

## **GENERAL TENDER CONDITIONS**

**AND** 

**TENDER - REQUEST FOR PROPOSALS** 

Tender no SAT 139/18

Invitation to tender for the Principal Contract for the complete execution, management and refurbishment of existing offices at South African Tourism's Head Office based in Sandton, Johannesburg.

Date issued: 16 November 2018

Tender due date: 10 December 2018 (12h00)

ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS - (NOT TO BE RE-TYPED)

THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2011, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT

Tender: Principal Contract

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#### 1 INTRODUCTION

South African Tourism Board (SA Tourism) was established by section 2 of the Tourism Act No 72 of 1993 and continues to exist in terms of section 9 of the new Tourism Act No 3 of 2014. SA Tourism is a schedule 3 A Public Entity in terms of schedule 3 of the Public Finance Management Act 1 of 1999.

The mandate of SA Tourism in terms of the Tourism Act is to provide for the development and promotion of sustainable tourism for the benefit of the Republic, its residents and its visitors. It is common cause that tourism is a key strategic industry in terms of National Tourism Sector Strategy documents as it supports government objectives of alleviating the triple challenges of unemployment, poverty and inequality.

The scope of SA Tourism's business includes three distinct areas of business focus and delivery, with different target markets and segments:

- I. International Leisure tourism (travel trade and consumer); and Domestic leisure tourism (travel trade and consumer)
- II. Business events through the delivery unit the South African National Convention Bureau (Meetings, Incentives, Conferences, Exhibitions);
- III. Quality assurance of tourism establishments through the delivery unit the Tourism Grading Council of South Africa.

Section 217 of the Constitution of the Republic of South Africa, 1996, prescribes that goods and services must be contracted through a system that is fair, equitable, transparent, competitive and cost-effective and also confers a constitutional right on every potential supplier to offer goods and services to the public sector when needed.

The submission of proposals will be in terms of this document. All information requested, must be supplied and all annexures completed, whether such information or annexure refers to the eventual tender or not. This information will form part of the eventual tender and must therefore be completed, as there will not be an opportunity to do so later. Thus it essential that the information supplied is both correct and true.

South African Tourism has a detailed evaluation methodology premised on Treasury Regulation 16A.3 promulgated under Section 76 of the Public Finance Management Act, 1999 (Act, No. 1 of 1999), the Preferential Procurement Policy Framework Act 2000 (Act, No.5 of 2000) read with Preferential Procurement Regulations 2017, and the Broad-Based Black Economic Empowerment Act, 2003 (Act, No. 53 of 2003).

Prospective tenderers must periodically review

https://www.southafrica.net/gl/en/corporate/page/tenders for updated information or amendments with regard to this tender, prior to due dates.

## 2 CLOSING DATE

The closing date for the submission of proposals is <u>12h00 on Monday</u>, <u>10 December 2018</u>. No late submissions will be accepted

## 3 TENDER DOCUMENTS MARKING

3.1 Failure on the part of the tenderer to sign/mark this tender form and thus to acknowledge and accept the conditions in writing or to complete the attached forms, questionnaires and specifications in all respects, may invalidate the tender.

- 3.2 Tenders must be completed in black ink where mechanical devices, e.g. typewriters or printers, are not used.
- 3.3 Tenderers will check the numbers of the pages and satisfy themselves that none are missing or duplicated. No liability will be accepted with regard to claims arising from the fact that pages are missing or duplicated.
- 3.4 Each tender, including 1 original, 3 hard copies and 4 electronic copies (PDF format), must be submitted in separate sealed envelopes (Please clearly mark which proposal is the original) with the following markings:

Tender Number: SAT 139/18

Description: Tender for Principal Contract Closing date: 12h00 on 10 December 2018

Name of Company: (Tenderer) Contact Person: (Tenderer)

3.5 Tenders should be hand delivered or couriered to the following address so as to reach the destination no later than the closing date and time:

Hand delivered to:	Couriered To:
The locked tender box located in the foyer in the reception area at:	The Supply Chain Sourcing Manager
South African Tourism	South African Tourism
Bojanala House	Bojanala House
90 Protea road	90 Protea road
Chislehurston	Chislehurston
Sandton, 2146	Sandton, 2146

3.6 No tenders transmitted by telegram, telex, facsimile, E-mail or similar apparatus will be considered.

# 4. CONTACT AND COMMUNICATION

- 4.1 A nominated official of the bidder(s) can make enquiries in writing, to the specified person, Ms. Pulane Muligwa via email <a href="mailto:pulane@southafrica.net">pulane@southafrica.net</a> and/or +27 11 895 3016. Bidder(s) must reduce all telephonic enquiries to writing and send to the above email address. Bidders are to communicate any technical enquiries no later than 03 December 2018 where responses will be published on the SA Tourism's website by no later than 07 December 2018.
- 4.2 The delegated office of South African Tourism may communicate with Bidder(s) where clarity is sought in the bid proposal.
- 4.3 Any communication to an official or a person acting in an advisory capacity for SA Tourism in respect of the bid between the closing date and the award of the bid by the Bidder(s) is discouraged.
- 4.4 All communication between the Bidder(s) and SA Tourism must be done in writing.
- 4.5 Whilst all due care has been taken in connection with the preparation of this bid, SA Tourism makes no representations or warranties that the content of the bid or any information communicated to or provided to Bidder(s) during the bidding process is, or will be, accurate, current or complete. SA Tourism, and its employees and advisors will not be liable with respect to any information communicated which may not be accurate, current or complete.
- 4.6 If Bidder(s) finds or reasonably believes it has found any discrepancy, ambiguity, error or inconsistency in this bid or any other information provided by SA Tourism (other than minor clerical matters), the

Bidder(s) must promptly notify SA Tourism in writing of such discrepancy, ambiguity, error or inconsistency in order to afford SA Tourism an opportunity to consider what corrective action is necessary (if any).

- 4.7 Any actual discrepancy, ambiguity, error or inconsistency in the bid or any other information provided by SA Tourism will, if possible, be corrected and provided to all Bidder(s) without attribution to the Bidder(s) who provided the written notice.
- 4.8 All persons (including Bidder(s)) obtaining or receiving the bid and any other information in connection with the Bid or the Tendering process must keep the contents of the Bid and other such information confidential, and not disclose or use the information except as required for the purpose of developing a proposal in response to this Bid.

#### 5 SECURITY AND INTEGRITY CLEARANCE

All information documents, records and books provided by SA Tourism to any tenderer, in connection with the invitation to tender or otherwise, are strictly private and confidential. These will not be disclosed by any tenderer to any third party, except with the express consent of SA Tourism, which will be granted in writing prior to such disclosure. SA Tourism, however, reserves the right to disclose any information provided by any tenderer to any of the employees of SA Tourism for successful tenders.

A proposal for award will be rejected if SA Tourism determines that the supplier recommended for award, has engaged in corrupt or fraudulent activities in competing for the contract in question.

SA Tourism may require contractors to permit SA Tourism to inspect their accounts and records relating to the performance of the contract and to have them audited by auditors appointed by SA Tourism.

#### 5.1 FALSE INFORMATION

Should the Tenderer provide and/or provides SA Tourism intentionally or negligently with false and/or misleading information or intentionally or negligently omitted any material fact that may have rendered any statement made by the Tenderer misleading, in connection with this Tender Request for Proposal or supporting information or any subsequent requests for information and/or such misleading and/or false information and/or omission of any material fact induced SA Tourism in awarding the Tender and/or concluding any subsequent agreement shall entitle SA Tourism in its sole discretion forthwith to disqualify the Tenderer and/or to immediately terminate any agreements subsequently entered into without prejudice to any of the rights SA Tourism has in terms of such agreement and/or any law.

# 5.2 VAT, DUTIES AND OTHER TAXES

Prices and must be quoted inclusive of VAT and all other relevant taxes and duties (where applicable) should be shown separately.

5.2.1 The full price under this tender must be quoted in South African Rand (ZAR).

# 6 SPECIAL TENDER CONDITIONS

This tender and its acceptance will be subject to the terms and conditions described below.

SA Tourism is/will not be liable for any costs incurred in preparation and delivery of tenders.

