator set and 1x WC deadlock with 8mm follower (disabled toilet - D02)	No	1

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4	1x Pair WC indicator set and 1x WC deadlock with 8mm follower	No	2		
5	300mm Flush lever bolt	No	2		
6	150mm Flush lever bolt	No	2		
7	Dust excluding socket	No	2		
	<u>HANDLES</u>				
	<u>"Ironmongery Warehouse" or equal approved</u>				
8	"Calini - IW1051" lever handle on rose, stainless steel	Pairs	13		
9	1x Pair round 500mm S/S pull handle with 15mm diam x 30mm posts, back to back fixing set and rosette (DP01, D01, D03, D04)	Pairs	7		
10	300mm Round pull handle set (disabled toilet)	No	1		
	<u>PUSH PLATES AND KICK PLATES</u>				
	<u>"Ironmongery Warehouse" or equal approved</u>				
11	1.2mm Thick S/S 800 x 200mm kick plate, fixed on door with min. 3 galvanised screws along each side and paintable silicon	No	8		
12	1.2mm Thick S/S 750 x 800mm kick plate, fixed on door with min. 3 galvanised screws along each side and paintable silicon	No	4		
13	1.2mm Thick S/S 700 x 750mm kick plate, fixed on door with min. 3 galvanised screws along each side and paintable silicon	No	8		
14	178 x 152mm S/S push plate fixed to door with galvanised screws and paintable silicon	No	1		
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<u>DOOR CLOSERS</u>					
	<u>"Ironmongery Warehouse" or equal approved</u>				
15	1 x Regular arm delayed action door closer	No	6		
	<u>ALUMINIUM VENTILATION LOUVRES</u>				
	<u>Natural anodised aluminium ventilation grill complete with telescopic back frame fitted to hardwood door including fixing vent in place</u>				
16	<u>Louvres 400 x 400mm high</u>	No	3		
	<u>SUNDRIES</u>				
	<u>"Ironmongery Warehouse" or equal approved</u>				
17	Rubber floor mounted door stop	No	19		
	<u>BATHROOM FITTINGS</u>				
	<u>"Hygiene Systems" or equal approved</u>				
18	Stainless steel sanitary bin, wall mounted, complete (Code: Excel Femcare)	No	3		
	<u>"Franke" or equal approved</u>				
19	750x260x32mm Diameter cistern and flush valve backrail manufactured from 18/10 stainless steel, satin finish to prevent slipping including screws and dowels. Code: CNTXBR 750X260MM 35992	No	1		
20	618x95x256mmx31.8mm Diameter angle bar grabrail manufactured from 18/10 stainless steel, satin finish to prevent slipping including screws and dowels. Code: CNTX700A 618 X 95 X 256MM 35877	No	1		
	<u>BLINDS (PROVISIONAL)</u>				
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21	<p><u>Hunter Douglas SA supplying Luxaflex or equal approved manually operated 127mm 'Solar Bloc Grey' (code:240100),privacy and light control fabric vertical blinds complete with standard stacking flame retardant slats ,recess fixed to walls</u></p> <p>1200 x 2200mm high overall</p>	No	3		
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	<p><u>BILL NO. 10</u></p> <p><u>STRUCTURAL STEELWORK</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of L-shaped and U-shaped anchor bolts shall be deemed to include bending, threading, nuts and washers and embedding in concrete</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p><u>Supply, Fabrication, Delivery and erection of galvanised steelwork Grade 300WA to SABS 1431, including fabrication, shop detail drawings, cleats, base plates and end plates, cap plates, packs, stiffeners, gussets and the like, of welded and bolted sections.</u></p> <p><u>HOT DIP GALVANISED STRUCTURAL STEEL</u></p>			
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<u>Welded columns, beams, supports in single lengths with flat base, cap, bearer and connection plates, bolted to concrete or brick work</u>				
1	203x133x25 I Section, complete with all fasteners(l.e Gussut plate) and stop end plates, as detailed on the drawing AFR1145-STR-DET-001	t	0.29	
2	200x75 Parallel Flange Channels,complete with all fasteners and stop end plates, as detailed on the drawing AFR1145-STR-DET-001	t	0.49	
3	180x70 Parallel Flange Channels, complete with all fasteners and stop end plates, as detailed on the drawing AFR1145-STR-DET-001	t	0.77	
4	75x75x4.5 Square Hollow Sections, complete with all fasteners and stop end plates, as detailed on the drawing AFR1145-STR-DET-001	t	0.15	
5	60x60x6 Equal Leg Angles, complete, as detailed on the drawing AFR1145-STR-DET-001	t	0.10	
6	4.5mm thick, Vastrap Plate complete with all fasteners and stop end plates, as detailed on the drawing AFR1145-STR-DET-001	t	0.83	
7	180x10x300mm Plate as detailed on the drawing AFR1145-STR-DET-001	t	0.03	
8	150x12x150mm Long sole plate as detailed on the drawing AFR1145-STR-DET-001	t	0.01	
9	10mm Thick flat plate as detailed on the drawing AFR1145-STR-DET-001	t	0.01	
<u>HILTI CHEMICAL ANCHORS</u>				
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	<u>High tensile steel chemical anchor bolts drilled 60mm deep into existing brickwork or concrete to fasten structural steel work onto existing brickwork or concrete surfaces</u>				
10	16mm Diameter x 150mm long	No	50		
11	12mm Diameter x 200mm long	No	21		
12	20mm Diameter x 150mm long	No	24		
	<u>GALVANISED MILD STEEL BALUSTRADING, HANDRAILS, ETC</u>				
	<u>Welded mild steel</u>				
13	1100mm High horizontal balustrading including top rail, knee rail, stanchions and other vertical supports, base plates, bolts, bends, corners, ends etc. all welded and installed complete as per the Mentis Ball Type Handrail System as indicated on drawing AFR1145-STR-DET-001	m	14.09		
14	1100mm High raking balustrading including top rail, knee rail, stanchions and other vertical supports, base plates, bolts, bends, corners, ends etc. all welded and installed complete as per the Mentis Ball Type Handrail System as indicated on drawing AFR1145-STR-DET-001	m	5.10		
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	<p><u>BILL NO. 11</u></p> <p><u>METALWORK</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Descriptions of bolts, anchors, etc</u></p> <p>Descriptions of bolts shall be deemed to include nuts and washers</p> <p>Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete</p> <p>Items described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described</p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres</p> <p><u>GALVANISED STEEL GATES, SCREENS, ETC</u></p>			
	Carried to Collection		R	
	<p>Section No. 2 Building Works Bill No. 11 Metalwork Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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<u>Welded screens and gates to cage stores</u>				
1	50 x 2,5mm Thick galvanised diamond wire mesh or similar approved covering in approximately 3000mm high panels tied with 1,6mm galvanised binding wire to frames, overall size of cage 2200mm x 1200mm, with horizontal bracing wires and 50 x 50mm mild steel hollow tube posts @ 1200mm C/C fixed with floor chemical anchors and base plates. All frames and subframes to be included, including welding to I-beam columns (elsewhere measured) and bolting to brickwork walls. Contractor to provide shop drawings for approval prior to procurement (cage 1)	m2	13.56	
2	50 x 2,5mm Thick galvanised diamond wire mesh or similar approved covering in approximately 3000mm high panels tied with 1,6mm galvanised binding wire to frames, overall size of cage 6260mm x 1200mm, with horizontal bracing wires and 50 x 50mm mild steel hollow tube posts @ 1200mm C/C fixed with floor chemical anchors and base plates. All frames and subframes to be included, including welding to I-beam columns (elsewhere measured) and bolting to brickwork walls. Contractor to provide shop drawings for approval prior to procurement (cage 2)	m2	22.38	
3	Double gate 2062 x 1800mm high, each leaf of 50 x 50mm galvanised mild steel hollow tubes frame and 50 x 50mm galvanised mild steel hollow section horizontal middle rail, with galvanised diamond wire mesh infill panels to match fence and each leaf fitted with 3x heavy duty hinges including sliding bolt and lugs for a padlock all to engineer's specifications. Contractor to provide shop drawings for approval prior to procurement.	No	3	
<u>ALUMINIUM WINDOWS, DOORS, ETC</u>				
Refer to attached door and shopfront and window schedules for details of windows and doors				
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	<u>Aluminium window units (colour to architect's spec) complete with 75mm subframes as per specialist, standard friction hinges, aluminium catch with nylon guide, clear toughened safety glass to AAAMSA, SABS 0400 and NBRI code of practice - thermal warrantee to be obtained when installed, vinyl draught and sound seals according to specialist, and fixing to brickwork or concrete. All windows to include ironmongery as per manufacturer's specifications</u>				
4	Window size 1800 x 1200mm high single clear glazing	No	2		
	<u>ALUMINIUM SLIDING DOORS</u>				
	<u>Powder coated automated sliding doors with vacuum seals complete with subframes as per specialist, (colour: RAL 9016 "traffic white" or similar approved, clear safety glass (SG1) to AAAMSA, SABS 0400 and NBRI code of practice - thermal warrantee to be obtained when installed, vinyl draught and sound seals according to specialist, and fixing to brickwork or concrete. All doors to include ironmongery, Dormakaba "ES 200" sliding door system as per manufacturer's specification and 750 x 750mm (x2) frosted vinyl panels fixed to glass as per door schedule</u>				
5	Purpose made automated door with vacuum seals, 1900 x 2100mm high	No	1		
	<u>PRESSED STEEL DOOR FRAMES</u>				
	<u>1,6mm Thick single rebated frames, factory primed with red oxide suitable for one brick walls</u>				
6	Frame for door 813 x 2 032mm high (D03)	No	2.00		
7	Frame for door 1511 x 2 032mm high (D04)	No	2.00		
	<u>1,6mm Thick single rebated frames, factory primed with red oxide suitable for half brick walls</u>				
8	Frame for door 915 x 2 032mm high (DP01)	No	2.00		
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9	Frame for door 813 x 2 032mm high (D01)	No	1.00		
10	Frame for door 915 x 2 032mm high (D02)	No	1.00		
<u>SUNDRY STEELWORK</u>					
<u>"EC Laridon" or equal approved steel shelving</u>					
11	"Polyclip" boltless shelving 949mm wide x 457mm deep x 1800m high module	No	10.00		
<u>"Maxidor" or equal approved burglar bars</u>					
12	"Maxi-grill Ultra Burglar Bars" system complete fit into existing window reveals, fastened onto brickwork walls including all bolts, screws, chemical-fasteners, UV stabilised TGIC grade powder coating finish of bars, colour to be specified by the architect. Installation complete as per the manufacturer's recommendation	m2	5.08		
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	<p><u>BILL NO. 12</u></p> <p><u>PLASTERING</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>GRANOLITHIC</u></p> <p><u>Method</u></p> <p>Where applicable, the method to be used shall be either the monolithic method or the bonded method</p> <p><u>Preparation</u></p> <p>Where applicable, for granolithic applied monolithically, the concrete floor shall be swept clean after bleeding of the concrete has ceased and the slab has begun to stiffen; any remaining bleed water shall be removed and the granolithic applied immediately thereafter. For granolithic to be bonded to the floor slab after it has hardened, the slab surface shall be hacked (preferably by mechanical means) until all laitance, dirt, oil, etc is dislodged and swept clean of all loose matter. The slab shall then be wetted and kept damp for at least six hours before applying the granolithic</p>			
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	<p>Section No. 2 Building Works Bill No. 12 Plastering Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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Mix