All documents, samples and materials submitted as part of a tender becomes the property of SA Tourism, and yet in any event SA Tourism will not be liable for loss or damage to any documents, samples and materials submitted.

## 6.1 TENDER SURETY

SA Tourism requires no proposal surety, but tenderers should note the conditions set out below. However SA Tourism reserves the right to review this position at contractual stages.

# 6.2 DOWNSCALING OF WORK

SA Tourism reserves the right to downscale the required services should the need arises where the winning bidder will be given reasonable notice in such cases.

#### 6.3 VALIDITY PERIOD

The tender proposal must remain valid for at least four (4) months after the tender due date. All contributions / prices indicated in the proposal and other recurrent costs must remain firm for the period of the contract.

#### 6.4 COMPLETENESS OF THE SOLUTION

The tenderer must complete all documents in full and submit these with the proposal. Failure to comply with these requirements may invalidate the tenderer or disqualify the proposal.

Notwithstanding any possible shortcomings and / or inconsistency in the specifications, the tenderer must ensure that the solution offered will form a complete, cost effective and functional proposal for the whole project solution.

## 6.5 CONTRACTUAL IMPLICATIONS

The tenderer must complete all documents in full and submit these with the proposal. Failure to comply with these requirements may invalidate the tenderer or disqualify the proposal.

- 6.5.1 Upon submission of the tender response, the Tenderer is unconditionally bound by the terms and conditions of the Request for Proposal (RFP) and the tender response. In the event of any conflict or confusion arising between the terms and conditions of the RFP and the tender response, the RFP shall prevail.
- 6.5.2 The Tenderer acknowledges that awarding of the Tender is based solely on the information supplied in the tender response, accordingly the relevant Terms and Conditions of the Request for Proposal and the tender response will be incorporated in the subsequent written agreement, unless otherwise provided by SA Tourism.
- 6.5.3 Other than providing rights to SA Tourism, nothing in this Tender Request and tender response should be construed to give rise to SA Tourism having any obligations or liabilities whatsoever, express or implied.
- 6.5.4 The successful Tenderer shall only be entitled to render services and/or provide goods to SA Tourism once a separate written contract, which should be aligned to "GOVERNMENT PROCUREMENT GENERAL CONDITIONS OF CONTRACT" and any other mandatory regulatory requirements within the industry relevant for provision of these goods/services. Once the written contract has been signed by both the Tenderer and SA Tourism, the Request for Proposal and tender response will cease to have force and effect.
- 6.5.5 The successful tenderer will assume sole responsibility, regardless of any third party or subcontracting agreements it may enter into.
- 6.5.6 The terms and conditions of this Request for Proposal and any agreement entered into between SA Tourism and Tenderer as a result of a successful proposal by the Tenderer to this Request for Proposal (RFP) shall always be interpreted and subject to the laws of the Republic of South Africa and the jurisdiction of the South Gauteng High Court in Johannesburg. The terms and conditions of this subclause 6.5.6 shall survive any subsequent contractual provision or agreement attempting to evade, amend or nullify the said provisions of this sub-clause 6.5.6 to the Request for Proposal.

# 6.6 CONDITIONS OF PAYMENT

No service should be provided to SA Tourism in terms of this tender and no amount will become due and payable by South African Tourism before:

- a cost estimate and relevant 3<sup>rd</sup> party supporting documents (where applicable) has been provided by the service provider/supplier.
- an official purchase order or similar written instruction has been issued to the supplier where service delivery will be within the specified time scale after the receipt of the official purchase order or similar written instruction; and

Unless otherwise determined in the contract or other agreement, all payments due to creditors will be settled within 30 days from receipt of an invoice or, in the case of civil claims, from the date of settlement or court judgment. This implies that amounts owing will be paid within 30 days from receipt of invoice if the goods, works or services were delivered to the satisfaction of SA Tourism.

Notwithstanding any provisions in this document, no payment will become due or payable unless the invoice is accompanied with:

- a statement, reconciling all monies already paid and still outstanding; and
- all relevant supporting documentation.

All invoices to be issued must be issued in the relevant currency in which the contract is done with SA Tourism. No GST or VAT may be levied on work that meets the criteria of an export.

The tenderer shall be responsible for any foreign exchange losses incurred due to currency fluctuations, without having any recourse whatsoever against SA Tourism for such loss.

# 6.7 QUALITY ASSURANCE

All services rendered by the Tenderer, its personnel, agents or sub-contractors will be subject to ongoing evaluation to determine its effectiveness and will be so guaranteed for the full contract period by the Tenderer after acceptance by SA Tourism.

## 6.8 INTELLECTUAL PROPERTY RIGHTS

Where relevant, all intellectual property rights, applicable to the awarded bidder, including, but not limited to, copyright, trademarks, design rights, patent rights and other similar rights in the Request for Proposal and the tender response and in any works or products created as a result of the performance of the Tenderer in relation to this Request for Proposal and tender response, will vest in, and are hereby assigned to SA Tourism, unless specifically agreed otherwise, in the form of individual written Agreements signed by both parties.

# 6.9 AWARDING OF CONTRACT

Proven relevant experience and success, as well as the ability to deliver services required will be important considerations. By the submission of tender, each submitter warrants that he/she/it is highly skilled, professional, competent and experienced in the area for which he/she has tendered. Any work performed by a successful tenderer will be evaluated.

The tenderer also warrants that the service provided will be of a superior standard, and is unlikely to cause undue difficulties.

The proposal may be awarded, in part or in full, at the sole discretion of SA Tourism, to one or more concerns on a non-exclusive basis. Proposals that are qualified by a tenderer's own conditions may be rejected as being invalid, and failure of the submitter to renounce such conditions when called upon to do so may invalidate the proposal.

SA Tourism may request clarification or additional information regarding any aspect of the proposal. The tenderer must supply the requested information within 24 hours after the request has been made, otherwise the tenderer may be disqualified. SA Tourism may also request a demonstration, and submitters must comply with such a request within 24 hours or within such a reasonable time as agreed by both SA Tourism and the tender.

## 6.10 CONFLICT OF INTEREST, CORRUPTION AND FRAUD

SA Tourism reserves its right to disqualify any bidder who either itself or any of whose members (save for such members who hold a minority interest in the bidder through shares listed on any recognised stock exchange), indirect members (being any person or entity who indirectly holds at least a 15% interest in the bidder other than in the context of shares listed on a recognised stock exchange), directors or members of senior management, whether in respect of SA Tourism or any other government organ or entity and whether from the Republic of South Africa or otherwise ("Government Entity")

- (a) engages in any collusive tendering, anti-competitive conduct, or any other similar conduct, including but not limited to any collusion with any other bidder in respect of the subject matter of this bid;
- (b) seeks any assistance, other than assistance officially provided by a Government Entity, from any employee, advisor or other representative of a Government Entity in order to obtain any unlawful advantage in relation to procurement or services provided or to be provided to a Government Entity;
- (c) makes or offers any gift, gratuity, anything of value or other inducement, whether lawful or unlawful, to any of SA Tourism officers, directors, employees, advisors or other representatives;
- (d) makes or offers any gift, gratuity, anything of any value or other inducement, to any Government Entity's officers, directors, employees, advisors or other representatives in order to obtain any unlawful advantage in relation to procurement or services provided or to be provided to a Government Entity;
- (e) accepts anything of value or an inducement that would or may provide financial gain, advantage or benefit in relation to procurement or services provided or to be provided to a Government Entity;
- (f) pays or agrees to pay to any person any fee, commission, percentage, brokerage fee, gift or any other consideration, that is contingent upon or results from, the award of any tender, contract, right or entitlement which is in any way related to procurement or the rendering of any services to a Government Entity;
- (g) has in the past engaged in any matter referred to above; or
- (h) has been found guilty in a court of law on charges of fraud and/or forgery, regardless of whether or not a prison term was imposed and despite such bidder, member or director's name not specifically appearing on the List of Tender Defaulters kept at National Treasury.