Where applicable, granolithic shall attain a compressive strength of at least 41MPa. The coarse aggregate shall comply with SANS 1083 and shall generally be capable of passing a 10mm mesh sieve. Where the thickness of the granolithic exceeds 25mm, the size of the coarse aggregate shall be increased to the maximum size compatible with the thickness of the granolithic

Panels

If applicable, granolithic shall be laid in panels not exceeding 14m² for monolithic finishes, not exceeding 9,5m² for bonded finishes and not exceeding 6m² for all external granolithic. Wherever possible, panels shall be square but at no time should the length of the panel exceed 1,5 times its width

Where possible joints between panels shall be positioned over joints in the floor slab and shall be at least 3mm wide through the full thickness of the finish, separated by strips of wood or fibreboard and finished with V-joints

Laying

Where applicable monolithic granolithic shall be applied to the partially set slab and thoroughly compacted and lightly wood floated to the required levels

All applicable bonded granolithic shall be applied to the slab after applying a 1:1 sand-and-cement slurry brushed over the surface and allowed to partially set before applying the granolithic. The granolithic shall be thoroughly compacted and lightly wood floated to the required levels

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If applicable after wood floating, the monolithic and bonded granolithic shall remain undisturbed until bleeding has ceased and the surface has stiffened. Any remaining bleed water and laitance shall then be removed and the surface steel trowelled or power floated

Curing, seasoning and protection

If applicable, granolithic shall be covered with clean hessian with waterproof building foil over and kept wet for at least seven days after laying

Colour

Where applicable coloured granolithic shall be tinted with an approved colouring pigment mixed into a true and even colour

Structural Screeds

All structural screeds shall be laid to Class 1 accuracy as per SANS 2001-CC1:2007

SCREEDS

TAL Screedmaster self-levelling screed to be laid on dry clean surface including relevant primers and bonding agents all in accordance with the manufacturer's specification

1	On floors	m2	53.00	
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Cement plaster screed wood floated on concrete

2	30mm Thick on surface beds	m2	334.98	
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3	30mm Thick on slab	m2	75.26	
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INTERNAL PLASTER

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4	<u>Two coat (1:4) cement plaster 15mm thick on brickwork finished to a smooth and even steel trowelled surface</u> On walls	m2	103.40		
5	<u>Cement plaster steel trowelled, on concrete</u> On ceilings and beams	m2	10.00		
<u>SPECIALISED FLOOR COATINGS</u>					
All specialised plaster type floor coatings are to be executed in strict accordance with the manufacturer's instructions					
<u>Hardwearing chemical, abrasion, impact, wear, graffiti and stain resistant self-smoothing epoxy resin floor topping with a 70 degrees C thermal resistance and a slip resistance (TRPL pendulum slip test) of 80 (dry) and 30 (wet) 5 to 10mm thick with a compressive strength of greater than 70N/mm2 and a gloss colour finish selected from the manufacturers standard colour range and installed in strict accordance with the manufacturer's instructions by a manufacturer approved installer. Sample and colour to be approved by architect prior to ordering - Floor finish FC-02</u>					
6	On floors	m2	172.00		
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	<p><u>BILL NO. 13</u></p> <p><u>TILING</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>Fixing</u></p> <p>Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding</p> <p>Tiling described as "fixed with adhesive on power floated concrete" shall be deemed to include for approved tiling key-coat</p> <p>Ceramic, porcelain, marble and granite tiles are to be fixed and grouted with suitable adhesives and grouts as recommended by the manufacturer of the tiles</p> <p><u>WALL TILING</u></p>			
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1	<p><u>Ceramic "Johnson" wall tile size 200x200mm, shiny finish, colour: white or per Architect's specification fixed to internal wall plaster backing (elsewhere measured) with and including TAL "Goldstar 6" tile adhesive or similar approved mixed with TAL bonding liquid in lieu of water with joints continuous in both directions grouted with TAL "High Traffic Grout" tile grout, Excess grout on the surface to be cleaned with water as the work progresses.</u></p> <p>On walls</p>	m2	82.37	
<u>FLOOR TILING</u>				
2	<p><u>Full-bodied porcelain floor tile size 600x600, non-slip finish, fixed to wood floated 1:4 cement and sand screed (elsewhere measured) with and including TAL "Goldstar 6" tile adhesive or similar approved on concrete surfaces (elsewhere) with 3mm joints continuous in both directions grouted with TAL "high traffic grout" tile grout (colour Dove grey) with minimum 5mm expansion joints at perimeter, all structural expansion joints and construction joints at maximum 5m centres internally and at 3m centres externally, in both directions (Allow PC Amount of R400/m2) - Floor finish FC-03</u></p> <p>On floors</p>	m2	41.50	
3	On ramps	m2	12.88	
4	Skirting 100mm high	m	44.51	
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	<u>Full-bodied porcelain floor tile size 300x300, non-slip finish, fixed to wood floated 1:4 cement and sand screed (elsewhere measured) with and including TAL "Goldstar 6" tile adhesive or similar approved on concrete surfaces (elsewhere) with 3mm joints continuous in both directions grouted with TAL "high traffic grout" tile grout (colour Dove grey) with minimum 5mm expansion joints at perimeter, all structural expansion joints and construction joints at maximum 5m centres internally and at 3m centres externally, in both directions (Allow PC Amount of R400/m2) - Floor finish FC-04</u>				
5	On floors (ablutions)	m2	11.50		
	<u>M-Trim stainless steel straight edge (Kirk Marketing) Code: ASE120</u>				
6	12mm straight edge trim to suit 10-12mm thick tile	m	100.00		
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	<p><u>BILL NO. 14</u></p> <p><u>PLUMBING AND DRAINAGE</u> <u>(PROVISIONAL)</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p>Wire gratings descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p>Where applicable stormwater channels descriptions of channels shall be deemed to include all necessary excavation and disposal of surplus material</p> <p>uPVC pipes and fittings Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings Soil, waste and vent pipes and fittings shall be solvent weld jointed or sealed with butyl rubber rings</p> <p>Stainless steel basins, sinks, wash troughs, urinals, etc Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p>			
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uPVC pressure pipes and fittings Pipes for water supply shall be of the class described. Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings Pipes of 50mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints

"Polycop" polypropylene pipes Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes, as described Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions All pipe diameters arenominal external

Copper pipes shall be hard drawn and half-hard pipes of the class described. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be "Cobra Watertech" type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground

Where applicable Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied in the appropriate widths and with relevant overlaps for specific diameters of pipes Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc

Prices for wrapping of pipes shall include for all work as described to couplings in the length

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Excavations

No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling "Soft rock" and "hard rock" shall be as defined in "Earthworks"

Excavations for sumps, catchpits, inspection chambers, junction boxes and the like shall be deemed to include for keeping free of water

Laying, backfilling, bedding, etc of pipes Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions

Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200L : Medium-pressure pipelines LD : Sewers LE : Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding

Reducing fittings Where fittings have reducing ends or branches they are described as "reducing". In the case of pipes with diameters not exceeding 60mm, only the largest end or branch size is given. Should the contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm, all sizes are given and no claim for extra bushes, reducers, etc will be entertained

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Where applicable, general descriptions of cast iron roof outlets shall be deemed to include joints to pipes and casting into concrete. Descriptions of overflow pipes where measured number, shall be deemed to include joints to cisterns and splay cut ends. Descriptions of pipes laid in and including trenches shall be deemed to include excavation, bedding, backfilling, compaction to a minimum of 93% Modified AASHTO density and disposal of surplus material. Descriptions of copper service pipes and flexible connecting pipes shall include connections to taps, cisterns, etc and to steel pipes. Descriptions of wc pans, slop hoppers, etc shall be deemed to include for joints to soil pipes (pan connectors separately measured)

SANITARY FITTINGS

"Franke" or equal approved

1	"Projectline" stainless steel sink drop in type dimensions 1160 x 460mm double end bowl with 38mm diameter waste fitting and recessed drainage ledge	No	1
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2	"Rondo" stainless steel prep bowl dimensions 450 x 450 x 161mm with 38mm diameter waste fitting and recessed drainage ledge (code: RDX610-45)	No	2
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"Vaal" or equal and approved

3	"Bantam" china 455 x 290mm wall hung basin with two tapholes, intergrated overflow and chain stay hole, bolted to wall using 10mm bolts including 2 x 15mm diameter CP regulator valve	No	2.00
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4	"Springbok" ceramic fireclay 550 x 400mm rectangular wall hung paraplegic basin with two tapholes, intergrated overflow and chain stay hole, bolted to wall using 10mm bolts including 2 x 15mm diameter CP regulator valve	No	1.00
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5	"Parktown" sanitary ware vitreous china close coupled WC suite 90 degree outlet top inlet (code: 431500) or back inlet (code: 431600) closed rim back-to-wall pan. Colour White	No	2.00		
6	"Pearl Paraplegic" sanitaryware vitreous china semi-close coupled 90 degree outlet open rim washdown pan and matching 9 Litre cistern complete with lid, fitments, and purpose made CP side flush lever (left or right) supplied with purpose made thermoset seat and cover plate.	No	1.00		
	<u>"Franke" or equal and approved grade 304 (18/10) stainless steel</u>				
7	1,2mm Grade 304 18/10 stainless steel CH slop hopper code: 351350) size 540 x 540 x 415mm deep, 100mm high intergral splashback, 110mm waste outlet with intergral flushing rim fitted with a 38 x 250mm long vertical flush pipe inlet in cobra FM with a hinged bucket grid fitted over funnel, fixed to wall with 2No. 40 x 40mm square stainless steel gallows brackets bolted with 4No. anchor bolts 600mm from finished level	No	2		
	<u>SANITARY PLUMBING</u>				
	<u>PVC-U soil and vent pipes</u>				
8	110mm Pipes chased into brickwork	m	2.00		
	<u>Extra over PVC-U soil and vent pipes for fittings</u>				
9	110mm End cap	No	2		
10	110mm Pan connector	No	3		
11	110mm Bend	No	4		
12	110mm Access bend	No	2		
13	110mm Air vent cowl	No	2		
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<u>WATER SUPPLY</u>			
<u>Class 1 copper pipes with brass compression couplings</u>			
14	15mm Pipes	m	24.00
15	15mm Pipes chased into brickwork or concrete	m	24.00
16	22mm Pipes	m	32.00
<u>Extra over Class 1 copper pipes for brass compression fittings</u>			
17	15mm Fittings	No	24
18	22mm Fittings	No	24
<u>ELECTRIC WATER HEATERS</u>			
<u>"Kwikot" or equal and approved</u>			
19	10 Litre "Prisma Classique" under counter electric water heater (code: FPRX-10-UB)	No	1
20	150Litre "Megaflo" floor/wall mounted electric water heater	No	1
<u>"Zip " or equal approved</u>			
21	7,5 litre stainless steel hydroboil with 2 way tap complete, to be Installed per supplier, installed in accordance with the relevant SANS codes and manufacturers specifications with and including water piping, and all necessary fittings.	No	1.00
<u>WASTE UNIONS ETC</u>			
22	40mm CP Unslotted bath aquawaste (click-clack waste) 70mm diameter flange, 40mm long shank, 1 1/2" BSP male outlet connection (code: 318-40)	No	3.00
Carried to Collection			R
Section No. 2 Building Works Bill No. 14 Plumbing and Drainage (Provisional) Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

BILLS OF QUANTITIES
Engineering and Construction of Facilities
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23	38mm sink waste union	No	3		
	<u>TRAPS ETC</u>				
	<u>PVC</u>				
24	38mm "P" or "S" trap	No	2		
	<u>"Cobra Watertech" or equal approved</u>				
25	32mm Chromium Plated bottle trap including tailpipe and wall flange complete	No	3.00		
	<u>"Rofo" floor drain</u>				
26	Floor drain installed in existing surface bed, including making good all finishes	No	1		
	<u>TAPS, VALVES, ETC</u>				
	<u>"Cobra" or similar approved</u>				
27	Flushmaster exposed type, back entry toilet flushvalve with control stop and wall flange with bent flush pipe and pan connector, to SANS 1240 specification. Horizontal telescopic adjustment (control stop valve body) for easy installation (code: FM1-100)	No	2		
	<u>Brass</u>				
28	15mm Bolo stops	No	13		
	<u>"Cobra Watertech" or equal and approved including joints to plastic piping</u>				
29	Medical sink mixer tap with swan neck aerated swivel outlet - chrome, including 2 x 15mm BSP male iron connection ends adjustable inlet connections with wall flanges	No	3.00		
	Carried to Collection				R
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	Plumbing and Drainage (Provisional)				
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30	'Medical Elbow Action' chrome pillar taps, including 1/4" turn ceramic disc head part, blue indice, 1/2" BSP male inlet, and flanged backnut (code:505-21B)	No	6		
	<u>Flexible service pipes</u>				
31	15mm Service pipe 350mm girth	No	13		
	Carried to Collection				R
	Section No. 2 Building Works Bill No. 14 Plumbing and Drainage (Provisional) Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

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Engineering and Construction of Facilities
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Item No		Quantity	Rate	Amount
	<u>BILL NO. 15</u>			
	<u>GLAZING</u>			
	<u>PREAMBLES</u>			
	The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)			
	<u>SUPPLEMENTARY PREAMBLES</u>			
	<u>Float glass</u>			
	The term "float glass" is used for monolithic annealed glass			
	<u>Laminated glass</u>			
	Laminated glass to have polyvinyl butyral (PVB) interlayer(s)			
	<u>GLAZING TO STEEL WITH PUTTY</u>			
	<u>4mm Clear float glass</u>			
1	Panes exceeding 0,1m ² and not exceeding 0,5m ²	m2	5.00	
	<u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u>			
	<u>4mm Polished mirror with beveled edge, fixed wall with dome mirror screws</u>			
2	Mirror 400 x 700mm high with four screws	No	3	
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	Section No. 2 Building Works Bill No. 15 Glazing Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