#### 6.11 MISREPRESENTATION DURING THE LIFECYCLE OF THE CONTRACT

The bidder should note that the terms of its Tender will be incorporated in the proposed contract by reference and that SA Tourism relies upon the bidder's Tender as a material representation in making an award to a successful bidder and in concluding an agreement with the bidder.

It follows therefore that misrepresentations in a Tender may give rise to contract/service termination and a claim by SA Tourism against the bidder notwithstanding the conclusion of the relevant agreement between SA Tourism and the bidder for the provision of the goods or services in question. In the event of a conflict between the bidder's proposal and the written agreement concluded between the parties, the written agreement will prevail.

## 6.12 PREPARATION COSTS

The Bidder will bear all its costs in preparing, submitting and presenting any response or Tender to this bid and all other costs incurred by it throughout the bid process. Furthermore, no statement in this bid will be construed as placing SA Tourism, its employees or agents under any obligation whatsoever, including in respect of costs, expenses or losses incurred by the bidder(s) in the preparation of their response to this bid.

#### 6.13 INDEMNITY

If a bidder breaches the conditions of this bid and, as a result of that breach, SA Tourism incurs costs or damages (including, without limitation, the cost of any investigations, procedural impairment, repetition of all or part of the bid process and/or enforcement of intellectual property rights or confidentiality obligations), then the bidder indemnifies and holds SA Tourism harmless from any and all such costs which SA Tourism may incur and for any damages or losses SA Tourism may suffer.

#### 6.14 PRECEDENCE

This document will prevail over any information provided during any briefing session whether oral or written, unless such written information provided, expressly amends this document by reference.

Prospective tenderers must periodically review <a href="https://www.southafrica.net/gl/en/corporate/page/tenders">https://www.southafrica.net/gl/en/corporate/page/tenders</a> for updated information or amendments with regard to this tender, prior to due dates.

#### 6.15 LIMITATION OF LIABILITY

A bidder participates in this bid process entirely at its own risk and cost. SA Tourism shall not be liable to compensate a bidder on any grounds whatsoever for any costs incurred or any damages suffered as a result of the Bidder's participation in this Bid process.

#### 6.16 TAX COMPLIANCE

No tender shall be awarded to a bidder who is not tax compliant. SA Tourism reserves the right to withdraw an award made, or cancel a contract concluded with a successful bidder in the event that it is established that such bidder was in fact not tax compliant at the time of the award, or has submitted a fraudulent Tax Clearance Certificate to SA Tourism, or whose verification against the Central Supplier Database (CSD) proves non-compliant. SA Tourism further reserves the right to cancel a contract with a successful bidder in the event that such bidder does not remain tax compliant for the full term of the contract.

The Central Supplier Database (CSD) and the tax compliance status PIN are the approved methods of verifying the tax compliance of a bidder. The South African Revenues Services (SARS) does not issued Tax Clearance Certificates anymore but has introduces an online provision via eFiling, for bidders to print their own Tax Clearance Certificates which they can submit with their bids or price quotations.

SA Tourism will therefore accept printed or copies of Tax Clearance Certificates submitted by bidders but will verify their authenticity on eFiling.

#### 6.17 TENDER DEFAULTERS AND RESTRICTED SUPPLIERS

No tender shall be awarded to a bidder whose name (or any of its members, directors, partners or trustees) appear on the Register of Tender Defaulters kept by National Treasury, or who have been placed on National Treasury's List of Restricted Suppliers. SA Tourism reserves the right to withdraw an award, or cancel a contract concluded with a Bidder should it be established, at any time, that a bidder has been blacklisted with National Treasury by another government institution.

## 6.18 GOVERNING LAW

South African law governs this bid and the bid response process. The bidder agrees to submit to the exclusive jurisdiction of the South African courts in any dispute of any kind that may arise out of or in connection with the subject matter of this bid, the bid itself and all processes associated with the bid.

#### 6.19 RESPONSIBILITY FOR SUB-CONTRACTORS AND BIDDER'S PERSONNEL

A bidder is responsible for ensuring that its personnel (including agents, officers, directors, employees, advisors and other representatives), its sub-contractors (if any) and personnel of its sub-contractors comply with all terms and conditions of this bid. In the event that SA Tourism allows a bidder to make use of sub-contractors, such sub-contractors will at all times remain the responsibility of the bidder and SA Tourism will not under any circumstances be liable for any losses or damages incurred by or caused by such sub-contractors.

#### 6.20 CONFIDENTIALITY

Except as may be required by operation of law, by a court or by a regulatory authority having appropriate jurisdiction, no information contained in or relating to this bid or a bidder's tender(s) will be disclosed by any bidder or other person not officially involved with SA Tourism's examination and evaluation of a Tender.

No part of the bid may be distributed, reproduced, stored or transmitted, in any form or by any means, electronic, photocopying, recording or otherwise, in whole or in part except for the purpose of preparing a Tender. This bid and any other documents supplied by SA Tourism remain proprietary to SA Tourism and must be promptly returned to SA Tourism upon request together with all copies, electronic versions, excerpts or summaries thereof or work derived there from.

Throughout this bid process and thereafter, bidder(s) must secure SA Tourism's written approval prior to the release of any information that pertains to (i) the potential work or activities to which this bid relates; or (ii) the process which follows this bid. Failure to adhere to this requirement may result in disqualification from the bid process and civil action.

## 6.21 SOUTH AFRICAN TOURISM PROPRIETARY INFORMATION

Bidder will on their bid cover letter make declaration that they did not have access to any SA Tourism proprietary information or any other matter that may have unfairly placed that bidder in a preferential position in relation to any of the other bidder(s).

## 6.22 AVAILABILITY OF FUNDS

Should funds no longer be available to pay for the execution of the responsibilities of this bid (RFP SAT 139/18), SA Tourism may terminate the Agreement at its own discretion or temporarily suspend all or part of the services by notice to the successful bidder who shall immediately make arrangements to stop the performance of the services and minimize further expenditure: Provided that the successful bidder shall thereupon be entitled to payment in full for the services delivered, up to the date of cancellation or suspension.

#### 6.23 ANTI-CORRUPTION COMPLIANCE

SA Tourism is committed to conducting its business ethically and to achieving and maintaining the highest standards of corporate governance, particularly in respect of anti-corruption compliance. We require all of our business partners, suppliers, vendors, contractors and service providers, who play an important and valued role in our continuing business success, to behave ethically and to avoid engaging in corrupt business activities.

Successful bidders will be required to undertake contractually that, in carrying out their responsibilities on behalf of SA Tourism, neither they nor their owners, officers, directors, employees, or their agents or subcontractors will pay, offer, or promise to pay, or authorize the payment directly or indirectly, of

any money, gift, or anything of value to any government official or anyone else for the purpose of influencing any act or decision of such official or of the government to obtain or retain business, or to direct business to any person.

#### 6.24 FRONTING

SA Tourism supports the spirit of broad based black economic empowerment and recognizes that real empowerment can only be achieved through individuals and businesses conducting themselves in accordance with the Constitution and in an honest, fair, equitable, transparent and legally compliant manner. Against this background the Government condemn any form of fronting.

SA Tourism, in ensuring that Bidders conduct themselves in an honest manner will, as part of the bid evaluation processes, conduct or initiate the necessary enquiries/investigations to determine the accuracy of the representation made in bid documents. Should any of the fronting indicators as contained in the Guidelines on Complex Structures and Transactions and Fronting, issued by the Department of Trade and Industry, be established during such enquiry / investigation, the onus will be on the Bidder / contractor to prove that fronting does not exist. Failure to do so within a period of 14 days from date of notification may invalidate the bid / contract and may also result in the restriction of the Bidder / contractor to conduct business with the public sector for a period not exceeding ten years, in addition to any other remedies South African Tourism may have against the Bidder / contractor concerned.

## 6.25 SUPPLIER DUE DILIGENCE

South African Tourism reserves the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include site visits and requests for additional information.

#### 6.26 DURATION OF THE CONTRACT

SA Tourism intends to enter into a 4 (four) month contract with the successful bidder(s). The contract will also be subject to a periodic performance evaluation on the same terms and conditions unless the parties agrees otherwise

# 7 TERMINATION OF CONTRACT

SA Tourism reserves the right to curtail the scope of any tender awarded or to curtail any aspect of any tenderer. In the event of any such curtailment, the tenderer will have no claim against SA Tourism.

SA Tourism also reserves the right to terminate, in SA Tourism's sole discretion and without providing any reason for the termination, the award of any proposal to any party if such party breaches, on 2 or more occasions, any component of the written agreement to be signed by both the supplier and SA Tourism.

#### 8 PROPOSAL SUBMISSION

All annexures must be completed in full, using the given numbering format. All attachments or references to attachments must be clearly marked and specific to information required. Compliance or Non-compliance with detailed information must be indicated per paragraph as per numbering format if there are additional and/or alternative products/services, options must be separately tendered for in the form of a separate proposal, and with a complete schedule describing deviations from specifications and technical brochures must be submitted where applicable.

Own conditions submitted by small, micro enterprises will be considered sympathetically by SA Tourism, however SA Tourism reserves the right to call upon the tenderer to renounce such conditions.

If any of the conditions on this tender form are in conflict with any special conditions, stipulations or provisions incorporated in the tender, such special conditions, stipulations or provisions will apply.

Only those bidders who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a 6GB (5GB PE) class of building work and are registered with the CIDB as having a track record, are eligible to submit a Bid.

#### ANNEXURES TO TENDER - REQUEST FOR PROPOSAL

#### 8.1 ANNEXURE A: DETAILED SPECIFICATION OF GOODS & SERVICES

#### 8.2 ANNEXURE B: COMPANY INFORMATION

The affidavit provides vital information required to evaluate a tender. It is therefore compulsory that the document be completed and stamped by a Commissioner of Oath.

In the case of more than one party participating in a joint venture that jointly submit a tender for work, the information of all legal entities participating in the joint venture must be provided.

- 8.3 ANNEXURE C: DETAILED BREAKDOWN OF TOTAL COST AND STANDARD SERVICES
- 8.4 ANNEXURE D: ACCEPTANCE OF GENERAL TENDER CONDITIONS OF SOUTH AFRICAN TOURISM
- 8.5 ANNEXURE E: DECLARATION OF INTEREST FOR TENDERS
- 8.6 ANNEXURE F: TENDER ENTERPRISE DECLARATION AFFIDAVIT:

An affidavit detailing the company structure, classification, sector, assets etc. of a firm is required. The affidavit provides vital information required to evaluate a tender e.g. the SMME/ HDI status of a firm may be ascertained from the information provided. It is therefore compulsory that the document be completed and stamped by a Commissioner of Oath.

## 8.7 ANNEXURE G: NATIONAL TREASURY CENTARLISED SUPPLIER DATABASE:

- (a) Bidders are required to be registered on the Central Supplier Database and the National Treasury shall verify the bidder's tax compliance status through the Central Supplier Database.
- (b) Where Consortia / Joint Ventures / Sub-contractors are involved, each party must be registered on the Central Supplier Database and their tax compliance status will be verified through the Central Supplier Database.
- (c) Bidder(s) must be compliant when submitting a proposal to South African Tourism and remain compliant for the entire contract term with all applicable tax legislation, including but not limited to the Income Tax Act, 1962 (Act No. 58 of 1962) and Value Added Tax Act, 1991 (Act No. 89 of 1991).
- (d) It is a condition of this bid that the tax matters of the successful bidder be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.
- (e) The Tax Compliance status requirements are also applicable to foreign bidders / individuals who wish to submit bids.
- (f) It is a requirement that bidders grant a written confirmation when submitting this bid that SARS may on an ongoing basis during the tenure of the contract disclose the bidder's tax compliance status and by submitting this bid such confirmation is deemed to have been granted.

Bidders who are not registered on CSD can do so on <a href="https://secure.csd.gov.za/">https://secure.csd.gov.za/</a>

# 8.8 ANNEXURE H: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

This annexure serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

The tender of any tenderer may be disregarded if that tenderer, or any of its directors have:

- Abused the institution's supply chain management system;
- Committed fraud or any other improper conduct in relation to such system; or
- Failed to perform on any previous contract.

## 8.9 ANNEXURE I: CERTIFICATE OF INDEPENDENT BID DETERMINATION

Tender: Principal Contract Company Confidential

## 9 ANNEXURE A: DETAILED SPECIFICATION OF GOODS AND SERVICES

# 9.1 Background on SA Tourism

SA Tourism was established by section 2 of the Tourism Act No 72 of 1993 and continues to exist in terms of section 9 of the new Tourism Act No 3 of 2014. SA Tourism is a schedule 3 A Public Entity in terms of schedule 3 of the Public Finance Management Act 1 of 1999.

The mandate of the South African Board in terms of the Tourism Act is to provide for the development and promotion of sustainable tourism for the benefit of the Republic, its residents and its visitors. It is common cause that tourism is a key strategic industry in terms of National Tourism Sector Strategy documents as it supports government objectives of alleviating the triple challenges of unemployment, poverty and inequality.

# 9.2 SA Tourism's Business Units and Country Offices

SA Tourism executes a broad spectrum of segment-specific marketing activities and support activities throughout the world through its various Business Units.

Details of these are as follows:

1	Office of the CEO	Internal Audit
2	Chief Strategy Officer	Insights Analytics Corporate Governance
		Financial Management
3	Chief Financial Officer	Supply Chain and Asset Management
		Corporate Legal Services
		Meetings, Incentives, Conference & Events sales
4	Chief Conventions Bureau Officer	Exhibitions and Strategic Events
		Business Events development and Services Support
		Human Capital
		Information and Communications Technology
		Embassy Liaison
		South Africa *
	Chief Operations Officer	Domestic Marketing
		Africa
		Angola
		West Africa *
		Europe
		South Europe Hub
5		France *
		Spain
		Portugal
		Italy
		Central Europe hub
		Germany *
		Austria
		Switzerland
		UK and Ireland Hub
		UK *
		Ireland
		North Europe Hub

Belgium Nordics  Americas  North Americas Hub US * Canada South Americas Hub Brazil Argentina Chile Asia, Australasia, Middle East Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East South East			
Nordics Americas North Americas Hub US * Canada South Americas Hub Brazil Argentina Chile Asia, Australasia, Middle East Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East			Netherlands *
Americas  North Americas Hub  US *  Canada  South Americas Hub  Brazil  Argentina  Chile  Asia, Australasia, Middle East  Australia and New Zealand Hub  Australia *  New Zealand  Middle East  India *  Middle East  South East			Belgium
North Americas Hub US * Canada South Americas Hub Brazil Argentina Chile Asia, Australasia, Middle East Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East			Nordics
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Canada South Americas Hub Brazil Argentina Chile Asia, Australasia, Middle East Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East			North Americas Hub
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Brazil Argentina Chile Asia, Australasia, Middle East Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East			Canada
Argentina Chile Asia, Australasia, Middle East Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East			South Americas Hub
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Asia, Australasia, Middle East Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East			Argentina
Australia and New Zealand Hub Australia * New Zealand Middle East India * Middle East South East			Chile
Australia * New Zealand Middle East India * Middle East South East			Asia, Australasia, Middle East
New Zealand  Middle East  India *  Middle East  South East			Australia and New Zealand Hub
Middle East India * Middle East South East			Australia *
India *  Middle East  South East			New Zealand
Middle East South East			Middle East
South East			India *
			Middle East
Asia Dacific			South East
ASIA PACITIC			Asia Pacific
China *			China *
Japan *			Japan *
Brand and Marketing			Brand and Marketing
Global Trade Relations	4	Chief Marketing Officer	Global Trade Relations
6 Chief Marketing Officer Global Public Relations and Communications	O	Chief Marketing Officer	Global Public Relations and Communications
Quality Assurance			Quality Assurance

<sup>\*</sup> SA Tourism operates physical offices

## 9.3 Scope of services

The Public Finance Management Act (PFMA), 1999 (Act No. 1 of 1999) promotes economy, efficiency, effectiveness and transparency in the use of state resources. A key objective is to establish and maintain a responsive and credible Supply Chain Management System.