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Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 16</u></p> <p><u>PAINTWORK</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>PAINT SPECIFICATIONS</u></p> <p>All paints shall be "Dulux" and done in accordance with "Dulux" specifications or equal approved</p> <p>All painting shall be done in accordance with "SABS" specifications unless otherwise described</p> <p><u>COLOURS</u></p> <p>Unless otherwise described all paintwork shall be deemed to have a colour value in excess of 7 on the Munsell system in accordance with SANS 1091</p> <p><u>PAINTWORK, ETC TO NEW WORK ON</u></p> <p><u>ON INTERNAL FLOATED PLASTER SURFACES</u></p>			
	Carried to Collection		R	
	<p>Section No. 2 Building Works Bill No. 16 Paintwork Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

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	<u>One coat "Dulux 1 Step prep Water Based Primer, Sealer and Undercoat" or similar approved, minimum 16hrs overcoating time, be be followed by two coats "Dulux Easy Care Washable and Tough PVA", or similar approved. Minimum 48 hrs drying time between successive coats. Paint on:</u>			
1	Internal walls	m2	103.40	
2	Ceilings and beams	m2	10.00	
	<u>ON PLASTERBOARD SURFACES</u>			
	<u>One coat "Dulux 1 Step prep Water Based Primer, Sealer and Undercoat" or similar approved, minimum 16hrs overcoating time, be be followed by two coats "Dulux Easy Care Washable and Tough PVA", or similar approved. Minimum 48 hrs drying time between successive coats. Paint on:</u>			
3	Ceilings and cornices including priming metal cover strips and nailheads	m2	143.51	
	<u>WOOD SURFACES WITH</u>			
	<u>One coat undercoat and two coats "Plascon" white Egg Sheel Enamel paint. Light sanding between coats.</u>			
4	Doors	m2	28.14	
	<u>METAL SURFACES WITH</u>			
	<u>One coat undercoat and two coats "Plascon" white Egg Sheel Enamel paint. Light sanding between coats.</u>			
5	Door frames	m2	9.50	
	<u>PAINTWORK, ETC TO PREVIOUSLY PAINTED WORK</u>			
	<u>ON INTERNAL FLOATED PLASTER SURFACES</u>			
	Carried to Collection			R
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	<u>One coat "Dulux 1 Step prep Water Based Primer, Sealer and Undercoat" or similar approved, minimum 16hrs overcoating time, be be followed by two coats "Dulux Easy Care Washable and Tough PVA", or similar approved. Minimum 48 hrs drying time between successive coats. Paint on:</u>			
6	Internal walls	m2	738.00	
7	Ceilings and beams	m2	10.00	
	<u>ON PLASTERBOARD SURFACES</u>			
	<u>One coat "Dulux 1 Step prep Water Based Primer, Sealer and Undercoat" or similar approved, minimum 16hrs overcoating time, be be followed by two coats "Dulux Easy Care Washable and Tough PVA", or similar approved. Minimum 48 hrs drying time between successive coats. Paint on:</u>			
8	Ceilings and cornices including priming metal cover strips and nailheads (Proposed Lab)	m2	205.00	
9	Trunking	m	56.00	
	<u>WOOD SURFACES WITH</u>			
	<u>One coat undercoat and two coats "Plascon" white Egg Sheel Enamel paint. Light sanding between coats.</u>			
10	Doors	m2	169.79	
	<u>Sand existing doors and seal with 1 x coat 'Dulux Wood Primer" and 2 x coats "Dulux Exterior Double Life Timbavarnish Eggshell" varnish, or similar approved.</u>			
11	Doors	m2	53.52	
12	Door frames	m2	9.22	
	<u>METAL SURFACES WITH</u>			
	Carried to Collection			R
	Section No. 2 Building Works Bill No. 16 Paintwork Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

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Engineering and Construction of Facilities
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One coat undercoat and two coats "Plascon" white Egg Sheel Enamel paint. Light sanding between coats.

13	Door frames	m2	25.56		
14	Rails, bars, pipes, etc not exceeding 300mm girth (Water pipes)	m	40.00		

Carried to Collection

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Section No. 2
 Building Works
 Bill No. 16
 Paintwork
Bespoke Global Efficacy
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Bill No	<u>SECTION SUMMARY - Building Works</u>	Page No	Amount
1	Alterations	49	
2	Earthworks (Provisional)	55	
3	Concrete, Formwork and Reinforcement	60	
4	Masonry	64	
5	Waterproofing	67	
6	Carpentry and Joinery	71	
7	Ceilings, Partitions and Access Flooring	75	
8	Floor Coverings	76	
9	Ironmongery	82	
10	Structural Steel	86	
11	Metalwork	91	
12	Plastering	96	
13	Tiling	100	
14	Plumbing and Drainage (Provisional)	109	
15	Glazing	110	
16	Paintwork	115	
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	Section No. 2 Building Works Bespoke Global Efficacy Ramgoolam (Pty) Ltd		



4.3 Bill No.3 - Electrical Installation

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Item No		Quantity	Rate	Amount
	<u>BILL NO.1</u>			
	<u>STANDBY GENERATOR</u>			
	<u>New 500kVA (400V, 3phase) genset complete with automatic change-over panel, fuel storage tank, fuel pump</u>			
1	Supply & delivery, off loading and placing in position on site a new 500kVA (400V, 3phase) genset complete with automatic change-over panel, fuel storage tank, fuel pump	No	1.00	
2	Factory test on fully completed generator (including 1 hour full load dummy test)		Item	
3	Site tests and commissioning of the entire generator installation		Item	
4	Servicing of Generator during 12 months maintenance project		Item	
5	1-Year (12 months) maintenance guarantee		Item	
6	On site training	Hrs	2.00	
	<u>Diesel supply (to allow 12hours standby time)</u>			
	Note: Refer to Summary Page (Section 5C) for pricing: Fuel Price to exclude VAT. Price to be inserted under summary Page (Section 5C)			
7	Compilation of Operations and Maintenance Manuals	No	1.00	
	<u>Generator Concrete Plinth, Earthworks & Foundations (CIVIL WORKS)</u>			
8	Clear & Grub of new generator position	m2	18.36	
	Carried to Collection			R
	Section No. 3 Electrical Installation Bill No. 1 Reticulation & Gen-set Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

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Engineering and Construction of Facilities
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9	Cut to spoil excavated material	m3	11.93		
10	In situ preparation rip and compact of 150mm thick layer to a minimum of 90% of modified AASHTO maximum density.	m3	2.75		
11	Import 150mm G6 from commercial sources and compacted to 93% MOD AASHTO to construct lower selected layer.	m3	2.75		
12	Import 150mm G6 from commercial sources and compacted to 95% MOD AASHTO to construct upper selected layer.	m3	2.37		
13	Import 150mm G5 from commercial sources and compacted to 95% MOD AASHTO to construct sub-base layer.	m3	2.02		
14	Import 200mm G5 from commercial sources, stabilise with 3% cement to construct C4 base layer compacted to 97% MOD AASHTO.	m3	1.69		
15	Construct, level & cure 50mm, 15 Mpa 19/15 concrete blinding layer as per project specifications (2.2m x 4.2m x 50mm)	m3	0.46		
16	Design, Supply and install concrete plinth in accordance with Drawing 12964-EE-102 Rev C, the project specifications and selected generator properties, complete with concrete bund walls, bund wall floor, concrete plinth, Mentis Grating, fuel / water separation and connection to storm water system, to ensure 200Kpa bearing capacity is achieved. The Contractor should have a Professional Engineer's Certificate for the plinth according to the selected generator.			Item	
<u>Maintenance Tools / Spares</u>					
17	Spare parts for 1000 Hrs			Item	
18	20mm diameter diesel hose	m	3.00		
Carried to Collection				R	
Section No. 3 Electrical Installation Bill No. 1 Reticulation & Gen-set Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