Section 51 of The PFMA prescribes that a public entity must ensure that that public entity has and maintains an appropriate procurement and provisioning system which is fair, equitable, transparent, competitive and cost-effective and must take effective and appropriate steps to prevent irregular expenditure, fruitless and wasteful expenditure, and expenditure not complying with the operational policies of the public entity; and manage available working capital efficiently and economically.

9.3.1 The purpose of this Request for Proposal (RFP) is to solicit tenders from potential tenderer(s) for the Principal Contract for the complete execution, management and refurbishment of existing offices at South African Tourism's Head Office situated at Bojanala House, 90 Protea Road, Chislehurston, Sandton, Johannesburg 2196.

When considering submitting a bid, bidder(s) should be cognisant of the legislation and/or standards specifically applicable to the services required under this tender. SA Tourism seeks to conclude a written contract with the winning bidder, for the Principal Contract for the complete execution, management and refurbishment existing offices at South African Tourism's Head Office as per the attached Annexure A.

It should be noted that SA Tourism has issued a separate tender for the supply; delivery and installation of furniture based on a new office space plan. The winning bidder for the principal contract will be expected to work closely with the appointed contractor for the supply of furniture office and where both parties need to agree on acceptable leads times with SA Tourism for progressive delivery to ensure the least disruption in business operations.

#### **CO-ORDINATION:**

Tenderers are to note that work shall be carried out in a live environment and work areas shall be handed over in sections to the principal contractor. Due to the live environment, the contractor is to take all necessary precautions that least disruption to the existing facilities is encountered and all power and utilities should be fully functional during the execution stage. All hoarding to fire escapes is not acceptable unless approved by the Fire Engineer.

## 9.4 Short listing

SA Tourism may look at bidders who meets the minimum threshold for functionality in more detail and may request additional information or presentations.

#### 9.5 Bid protocol

Bidders should take precaution to not contravene the provisions of Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, which prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).

An agreement to engage in a restrictive horizontal practice is presumed to exist between two or more firms if -

- a) any one of those firms owns a significant interest in the other, or they have at least one director or substantial shareholder in common; and
- b) any combination of those firms engages in that restrictive horizontal practice;
- c) an agreement for co-operation between two or more competing businesses operating at the same level in the market;
- d) Price fixing- an arrangement in which several competing businesses make a secret agreement to set prices for their products to prevent real competition.

South African Tourism requires bidder(s) to declare the following in the Bidder's Technical response:

Confirm that the bidder(s) is to: -

- (a) Act honestly, fairly, and with due skill, care and diligence, in the interests of SA Tourism;
- (b) Have and employ effectively the resources, procedures and appropriate technological systems for the proper performance of the services;
- (c) Act with circumspection and treat SA Tourism fairly in a situation of conflicting interests;
- (d) Comply with all applicable statutory or common law requirements applicable to the conduct of business;
- (e) Make adequate disclosures of relevant material information including disclosures of actual or potential own interests, in relation to dealings with SA Tourism;
- (f) Avoidance of fraudulent and misleading advertising, canvassing and marketing;
- (g) To conduct their business activities with transparency and consistently uphold the interests and needs of SA Tourism as a client before any other consideration; and
- (h) To ensure that any information acquired by the bidder(s) from SA Tourism will not be used or disclosed unless the written consent of the client has been obtained to do so.

## 9.6 Packaging of bids

Proposals are expected to be presented in one pack. The pack, however, should be noticeably <u>subdivided</u> into 3 parts i.e:-

## 9.6.1 PART A- Legal and commercial information

This refers to documents and information relating to the vetting of legal and commercial information where the below evidence and supporting documents should be provided in sequential order:

- a) Cover letter introducing your company and any subcontractors who will participate in the contract and what the main responsibilities would be of each party;
- b) Proof of successful registration on National Treasury's Centralized Supplier Database (CSD);
- c) Confirmation of valid tax clearance status;
- d) Copies of latest Statement of financial position, Statement of financial performance and Cash flow statement;
- e) Letter of Good standing Compensation Fund (COIDA);
- f) Certified copies of South African Identity Documents or Valid Passports of Members, Directors or owner (Copy with original stamp);
- g) Bidders must have specific experience and submit at least three recent references (in a form of written proof(s) on their client's letterhead including relevant contact person(s), office telephone & fax number, website and email address) where similar work were undertaken; and
- h) All information listed below:

Document that must be submitted	Non-submission may result in disqualification?		
Confirmation of valid Tax Status	YES	<ol> <li>Written confirmation that SARS may on an ongoing basis during the tenure of the contract disclose the bidder's tax compliance status.</li> </ol>	
	0	ii. In the event where the Bidder submits a hard cop the Tax Clearance Certificate, the CSD verifica outcome will take precedence.	
Declaration of Interest - SBD 4	YES	Complete and sign the supplied pro forma document	
Preference Point Claim Form - SBD 6.1	NO	Non-submission will lead to a zero (0) score on BBBEE	
Declaration Certificate For Local Production And Content For Designated Sectors (SBD 6.2)	YES	Complete and sign the supplied pro forma document	

Declaration of Bidder's Past Supply Chain Management Practices - SBD 8	YES	Complete and sign the supplied pro forma document
Certificate of Independent Bid Determination - SBD 9	YES	Complete and sign the supplied pro forma document
Bidder Compliance form for Functional Evaluation	YES	Complete and sign
Registration on Central Supplier Database (CSD)		The bidder and sub-contractor (if any) must be registered as a service provider on the Central Supplier Database (CSD). If you are not registered proceed to complete the registration of your company prior to submitting your proposal. Visit <a href="https://secure.csd.gov.za/">https://secure.csd.gov.za/</a> to obtain your vendor number. Submit proof of registration.

# 9.6.2 PART B- All documents and completed annexures of the Request for Proposal (RFP) as they were issued

This refers to actual bid document and duly completed accompanying annexures where bidders are also required to initial each page of the RFP to confirm that they have read and understood the terms, conditions and scope of work required under the bid.

Should all of these documents not be included and signed and certified where applicable, the bidder may be disqualified on the basis of non-compliance/ non-responsiveness.

## 9.6.3 PART C- Credentials and portfolio(s) of evidence

This refers to all credentials and supporting information to demonstrate a bidders experience, capacity, capability, and suitability against the required scope of services/delivery of goods under this tender which should include at least, but not limited, the following:

- a) Bidders' capability to provide the required goods/services, this may include but not limited to resources
  e.g. equipment, staff, asset register, geographic footprint etc. in line with SA Tourism's request for
  proposals (RFP);
- b) Description and location of premises where the bidder operates from (SA Tourism may perform site inspections of the proposed premises of shortlisted bidders);
- c) Proof of previous relevant experience considering the nature of SA Tourism's requirements in so far as delivery will need to happen during different times as the office renovations progresses;
- d) Any additional information which you deem valuable for consideration during the bid evaluation process;
- e) Any value added services you are able to offer relevant to this scope of work;
- f) The proposed value chain from appointment to delivery considering sub-contractors/third party suppliers and relevant lead times; and
- g) Detailed quantifiable financial proposals (inclusive of VAT) on the attached ANNEXURE A.

Companies who fail to adhere to the above requirements; risk being disqualified from the evaluation process.

# 9.6.4 Pricing schedule

A detailed pricing schedule should be included in the bid proposal, detailing all aspects to deliver the requirements to SA Tourism as required under this tender.

The detailed pricing schedule should (as per ANNEXURE A), for the avoidance of doubt, should also be summarised under section 11 of the bid document.

For the purpose of evaluation, the price shall include all local taxes and other reimbursable expenses. The proposal with the lowest price will obtain the maximum points for price as prescribed in the RFP. Proposals with higher prices will proportionately obtain lower points according to the method as prescribed in the RFP.

#### PRICING INSTRUCTIONS

#### 9.6.4.1. General

- 9.6.4.2 This section provides the bidder with guidelines and requirements with regard to the completion of the Bill of Quantities. The Bill shall be completed in black ink or can be a printed version of the electronic copy bound into the bid document. The electronic version of the Bills will be issued to the Contractor with the bid documents. The completed electronic version of the Bills shall be submitted with the bid at the closing date. The bidder is referred to the Bid Conditions in regard to the correction of errors.
- 9.6.4.3 The Bill of Quantities shall be read with all the documents that form part of this Contract.
- 9.6.4.4 The following words shall have the meanings hereby assigned to them:

Unit: The unit of measurement for each item of work in terms of the Standard Specifications

or Particular Specifications.

Quantity: The number of units of work for each item.

Rate: The payment per unit of work at which the bidder to do the work.

Amount: The product of the quantity and the rate bidded for an item.

Lump sum: An amount bidded for an item, the extent of which is described in the Bill of Quantities

and the Specifications, but the quantity of work of which is not measured in any units.

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#### 9.6.4.5 Standard System of Measuring Building Work

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- 9.6.4.6 The Bill of Quanties was measured in accordance with the latesed edition of The Standard System of Measuring Building Work as published by the South African Association of Quantity Surveyors.
- 9.6.4.7 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- 9.6.4.8 The quantities set out in the Bill of Quantities are the estimated quantities of the Works, but the Contractor will be required to undertake whatever quantities of work that may be directed by the Principal Agent from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
- 9.6.4.9 The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1000kg)
$m^2$	=	square metre	No.	=	number
m².pass	=	square metre pass	Sum	=	lump sum
ha	=	hectare	MN	=	meganewton
$m^3$	=	cubic metre	N.m	=	meganewton-metre
m³.km	=	cubic metre-kilometre	C sum	=	Prime Cost sum
l	=	litre	Prov sum	=	Provisional sum
kl	=	kilolitre	%	=	Percent
MPa	=	megaspascal	kW	=	kilowatt

#### 9.6.4.10 Rates

- 9.6.4.11 The prices and rates to be inserted in the Bill of Quantities are to be full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the bid is based, as well as overhead charges and reasonable profit. Reasonable prices shall be inserted, as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- **9.6.4.11** A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered or where a word or phrase such as "included" or "provided elsewhere" will be accepted as a rate of nil (R0,00) having been entered against such items and covered by the other prices or rates in the Bill.
- 9.6.4.12 Any work executed to which such a pay item applies, shall be measured under the appropriate items in the Bill of Quantities and valued at a rate of nil (R0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.
- **9.6.4.12** The Bidder shall fill in a rate against all items where the words "rate only" appear in the amount column. The intention is that, although no work is foreseen under such item and no quantities are consequently given in the quantity column, the bidded rate shall apply should work under this item be actually required.
- **9.6.4.13** Except where rates only are required, the Bidder shall insert all amounts to be included in his total bidded price in the "Amount" column and show the corresponding total bidded price.
- **9.6.4.14** All rates and sums of money quoted in the Bill of Quantities shall be in rands and whole cents. Fractions of a cent shall be discarded.
- **9.6.4.15** All prices and rates entered in the Bill of Quantities must be **excluding** VAT. VAT will be added last on the summary page of the Bill of Quantities.
- **9.6.4.16** Should excessively high unit prices be bidded, such prices may be of sufficient importance to warrant rejection of a bid by the Employer.

## **CORRECTION OF ENTRIES MADE BY BIDDER**

Any entry made by the Bidder in the Bill of Quantities, forms, etc, which the bidder desires to change, **shall not be erased or painted out**. A line shall be drawn through the incorrect entry and the correct entry shall be written above in black ink and the **initial** of the Bidder shall be placed next to the correction.

# 9.7 Anti-Corruption Compliance

SA Tourism is committed to conducting its business ethically and to achieving and maintaining the highest standards of corporate governance, particularly in respect of anti-corruption compliance. We require all of our business partners, suppliers, vendors, contractors and service providers, who play an important and valued role in our continuing business success, to behave ethically and to avoid engaging in corrupt business activities.

To assist SA Tourism in respect of its commitment to ethical business practices, all successful bidders are required to complete an anti-bribery compliance questionnaire and thereafter to undergo an anti-bribery due diligence check; the outcome thereof may determine, at SA Tourism's discretion, whether SA Tourism will enter into any contractual agreement or other arrangements with the supplier, or not.

SA Tourism reserves the right to disqualify bidders based on the results and outcomes of its risk based anti-bribery due diligence procedures and will not furnish reasons for such decisions.

Successful bidders will further be required to sign warranties and undertake contractually that, in carrying out their responsibilities on behalf of SA Tourism, neither they nor their owners, officers, directors, employees, or their agents or subcontractors will pay, offer, or promise to pay, or authorize the payment directly or indirectly, of any money, gift, or anything of value to any government official or anyone else for the purpose of influencing any act or decision of such official or of the government to obtain or retain business, or to direct business to any person.

## 9.8 Bid evaluation process

SA Tourism has set minimum standards (Gates) that a bidder needs to meet in order to be evaluated and selected as a successful bidder. The minimum standards consist of the following:

Pre-qualification Criteria (Gate 0)	Technical Evaluation Criteria (Gate 1)	Price and B-BBEE Evaluation (Gate 2)
Bidders must submit all documents as	Bidder(s) are required to	The tender will be evaluated
required under paragraph 9.6.1, 9.6.2,	achieve a minimum threshold	on the 80/20 preference point
9.6.3 and 9.6.4	80% to proceed to Gate 2	system.
	(Price and B-BBEE).	
Only bidders that comply with ALL		
these criteria will proceed to Gate 1.	Bidders are required to	
	reference page numbers in	
	Bid Proposals next to the	
	criteria under paragraph	
	9.8.2	

# 9.8.1 Gate 0: Pre-qualification Criteria

Without limiting the generality of SA Tourism's other critical requirements for this Bid, bidder(s) must submit all the documents as required under listed under paragraph 9.6.1, 9.6.2, 9.6.3 and 9.6.4

All documents must be completed and signed by the duly authorised representative of the prospective bidder(s). During this phase Bidders' responses will be evaluated based on compliance with the listed administration and mandatory bid requirements. The bidder(s) proposal may be disqualified for non-submission of any of the documents.

# 9.8.2 Gate 1: Technical Evaluation Criteria = Weighting out of 100 basis points

All bidders are required to respond to the technical evaluation criteria scorecard and provide information/portfolio of evidence that they unconditionally hold the available capacity, ability, experience, and qualified staff to provide the requisite goods/services under this tender.

Bidders will be required to achieve a minimum threshold of 80% in order to proceed to Gate 2 for further evaluation which only considers comparative Price and BBBEE level of contribution.

Bidders who does not achieve the minimum threshold, which translates to a minimum score of 80 points out of a possible maximum score of 100 points, will not be further considered.

The Bidders will be evaluated according to the technical evaluation criteria in the scorecard below.

Bidders must indicate their ability to do the following and to substantiate as required with supporting documentation.

Evaluation Criteria		Weight	Score	Score Criteria	Comments and scoring
QUALITY	Quality - schedule of tender's experience	[20]	5	Experience building works or comparable, similar scale projects: - 0 Project completed=0 Point 1 Project completed=1 Point 2 Project completed=3 Points 3 Project completed=5 Points	
	Performance and quality reports from consultants/telephone numbers on previous projects		15	Performance record in similar projects: - No positive reference=0 Point 1 positive reference=5 Points 2 positive references=10 Points 3 positive references=15 Points	
	Capacity - schedule of plant and equipment		10	Availability of plant and equipment = 10 Points	
CAPACITY	CV's of personnel	[20]	10	Qualified and competent key staff assigned to the project with an NQF 6 construction industry related tertiary qualification with minimum 3 years post qualification: Contracts Manager = 2 points Site Agent = 2 Points Site Engineer = 2 Points Quantity Surveyor = 2 Points Safety Officer/OHS = 2 Points	
RISK ANALYSIS	Risk analysis - a current original date stamped audited financial statement and proof for bank rating.	[10]	10	Financials: -  *No bank rating and Audited Financial statements= 0 Points  *3 years audited financial statement showing a positive balance of 1% of the bid amount = 2 points  *A bank rating of C and 3 years audited financial statements showing a positive balance of 1% of the bid amount = 10 points	