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19	1 pair, 10m2 battery jumper cable	No	1.00	
20	Oil Funnel	No	1.00	
21	9Kg Fire extinguisher	No	1.00	
22	Manual diesel pump set	No	1.00	
23	24VDC electrical pump set	No	1.00	Rate Only
24	First aid kit		Item	
	<u>Trench</u>			
	<u>650 deep x 600 wide cable trench including backfilling and compaction. Installation to be in accordance with SANS10198. Coaxial spacing of cables to be 300mm.</u>			
25	(a) Pickable soil	m3	4.00	
26	(b) Soft rock	m3	3.00	
27	(c) Hard rock	m3	2.00	
	<u>Sleeve Installation</u>			
28	Supply and Install 110mm diameter Sleeve (For Low Voltage Cable)	m	30.00	
29	Supply and Install 50mm diameter Sleeve (For Data Cabinet)	m	5.00	
	<u>Low Voltage Cable Installation</u>			
	<u>Installation of new Low Voltage: 600/1000V PVC/ SWA / ECC/ PVC</u>			
	<u>Cu Cable</u>			
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	Section No. 3 Electrical Installation Bill No. 1 Reticulation & Gen-set Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

BILLS OF QUANTITIES
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	<u>(a) 185mm² 4Core</u>				
30	(i) Supply and Deliver	m	88.00		
31	(ii) Install	m	88.00		
	<u>(b) 35mm² 4Core</u>				
32	(i) Supply and Deliver	m	37.00		
33	(ii) Install	m	37.00		
	<u>(c) 16mm² 4Core</u>				
34	(i) Supply and Deliver	m	17.00		
35	(ii) Install	m	17.00		
	<u>(d) 10mm² 4Core</u>				
36	(i) Supply and Deliver	m	17.00		
37	(ii) Install	m	17.00		
	<u>LV Cable Terminations</u>				
	<u>(a) 185mm² 4Core</u>				
38	(i) Supply and Deliver	No	4.00		
39	(ii) Install	No	4.00		
	<u>(b) 35mm² 4Core</u>				
40	(i) Supply and Deliver	No	2.00		
41	(ii) Install	No	2.00		
	<u>(c) 16mm² 4Core</u>				
42	(i) Supply and Deliver	No	2.00		
	Carried to Collection				R
	Section No. 3 Electrical Installation Bill No. 1 Reticulation & Gen-set Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

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43	(ii) Install	No	2.00		
	<u>(d) 10mm² 4Core</u>				
44	(i) Supply and Deliver	No	2.00		
45	(ii) Install	No	2.00		
	<u>Cable Warning Tape</u>				
46	(i) Supply and Deliver	m	15.00		
47	(ii) Install	m	15.00		
	<u>Heavy Duty Cable Ladder Including All Required Accessories</u>				
	<u>Supply and deliver to site and Install, complete with all accessories (a) 400mm wide heavy duty cable Ladder complete with fixing accessories, tees, end caps and elbows</u>				
48	(i) Supply	m	20.00		
49	(ii) Install	m	20.00		
50	Provisional Sum for Ground Penetrating Radar scanning of existing services in area where generator and external cable installation must take place		Item		30,000.00
Carried to Collection				R	
Section No. 3 Electrical Installation Bill No. 1 Reticulation & Gen-set Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

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Electrical Installation

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Item No		Quantity	Rate	Amount
	<u>BILL NO.2</u>			
	<u>MAIN BUILDINGS POWER, LIGHTING, TEL & DATA</u>			
	<u>LIGHTING INSTALLATION</u>			
	<u>Supply and deliver new light fittings complete with lamps</u>			
1	(a) Type A: 1 x 33W LED, 3956 Lumens, 600mm x 600mm x 30mm Panel, 99.9 efficiency recessed / surface mounted Luminaire, or equal, better or similar approved	No	28.00	
2	(b) Type A1: 1 x 33W LED, 3956 Lumens, 600mm x 600mm x 30mm Panel, 99.9 efficiency recessed / surface mounted Luminaire, with 1-hr battery back-up unit or equal, better or similar approved	No	19.00	
3	(c) Type D: LED 18W Downlight Luminaire - with battery back-up or equal, better or similar approved	No	8.00	
4	(d) Type B: 20W LED Series 21 with Prismatic Diffuser, Wall Surface Mounted Luminaire or equal, better or similar approved	No	2.00	
5	(e) Type E: 8W Single Sided Surface mounted emergency escape signage luminaire with 1-hr battery back-up unit or equal, better or similar approved	No	4.00	
6	(f) Type J: 55W 1050mA WIDE BEAM Bulkhead Surface Mounted or equal, better or similar approved	No	9.00	
7	(g) Type F: LED FLOOD 215W 700mA, 25661 Lumens, 600mm x 350mm x 100mm Panel, surface mounted Luminaire, Mounted at 5.0m Height or equal, better or similar approved	No	8.00	
	Carried to Collection			R
	Section No. 3 Electrical Installation Bill No. 2 Small Power & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

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	<u>Install new light fittings</u>			
8	(a) Type A: 1 x 33W LED, 3956 Lumens, 600mm x 600mm x 30mm Panel, 99.9 efficiency recessed / surface mounted Luminaire, or equal, better or similar approved	No	28.00	
9	(b) Type A1: 1 x 33W LED, 3956 Lumens, 600mm x 600mm x 30mm Panel, 99.9 efficiency recessed / surface mounted Luminaire, with 1-hr battery back-up unit or equal, better or similar approved	No	19.00	
10	(c) Type D: LED 18W Downlight Luminaire - with battery back-up or equal, better or similar approved	No	8.00	
11	(d) Type B: 20W LED Series 21 with Prismatic Diffuser, Wall Surface Mounted Luminaire or equal, better or similar approved	No	2.00	
12	(e) Type E: 8W Single Sided Surface mounted emergency escape signage luminaire with 1-hr battery back-up unit or equal, better or similar approved	No	4.00	
13	(f) Type J: 55W 1050mA WIDE BEAM Bulkhead Surface Mounted or equal, better or similar approved	No	9.00	
14	(g) Type F: LED FLOOD 215W 700mA, 25661 Lumens, 600mm x 350mm x 100mm Panel, surface mounted Luminaire, Mounted at 5.0m Height or equal, better or similar approved	No	8.00	
	<u>Supply and deliver new light switches</u>			
15	(a) 16A 1-lever 1-way light switch	No	5.00	
16	(b) 16A 2-lever 2x1-way light switch	No	1.00	Rate Only
17	(c) 16A 1-lever 3-way light switch	No	1.00	
18	(d) 16A 1-lever 1-way weatherproof rotary light switch	No	1.00	
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	Section No. 3 Electrical Installation Bill No. 2 Small Power & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

BILLS OF QUANTITIES
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to House a Hot Isostatic Press (HIP) Machine
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	<u>(a) 2-lid, 2-compartment mild steel power skirting complete with fixing accessories, tees, end caps and elbows</u>			
33	(i) Supply	m	25.00	
34	(ii) Install	m	25.00	
	<u>(b) P9000 for Lighting, Data & Tel, AC Units complete with fixing accessories, tees, end caps and elbows ((Installed in Ceiling Void)</u>			
35	(i) Supply	m	180.00	
36	(ii) Install	m	180.00	
	<u>(c) Rapid 45 GEK PVC power skirting complete with fixing accessories, tees, end caps and elbows</u>			
37	(i) Supply	m	1.00	Rate Only
38	(ii) Install	m	1.00	Rate Only
	<u>(d) Power skirting (mild steel power skirting) mounted 16A, normal SSO complete with frame and cover plate</u>			
39	(i) Supply	No	50.00	
40	(ii) Install	No	50.00	
	<u>(e) Power skirting (Rapid 45 GEK PVC) mounted 16A normal SSO, complete with frame and cover plate</u>			
41	(i) Supply	No	1.00	Rate Only
42	(ii) Install	No	1.00	Rate Only
	<u>(f) Power skirting mounted RJ11 telephone outlet complete with frame and cover plate</u>			
43	(i) Supply	No	1.00	Rate Only
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	Section No. 3 Electrical Installation Bill No. 2 Small Power & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

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44	(ii) Install	No	1.00		Rate Only
	<u>(g) Power skirting mounted RJ45 data outlet complete with 100 x 100 outlet box and cover plate</u>				
45	(i) Supply	No	20.00		
46	(ii) Install	No	20.00		
	<u>Socket Outlets</u>				
	<u>(a) 16A normal double switched socket outlet complete with 100 x 100 drawbox and cover plate</u>				
47	(i) Supply and deliver	No	8.00		
48	(ii) Install flush in existing wall	No	8.00		
49	(b) Remove existing single socket outlet from wall	No	20.00		Rate Only
	<u>Isolators</u>				
50	(a) Remove existing surface isolators	No	5.00		Rate Only
	<u>(b) Supply and deliver new isolators (20A 2-pole or 32A - 63A 3-Pole) complete with 100 x 100 drawbox and cover plate</u>				
51	(i) 20A Surfaced / Rescenced indoor isolator	No	9.00		
52	(ii) 30A Surfaced /Rescenced indoor isolator	No	1.00		
53	(iii) 20A Surfaced /Rescenced weatherproof isolator	No	12.00		
54	(iv) 32A Surfaced /Rescenced weatherproof isolator	No	8.00		
55	(v) 63A Surfaced /Rescenced weatherproof isolator	No	1.00		
	<u>(c) Install new isolators complete</u>				
56	(i) 20A Surfaced / Rescenced indoor isolator	No	9.00		
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Section No. 3 Electrical Installation Bill No. 2 SmallPower & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
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57	(ii) 30A Surfaced /Rescenced indoor isolator	No	1.00		
58	(iii) 20A Surfaced /Rescenced weatherproof isolator	No	12.00		
59	(iv) 32A Surfaced /Rescenced weatherproof isolator	No	8.00		
60	(v) 63A Surfaced /Rescenced weatherproof isolator	No	1.00		
61	Supply & Install New Data Cabinet & Network switch		Item		35,000.00
	<u>New RJ45 data outlet complete with 100 x 100 outlet box and cover plate</u>				
62	(a) Supply and deliver	No	4.00		
63	(b) Install recessed 100 x 100 wall box	No	4.00		
	<u>New RJ11 telephone outlet complete with 100 x 100 cover plate</u>				
64	(a) Supply and deliver	No	1.00		Rate Only
65	(b) Install recessed 100 x 100 wall box	No	1.00		Rate Only
66	(c) Supply and deliver 3m telephone connection cord	No	1.00		Rate Only
	<u>Wiring and Wireways</u>				
	<u>Supply and deliver PVC insulated stranded copper conductors</u>				
67	(a) 6mm ² PVC	m	240.00		
68	(b) 4mm ² PVC	m	1,800.00		
69	(c) 2,5mm ² PVC	m	1,400.00		
	<u>Install PVC insulated stranded copper conductors</u>				
70	(a) 6mm ² PVC	m	240.00		
	Carried to Collection				R
	Section No. 3 Electrical Installation Bill No. 2 SmallPower & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
Engineering and Construction of Facilities
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71	(b) 4mm ² PVC	m	1,800.00		
72	(c) 2,5mm ² PVC	m	1,400.00		
	<u>Supply and deliver earth conductors</u>				
73	(a) 4mm ² BCEW	m	400.00		
74	(b) 2,5mm ² BCEW	m	900.00		
75	(c) 2,5mm ² green PVC insulated	m	450.00		
	<u>Install earth conductors</u>				
76	(a) 4mm ² BCEW	m	200.00		
77	(b) 2,5mm ² BCEW	m	900.00		
78	(c) 2,5mm ² green PVC insulated	m	450.00		
	<u>20mm diameter PVC conduit including couplers, drawboxes, fasters, etc</u>				
79	(a) Supply	m	450.00		
80	(b) Install surface	m	280.00		
81	(c) Chased into existing wall	m	160.00		
	<u>25mm diameter PVC conduit including couplers, drawboxes, fasters, etc</u>				
82	(a) Supply	m	120.00		
83	(b) Install surface	m	120.00		
84	(c) Install in Ceiling Void	m	60.00		
	Carried to Collection				R
	Section No. 3 Electrical Installation Bill No. 2 Small Power & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

	<u>20mm diameter Steel conduit including couplers, drawboxes, fasters, etc</u>				
85	(a) Supply	m	24.00		
86	(b) Install surface	m	12.00		
87	(c) Chased into existing wall	m	12.00		
	<u>20mm Galvanized steel sprague</u>				
88	(a) Supply	m	12.00		
89	(b) Install	m	12.00		
	<u>Heavy Duty Cable Ladder Including All Required Accessories (Supply and deliver to site and Install, complete with all accessories)</u>				
	<u>(a) 200mm wide heavy duty cable Ladder complete with fixing accessories, tees, end caps and elbows</u>				
90	(i) Supply	m	1.00		Rate Only
91	(ii) Install	m	1.00		Rate Only
	<u>(b) 400mm wide heavy duty cable Ladder complete with fixing accessories, tees, end caps and elbows</u>				
92	(i) Supply	m	20.00		
93	(ii) Install	m	20.00		
	<u>Distribution Boards</u>				
	<u>De-commission / Remove Existing Building 16 Main Distribution Board</u>				
94	(a) Existing DB - Main Distribution Board	No	1.00		
95	(b) Existing Sub-Boards (New HIP Building Floors)	No	3.00		
	Carried to Collection				R
	Section No. 3 Electrical Installation Bill No. 2 Small Power & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
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	<u>Supply and deliver new distribution board c/w swichgear, labels and factory wired as per single line diagrams</u>				
96	(a) DB - Main Distribution Board	No	1.00		
97	(b) DB-HIP Ground Floor	No	1.00		
98	(c) Sub-DB First Floor	No	1.00		
99	(d) Cooling Tower Sub DB	No	1.00		
	<u>Installation and commissioning of new distribution boards</u>				
100	(a) DB - Main Distribution Board	No	1.00		
101	(b) DB-HIP	No	1.00		
102	(c) Sub-DB First Floor	No	1.00		
103	(d) Cooling Tower Sub DB	No	1.00		
	<u>Distribution board switchgear</u>				
	<u>(a) Supply and deliver circuit breakers</u>				
104	(i) 20A, 6kA 1-Pole	No	2.00		
105	(i) 15A, 6kA 1-Pole	No	2.00		
	<u>(b) Install circuit breakers</u>				
106	(i) 20A, 6kA 1-Pole	No	2.00		
107	(i) 15A, 6kA 1-Pole	No	2.00		
	<u>(c) 60A, 2-Pole ELCB</u>				
108	(i) Supply and deliver	No	2.00		
	Carried to Collection				R
	Section No. 3 Electrical Installation Bill No. 2 SmallPower & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
Engineering and Construction of Facilities
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109	(ii) Install in existing distribution board	No	2.00		
	<u>Fire Detection System</u>				
110	Provisional Amount for the Fire Detetction System (Supply and Installation)		Item		48,000.00
	<u>Instrumentation</u>				
	<u>Supply and deliver to site and Install, complete with all accessories</u>				
	<u>(a) oxygen sensors in the HIP room, as specified</u>				
111	(i) Supply	No	2.00		
112	(ii) Install	No	2.00		
	<u>(b) Wall mounted audible alarm with red strobe light, suitable for connection to oxygen sensor controller</u>				
113	(i) Supply	No	3.00		
114	(ii) Install	No	3.00		
	<u>(c) Controller, including 24V power supply, as specified</u>				
115	(i) Supply	No	1.00		
116	(ii) Install	No	1.00		
	<u>(d) 1mm² 3-core overall screened instrumentation cable, c/w terminations</u>				
117	(i) Supply	m	40.00		
118	(ii) Install	m	40.00		
	Carried to Collection				R
	Section No. 3 Electrical Installation Bill No. 2 SmallPower & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
Engineering and Construction of Facilities
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	<u>(d) 1-pair overall screened instrumentation cable, c/w terminations</u>				
119	(i) Supply	m	40.00		
120	(ii) Install	m	40.00		
	<u>Access Control</u>				
121	Provisional Amount for the Access Control (Supply and Installation)		Item		5,000.00
	<u>UPS</u>				
	<u>New 1 x 6kVA, 230V/230V 50Hz, 1-phase in, 1-phase out UPS unit, complete with 10-year maintenance free 30-minute battery back-up for 6kVA at 0.8pf, Batteries to be protected by DC fuses, manual and static by-pass and battery temperature sensor 1-year maintenance guarantee</u>				
122	(a) Supply unit complete with batteries	No	1.00		
123	(b) Delivery, offloading, installation, testing and commissioning of the UPS unit	No	1.00		
	<u>COC (Certificate of Compliance)</u>				
124	Provide Certificate of Compliance for the entire new installation (Main DB, DB-HIP, Sub DBs, UPS & Generator Installation,etc)		Item		6,000.00
	Carried to Collection				
				R	
	Section No. 3 Electrical Installation Bill No. 2 Small Power & Lighting Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
Engineering and Construction of Facilities
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Section No. 3