METHOD STATEMENT	Method statement accompanied by detailed tender program and undertaking of the ability to sustain the works for a minimum period of 3 months.	[40]	40	Quality of Proposal on the method statement of the works including detailed tender program Excellent = 40 points Good = 35 points Average = 20 points Poor = 0 points
CIDB GRADING	Other CIDB - CIDB Grading for -Electrical works	[10]	10	Other CIDB: -  EB = 2 Points
	·General building ·Fencing work ·Mechanical work	[**]		GB = 4 Points SQ = 2 Points ME = 2 points
	TOTAL SCORE	100	100	

- Bids proposals will be evaluated strictly according to the bid evaluation criteria stipulated in this section.
- Bidders must, as part of their bid documents, submit supportive documentation for all functional requirements as indicated in the Terms of Reference. The panel responsible for scoring the respective bids will evaluate and score all bids based on information presented in the bid proposals in line with the RFP.
- The score for functionality will be calculated in terms of the table below where each Bid Evaluation Committee (BEC) member will rate each individual criterion on the bid evaluation score sheet using the below value scale/matrix:

Rating	Definition	Score
Excellent	<b>Exceeds</b> the requirement. Exceptional demonstration by the supplier of the relevant ability, understanding, experience, skills, resource and quality measures required to provide the goods / services. Response identifies factors that will offer potential added value, with supporting evidence.	5
Good	Satisfies the requirement with minor additional benefits. Above average demonstration by the supplier of the relevant ability, understanding, experience, skills, resource and quality measures required to provide the goods / services. Response identifies factors that will offer potential added value, with supporting evidence.	4
Acceptable	<b>Satisfies</b> the requirement. Demonstration by the supplier of the relevant ability, understanding, experience, skills, resource, and quality measures required to provide the goods / services, with supporting evidence.	
Minor Reservations	Satisfies the requirement with <b>minor reservations</b> . Some minor reservations of the supplier's relevant ability, understanding, experience, skills, resource and quality measures required to provide the goods / services, with little or no supporting evidence.	
Serious Reservations	Satisfies the requirement with <b>major reservations</b> . Considerable reservations of the supplier's relevant ability, understanding, experience, skills, resource and quality measures required to provide the goods / services, with little or no supporting evidence.	
Unacceptable	Does not meet the requirement. Does not comply and/or insufficient information provided to demonstrate that the supplier has the ability, understanding, experience, skills, resource & quality measures required to provide the goods / services, with little or no supporting evidence.	0

# Evaluation Sheet (for office use)

Reference	SAT139/18	Quoted price	
Description	Tender for Principal Contract	B-BEE Level	
Company			

# **Evaluation Metrix**

0	1	2	3	4	5
Non-compliant	Poor	Average	Good	Excellent	Best in class

Evaluation criteria Weight		Weight	Allocated score	Comments
QUALITY	Quality - schedul e of tender' s experie nce	[20]		
CAPACITY	Capacit y- schedul e of plant and equipm ent  CV's of person nel	[20]		
RISK ANALYSIS	Risk analysis - a current original	[10]		

	date stampe d audited financi al statem ent and proof for bank rating.		
METHOD STATEMENT	Method statem ent accomp anied by detaile d tender progra m and undert aking of the ability to sustain the works for a minimu m period of 3 months	[40]	
CIDB GRADING	Other CIDB - CIDB	[10]	

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W	ork e	
	OTAL 100	
SCO	ORE	

Bid Evaluation Committee Member	
Signature	
Date	

# Tender: Principal Contract

# 9.8.3 Gate 2: Price and BBBEE Evaluation (80+20) = 100 points

Only Bidders that have met the 80% threshold in Gate 1 will be evaluated in Gate 2 for comparative price and BBBEE level of contribution. Price and BBBEE will be evaluated as follows:

In terms of regulation 6.1 of the Preferential Procurement Regulations 2017 as per Gazette 10684 pertaining to the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000), responsive bids will be adjudicated using the 80/20 preference point system.

For the purpose of evaluation, the price shall include all local taxes and other reimbursable expenses. The proposal with the lowest price will obtain the maximum points for price as prescribed in the RFP. Proposals with higher prices will proportionately obtain lower points according to the method as prescribed in the RFP.

Points will be awarded to bidders on the basis of:

- The bid price (maximum 80 points)
- B-BBEE status level of contributor (maximum 20 points)

## (a) Stage 1 - Price Evaluation (80 Points)

Criteria	Points
Price Evaluation	80
$Ps = 80 \left( 1 - \frac{Pt - P \min}{P \min} \right)$	50

The following formula will be used to calculate the points for price:

Where

Ps = Points scored for comparative price of bid under consideration

Pt = Comparative price of bid under consideration

Pmin = Comparative price of lowest acceptable bid

# (b) Stage 2 - BBBEE Evaluation (20 Points)

A maximum of 20 points may be allocated to a bidder for attaining their B-BBEE status level of contributor in accordance with the table below:

B-BBEE Status Level of Contributor	Number of Points 80/20 system
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

B-BBEE points may be allocated to bidders on submission of the following documentation or evidence:

- A duly completed Preference Point Claim Form: Standard Bidding Document (SBD 6.1); and
- B-BBEE Certificate

**"B-BBEE status level of contributor"** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed;

9.8.3.1 Bidders who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates;

"EME" means any enterprise with annual total revenue of R5 million or less.

- 9.8.3.2 Bidders other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS;
- 9.8.3.3 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate;
- 9.8.3.4 A trust, consortium or joint venture will qualify for points for their B-BBEE status level as an unincorporated entity, provided that the entity submits their consolidated B-BBEE scorecard as if they were a group structure and that such a consolidated B-BBEE scorecard is prepared for every separate bid;
- 9.8.3.5 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice;
- 9.8.3.6 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder 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 bidder qualifies for, unless the intended sub-contractor is an EME that has the capability and ability to execute the sub-contract;

9.8.3.7 A person 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 EME that has the capability and ability to execute the sub-contract.

#### 9.8.3.8 BID DECLARATION

- (a) Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:
- (b) B-BBEE Status Level of Contribution: = ...... (maximum of 20 points);

Points claimed must be in accordance with the table reflected in paragraph 9.8.3 (c) and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an Accounting Officer as contemplated in the CCA).

## (c) SUB CONTRACTING

"sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;

- (d) Will any portion of the contract be sub-contracted? YES / NO (delete which is not applicable)
- (e) If YES, indicate:

(i) what percentage of the contract will be subcontracted?	%
(ii) the name of the sub-contractor?	
(iii) the B-BBEE status level of the sub-contractor?	
(iv) whether the sub-contractor is an EME?	YES / NO (delete which is not applicable)

[IF YES ENCLOSE PROOF]

I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraph 9.8.3. (c) of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- (i) The information furnished is true and correct;
- (ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 9.8.3 of this form;
- (iii) In the event of a contract being awarded as a result of points claimed as shown in paragraph 9.8.3 (c), the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct:
- (iv) If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have -
  - (a) disqualify the person from the bidding process;
  - recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, from obtaining business from any organ of state for a period not exceeding 10 years, after the audi alteram partem (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution.

Company Confidential

The undersigned is duly authorised on behalf of the firm and affirms that the information furnished is true and correct

Signature:

Duly authorised to sign on behalf of

Witness signature 1

Witness signature 2

Commissioner of Oath Signature

Date

Commissioner of Oath Stamp

Failure on the part of a bidder to fill in and/or to sign this form and submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA) together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed;

SA Tourism reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required.

# 9.8.3.9 Stage 3 - Consolidation of points for price and B-BBEE

Tender: Principal Contract

In terms of regulation 6.1 of the Preferential Procurement Regulations 2017 as per Gazette 10684 pertaining to the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000), responsive bids will be adjudicated on the 80/20 preference point system.

The total points for price evaluation (out of 80) and the total points for BBBEE evaluation (out of 20) will be consolidated. The bidder who scores the highest points for comparative pricing and B-BBEE status level of contributor after the consolidation of points will normally be considered as the preferred bidder who SA Tourism will enter into further negotiations with.

Upon the successful negotiation and signing of a written contract with the winning bidder all other bidders will be considered as unsuccessful.