Bill No. 2

SmallPower & Lighting

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Section No. 3

Electrical Installation

Bill No. 2

SmallPower & Lighting

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BILLS OF QUANTITIES
Engineering and Construction of Facilities
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2	SmallPower & Lighting	134	
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4.4 Bill No.4 - Mechanical Installation

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Item No		Quantity	Rate	Amount
	<u>BILL NO.1</u>			
	<u>MECHANICAL INSTALLATION</u>			
	<u>COMPRESSED AIR SYSTEM</u>			
	<u>Supply, deliver, install, test, and commission to full operation the new compressor system to deliver 1 500 l/min at 10 Bar. The compressed air system shall be complete with with a new compressor, oil free air system (OFAS) dryer, water seperator, Class 02 air filters, valves, regulators, and necessary piping with supporting brackets.</u>			
1	Supply and install a new compressor with a delivery rate of 1500 l/min at 10 Bar	Item		
2	Supply and install a 360 litre space saving receiver to also allow for mounting the compressor.	Item		
3	Supply and install a compressor panel complete with electrical wiring and controls	Item		
4	Supply and install an OFAS dryer to provide a constant outlet dewpoint in accordance with ISO8573-1 classes 1, 2, or 3 for water vapour	Item		
5	Supply and install a dew point sensor and measuring chamber complete with electronic control with dew point display and energy saving technology for the dryer.	No	1.00	
6	Supply and install 25 mm diameter; schedule 40 stainless steel piping	m	100.00	
7	Supply and install high pressure fittings and mounting brackets to allow for the full installation of the compressed air piping network.			
			SUM	
	Carried to Collection		R	
	Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

8	Supply and install a water separator to handle the specified 1500 l/min and Class 2 purity at the dryer		Item		
9	Supply and install in duty / standby configuration air filters to handle the specified 1500 l/min and Class 2 purity at the dryer and air consumption points inside the building complete with four ball valves with diameter 25mm diameter before and after each filter.		Item		
10	Supply and install an air regulator for each outlet point inside the building		Item		
11	Supply and install an automatic retracting coil air hose for each air outlet point inside the building		Item		
12	Supply and install an air regulator for each outlet point inside the building		Item		
13	Allow for painting on piping as per colour coding approved by the engineer				SUM
14	Allow for preparation of all necessary NDT testing and commissioning of compressed air piping as per OHS Act: Pressure Equipment regulations and SANS 347. Supply full operating and maintenance manuals for the compressed air system.				SUM
<u>ARGON INSTALLATION</u>					
15	Supply and install 25 mm diameter; schedule 40 stainless steel piping to operate at 200 bar	m		60.00	
16	Supply and install 54 mm diameter; schedule 80 stainless steel piping to operate at 200 bar	m		60.00	
17	Supply and install high pressure fittings and mounting brackets to allow for the full installation and operation of the compressed air piping network.				SUM
18	Supply and install a diameter 54mm bleed valve complete with necessary support brackets		Item		
Carried to Collection					R
Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

19	Supply and install a diameter 54 mm flexible reinforced braided hose to operate at 200 bar between the argon multi cylinder storage pack and the fixed pipe network. Piping to be fabricated and terminated with necessary fitting to suite the multi cylinder packs (for virgin and reclaimed argon storages). Each pipe piece to be at most 1m in length.		Item		
20	Supply and install shut off ball valves for each storage tank and supply network		Item		
21	Supply and install a pressure gauge to monitor up to 200 Bar argon pressure. Pressure gauge to read up to 220 Bar and appropriately marked with pressure high / low marks		Item		
22	Supply and install a pressure safety valve to monitor up to 200 Bar argon pressure and to protect the argon storage packs. Safety valves to be complete with statutory certifications.		Item		
23	Supply and install argon 2-1/2 inch exhaust pipe; appropriately supported and standing 2m above the roof complete with silencer. The silencer shall, beside reducing noise, blend the argon with outdoor air.		Item		
24	Allow for painting on piping as per colour coding approved by the engineer				SUM
25	Allow for preparation of all necessary NDT testing and commissioning of high pressure argon piping as per OHS Act: Pressure Equipment regulations and SANS 347. Supply full operating and maintenance manuals for the argon system.				SUM
<u>COOLING TOWER INSTALLATION</u>					
26	Supply and install a 2-inch stainless steel pipe line from the cooling tower to the press inside the building (about 25m apart). Piping to be to and from the cooling tower for supply and return.	m		70.00	
Carried to Collection					R
Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

27	Supply and install a 2-inch manifold to connect the cooling tower to the supply and return piping. Cooling tower to be free issue from the client.			SUM
28	Supply and install stainless fittings and mounting brackets to allow for the full installation and operation of the cooling tower water piping network.			SUM
29	Supply and install all fittings			SUM
30	Supply and install a 3.5 litre hydraulic accumulator on the water supply line feeding the press to accommodate water expansion. Accumulator to complete with necessary statutory certification.	No	1.00	
31	Allow for painting on piping as per colour coding approved by the engineer			SUM
32	Allow for preparation of all necessary NDT testing and commissioning of water piping.			SUM
<u>AIR CONDITIONING INSTALLATION</u>				
<u>METROLOGY LABORATORY</u>				
<u>Supply and install a ductable close control or precision cooling air-conditioning unit for vertical installation with heating by means of heating element, humidifier for precise temperature and humidity control. The unit shall have a noise rating of less than 47 dB(A). The unit shall be particularly suitable for precision air conditioning for metrology applications. The unit shall be complete with an inverter compressor to allow for the cooling capacity modulation according to the actual internal load. The unit shall be fitted with an electronic expansion valve and inverted fans for upflow air supply and frontal air return. The unit shall be complete with rubber mounting to avoid causing and propergrating undue vibration.</u>				
33	Supply downblow precision cooling unit with 17 kW Cooling, 8 kW heating, and 1 140 l/s air flow rate.		Item	
Carried to Collection				R
Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

34	Supply return air plenum with frontal grille, sound absorber, and 50 mm deep washable filters to suite the plenum		Item		
35	Supply SABS approved Fire Damper with a 2 hour rating; interlock the damper to only open when the upblow unit is operational.		Item		
36	Supply NC45 Sound Attenuator in the supply air duct		Item		
37	Supply externally insulated ducting as shown on the drawings.				SUM
38	Supply and install swirl air diffusers for 290 l/s		Item		
39	Carry out the complete unit testing and air balancing to full operation and environmental information condition logging to setup machine.				SUM
<u>NEW X-RAY LABORATORY STORE</u>					
<u>Design, Supply, Install, and commissioning ducted hide away direct expansion units complete with drain pipes, drain pumps (where necessary), enclosing trunking painted to match the colour of the wall, mounting brackets, vibration absorbing material, completely as specified and as shown on the drawings.</u>					
40	Supply 7.0 kW Under Ceiling Unit	No	1.00		
41	Install Ducted Unit	No	1.00		
<u>NEW OFFICE</u>					
Carried to Collection					R
Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

	<u>Ablutions Area: Supply, Install, and commission inline duct exhaust air fan system complete with two sound attenuators (down stream & upstream to each fan), weather louvre painted to match the colour of the wall, uninsulated ducting, flexible ducting leading to exhaust terminals (not more than 1m in length), disc valves, interlock with light switch, completely as specified and as shown on the drawings.</u>			
42	Extract air fan for 100 l/s	No	5.00	
43	Disk valves for 30 l/s	No	5.00	
44	Sound attenuators for NC35	No	2.00	
45	Ø100 spiral duct	m	20.00	
	<u>HIP MACHINE ROOM</u>			
	<u>Supply and Install 560 l/s exhaust wall mounted axial fans as shown on the drawings. All fans to be powder coated to the colour recommended by the Architect. The fresh air supply fans shall be complete with primary filters and interlocked to light switch</u>			
46	Wall Mounted Extraction Fans	No	5.00	
47	Wall Mounted Weather Cowls	No	5.00	
48	Wall wiring and switchgear			SUM
	<u>VENTILATION FANS - FOR EXTRACTION AIR SUPPLY</u>			
	<u>Supply and Install 2 800 l/s exhaust wall mounted axial fans as shown on the drawings. All fans to be powder coated to the colour recommended by the Architect. The fresh air supply fans shall be complete with primary filters and interlocked to light switch</u>			
49	Wall Mounted Extraction Fan	No	1.00	
	Carried to Collection			R
	Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd			

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

50	Wall Mounted Weather Cowls	No	1.00		
51	Electrical wiring, VSD, and switchgear				SUM
<u>AS-BUILT DRAWINGS, MANUALS, ETC.</u>					
52	Allow for the preparation of up-to-date general arrangement drawings, shop drawings and/or any other required drawings, together with the O&M manuals, all to be submitted to the Mechanical Engineer for approval.			Item	
<u>TESTING AND COMMISSIONING</u>					
53	Allow for the testing and commissioning of the entire Air conditioning and Ventilation system, ensuring that it is fully functional upon completion of the project, all as per the requirements of the Mechanical Engineer			Item	
<u>TWELVE (12) MONTH MAINTENANCE</u>					
54	Allow for a 12 month Maintenance period of the entire system, as per the specification of the Mechanical Engineer			Item	
<u>STAIR LIFT INSTALLATION</u>					
Carried to Collection					R
Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd					

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

	<u>Supply and install a platform stairlift suitable for indoor installation to provide access for persons on wheelchairs. The stairlift shall traverse along two flights of stairs or change direction once via a stair landing following the path of the handrail (the path is approximately 5m long over two flights of stairs excluding the parking length of the rack). The stairlift shall be "V65 vertical platform lift" or other similar approved and complete with rack and pinion drive, two stops, travel along the full length of existing flight of stairs from ground to first floor (through an intermediary landing) at 0.1 m/s speed. The stairlift shall typically be supplied via a single phase, 220 Volts, and 3.0 kW isolator (part of the scope of works by the contractor to pull power from nearest DB to new isolator)). The platform size shall be approximately 700mm x 830mm and of vastrap floor. The entrances onto the lift platform shall be ramp type to allow a wheelchair to roll onto the platform and complete with retractable arms to support the occupants. The operating panel shall be complete with an emergency stop button, machine activation key, squared buttons for floor selection, and landing call station shall be single push button. Moreover, the installation shall be in conformity with SABS 1545-4 and OHS Act. The installer shall be responsible for any/ all malfunctions during the 12 month maintenance/ guarantee period and shall be included in the rate below.</u>				
55	Supply and delivery of complete lift installation including all necessary mounting fixtures for the complete installation	No	1		
56	Allow for stair inspection by OEM to verify exact stair measurement in order to finalise manufacturing drawings and to suit the stairlift on offer. OEM to prepare new stairlift fixing arrangement shop drawing in order to confirm stairlift dimensional tolerances (storage space when non-operational & turning radius when changing direction through the stair landing)				SUM
	Carried to Collection				R
<p>Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>					

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
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57	Installation, snagging by OEM, and commissioning of complete lift installation			SUM	
	<u>Perform all required inspections and tests as required by the Occupational Health and Safety Act, No 85 of 1993, and as described in SABS1545 and SABS1543, including the issuing of the required Certificates</u>				
58	AIA inspection, testing, and certification of the new stairlift			SUM	
59	Arrange and co-ordinate with the Department of Labor inspector lift witness testing, registration, and certification			SUM	
60	Compilation of three (3) copies of Operation and Maintenance Manuals			SUM	
61	Carry out statutory maintenance during the 12 month guarantee period for the new installation	No	12		
Carried to Collection				R	
<p>Section No. 4 Mechanical Installation Bill No. 1 Mechanical Installation Complete Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>					

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Section No. 4

Bill No. 1

Mechanical Installation Complete

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Section No. 4

Mechanical Installation

Bill No. 1

Mechanical Installation Complete

Bespoke Global Efficacy

Ramgoolam (Pty) Ltd



4.5 Bill No.5 - Budgetary Allowances

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 1</u></p> <p><u>BUDGETARY ALLOWANCES</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>Prime cost amounts and provisional sums are net. Prime cost amounts include for delivery to site of all articles concerned</p> <p>Provisional sums are for material and equipment supplied and installed complete by firms of specialists</p> <p><u>Profit</u></p> <p>Where stated, the contractor may allow for profit if required</p> <p><u>General attendance on nominated/selected subcontractors</u></p> <p>The item "Attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors, the following:</p>			
	Carried to Collection		R	
	<p>Section No. 5 Budgetary Allowances Bill No. 1 Budgetary Allowances Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

- 1 The services as set out in clause B10.1 of the Preliminaries
- 2 Making good in all trades and cleaning down and removal of rubbish on completion

EXTERNAL WORKS

- 1 Budgetary allowance of R 300,000.00 (Three Hundred Thousand Rand) for the external works - to be used at the discretion of the Architect

FIRE SIGNAGE

- 2 Budgetary allowance of R 20,000.00 (Twenty Thousand Rand) for the installation of signage

Item

Item

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Section No. 5
 Budgetary Allowances
 Bill No. 1
 Budgetary Allowances
Bespoke Global Efficacy
Ramgoolam (Pty) Ltd

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Section No. 5

Bill No. 1

Budgetary Allowances

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Section No. 5

Budgetary Allowances

Bill No. 1

Budgetary Allowances

Bespoke Global Efficacy

Ramgoolam (Pty) Ltd



4.6 Bill No.6 - Provisional Sums

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Item No		Quantity	Rate	Amount
	<p><u>BILL NO. 1</u></p> <p><u>PROVISIONAL SUMS</u></p> <p><u>PREAMBLES</u></p> <p>The contractor is referred to the relevant Clause in the document Model Preambles for Trades as published by the Association of South African Quantity Surveyors (2017 edition)</p> <hr/> <p><u>SUPPLEMENTARY PREAMBLES</u></p> <p><u>General</u></p> <p>Prime cost amounts and provisional sums are net. Prime cost amounts include for delivery to site of all articles concerned</p> <p>Provisional sums are for material and equipment supplied and installed complete by firms of specialists</p> <p><u>Profit</u></p> <p>Where stated, the contractor may allow for profit if required</p> <p><u>General attendance on nominated/selected subcontractors</u></p> <p>The item "Attendance" which follows each provisional sum for nominated/selected subcontractors' work, shall be deemed to cover all the contractor's costs incurred in providing free of charge to the nominated/selected subcontractors, the following:</p>			
	Carried to Collection		R	
	<p>Section No. 6 Provisional Sums Bill No. 1 Provisional Sums Bespoke Global Efficacy Ramgoolam (Pty) Ltd</p>			

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

1	The services as set out in clause B10.1 of the Preliminaries			
2	Making good in all trades and cleaning down and removal of rubbish on completion			
<u>CARPENTRY AND JOINERY</u>				
1	Provide the sum of R 380,000 (Three Hundred and Eighty Thousand Rand) for the installation of joinery fittings for the laboratories	Item		
2	Profit	Item		
3	Attendance	Item		
<u>OVERHEAD CRANE</u>				
4	Provide the sum of R 750,000 (Seven Hundred and Fifty Thousand Rand) for the installation of work (equipment, etc.) supplied by others including crane hire (5 ton), integration/ co-ordination with other specialists, etc.	Item		
5	Profit	Item		
6	Attendance	Item		
Carried to Collection				R
Section No. 6 Provisional Sums Bill No. 1 Provisional Sums Bespoke Global Efficacy Ramgoolam (Pty) Ltd				

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Section No. 6

Bill No. 1

Provisional Sums

COLLECTION

Total Brought Forward from Page No.

**Page
No**

Amount

149

150

Carried to Final Summary

R

Section No. 6
 Provisional Sums

Bill No. 1
 Provisional Sums

Bespoke Global Efficacy
Ramgoolam (Pty) Ltd



4.7 Final Summary

BILLS OF QUANTITIES
Engineering and Construction of Facilities
to House a Hot Isostatic Press (HIP) Machine
at the CSIR Scientia Campus, Pretoria

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	Preliminaries	40	
2	Building Works	116	
3	Electrical Installation	135	
4	Mechanical Installation	145	
5	Budgetary Allowances	148	
6	Provisional Sums	151	
	Sub Total		R
	Contingency 7.5%		R
	Sub Total		R
	Add: Value Added Tax @ 15%		R
	Carried to Form of Tender		R
	Bespoke Global Efficacy Ramgoolam (Pty) Ltd		