# 10. ANNEXURE B - COMPANY INFORMATION

Tender: Principal Contract

SUPPLIER INFORMATION						
NAME OF BIDDER						
POSTAL ADDRESS						
STREET ADDRESS						
TELEPHONE NUMBER	CODE			NUMBER		
CELLPHONE NUMBER						I.
FACSIMILE NUMBER	CODE			NUMBER		
E-MAIL ADDRESS		<u> </u>				I
VAT REGISTRATION NUMBER						
TAX CLEARANCE NUMBER						
TAX CLEARANCE EXPIRY DATE						
HAS PROOF OF CENTARLISED S	SUPPLIER DATAB	ASE REGISTRAT	ION BEEN	SUBMITTED?		YES or NO
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAA	ΔA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLIC	CABLE BOX]		STATUS LEVEL AFFIDAVIT		[TICK APPLICABLE BOX]
	☐ Yes	□ No				☐ Yes ☐ No
[A B-BBEE STATUS LEVEL V SUBMITTED IN ORDER TO QU				•	? EMI	ES & QSEs) MUST BE
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	□Yes	□No SE PROOF]		ARE YOU FOREIGN BA SUPPLIER THE GO /SERVICES /WORKS OFFERED?	SED	☐ Yes ☐ No  [IF YES, ANSWER PART B:3]
QUESTIONNAIRE TO BIDDING	FOREIGN SUPPI	LIERS				<u> </u>
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?  ☐ NO						

Tender: Principal Contract Company Confidential

DOES THE ENTITY HAVE A BRANCH IN TH	E RSA?		
DOES THE ENTITY HAVE A PERMANENT ES	STABLISHMENT IN THE RSA?		
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?  YES \[ NO \]			
IS THE ENTITY LIABLE IN THE RSA FOR AN YES NO	NY FORM OF TAXATION?		
IF THE ANSWER IS "NO" TO ALL OF THE COMPLIANCE STATUS SYSTEM PIN COD REGISTER AS PER 2.3 BELOW.	HE ABOVE, THEN IT IS NOT A REQUIRE FROM THE SOUTH AFRICAN REV	IREMENT TO REGISTE ENUE SERVICE (SARS)	R FOR A TAX AND IF NOT
Total number of years the firm has be	een in business		
Total number of employees:			
Full Time			
Part Time			
Street Address of all Facilities used by	/ Firm (eg. Warehousing, storage sp	ace, offices etc.)	
Do you Share Facilities	☐ Yes	□ No	
If yes, which facilities			
With who do you share facilities (Nam	e of Firm / Individual)		

Tender: Principal Contract Company Confidential

What is the enterprises	annual turnover (excl VAT) durir	ng the lesser period for which t	he business has been	
operating, or for the pro	evious three financial years			
Rand amount :	R			
Or Previous three	Year	Year	Year	
financial years	R	R	R	
Management Structure	(Percentage of management on e	executive level in each of the fo	ollowing groups)	
Group		Percentage	Percentage	
African				
Coloured				
Indian				
White				

The undersigned is duly authorised of	on behalf of the firm and affirms that the information furnished is true and correct
Name and surname	
Signature	
Capacity under which the bid is signed	
Duly authorised to sign on behalf of	
Date	
Commissioner of Oath Signature	
Commissioner of Oath Stamp	

# 11. ANNEXURE C: DETAILED BREAKDOWN OF TOTAL COST AND STANDARD SERVICES

Bidders are required to summarize the proposed cost/fees as per the financial proposal (Using ANNEXURE A as basis (inclusive of VAT/GST and other applicable taxes) where the table needs to balance back to the detailed financial proposal i.e.:

# **SUMMARY OF TOTAL COST:**

TOTAL BID PRICE	ZAR (Including all applicable taxes)
YEAR 1	
OTHER - SPECIFY	
OTHER - SPECIFY	
OTHER - SPECIFY	
TOTAL COST	

# 12. TIME FRAMES

Include a detailed project / roll-out plan / implementation plan where applicable.

#### 13. ANNEXURE D: ACCEPTANCE OF GENERAL TENDER CONDITIONS OF SOUTH AFRICAN TOURISM

I/We hereby tender to supply all or any of the services described in the Tender Request for Proposal, in accordance with the specifications stipulated therein (and which will be taken as part of, and incorporated into, this tender submission) at the prices and on the terms regarding time for delivery and/or execution inserted therein, to South African Tourism on the terms of the General Tender Conditions of South African Tourism

I/WE AGREE THAT -

- 13.1 the offer herein will remain binding upon me/us and open for acceptance by South African Tourism during the Validity Period indicated and calculated from the closing time of the tender.
- if I/we withdraw my/our tender within the period for which I/we have agreed that the tender will remain open for acceptance, or fail to fulfill the contract when called upon to do so, South African Tourism may, without prejudice to its other rights, agree to the withdrawal of my/our tender or cancel the contract that may have been entered into between me/us and South African Tourism and I/we will then pay to South African Tourism any additional expense incurred by South African Tourism having either to accept any less favorable tender or, if fresh tenders have to be invited, the additional expenditure incurred by the invitation of fresh tenders and by the subsequent acceptance of any less favourable tender; South African Tourism will also have the right to recover such additional expenditure by set-off against moneys which may be due or become due to me/us under this or any other tender or contract or against any guarantee or deposit that may have been furnished by me/us or on my/our behalf for the due fulfillment of this or any other tender or contract and pending the ascertainment of the amount of such additional expenditure to retain such moneys, guarantee or deposit as security for any loss the Province may sustain by reason of my/our default;
- 13.3 if my/our tender is accepted the acceptance may be communicated to me/us by letter or order by ordinary post or registered post and that SA Post Office Ltd will be regarded as my/our agent; and delivery of such acceptance to SA Post Office Ltd will be treated as delivery to me/us;
- 13.4 the law of the Republic of South Africa will govern the contract created by the acceptance of my/our tender and that I/we choose domicilium citandi et executandi in the Republic at (full address of this place)

I/We furthermore confirm that I/we have satisfied myself/ourselves as to the correctness and validity of my/our tender; that the price(s) and rate(s) quoted cover all the work/item(s) specified in the tender documents and that the price(s) and rate(s) cover all my/our obligations under a resulting contract and that I/we accept that any mistakes regarding price(s) and calculations will be at my/our risk.

I/We hereby accept full responsibility for the proper execution and fulfillment of all obligations and conditions devolving on me/us under this agreement as the Principal(s) liable for the due fulfillment of this contract.

I/We agree that any action arising from this contract may in all respects be instituted against me/us and I/we hereby undertake to satisfy fully any sentence or judgment which may be pronounced against me/us as a result of such action.

I/We agree that background screening can be done to all directors of our legal entity that submits this bid

I/We declare that I/we have participation /no participation in the submission of any other offer for the supplies/services described in the attached documents. If in the affirmative, state name(s) of tender(s involved:

Duly signed by authorised person on this day of 2018 as unconditional acceptance of the terms and conditions of this Tender.

Name:\_\_\_\_\_\_ Signature:\_\_\_\_\_\_

These conditions form part of the tender and failure to comply therewith may invalidate a tender.

Tender: Principal Contract

**Company Confidential** 

#### 14 ANNEXURE E: DECLARATION OF INTEREST FOR TENDERS

This declaration must accompany tender documents submitted.

Any legal person, including persons employed by the South African Tourism or persons who act on behalf of South African Tourism or persons having a kinship with persons employed by South African Tourism including a blood relationship may make an offer or offers in terms of this tender invitation. In view of possible allegations of favouritism, should the resulting tender, or part thereof, be awarded to persons employed by South African Tourism, or to persons who act on behalf of South African Tourism, or to persons connected with or related to them, it is required that the tenderer or his/her authorized representative will declare his/her position vis-à-vis the evaluating authority and/or take an oath declaring his/her interest, where

The tenderer is employed by South African Tourism or acts on behalf of South African Tourism; and/or the legal person on whose behalf the tender document is signed, has a relationship with persons/a person who are/is involved with the evaluation of the tender(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation of the tender.

In order to give effect to the above, complete the following and submit with the tender.

Are you or any person connected with the tenderer, act on behalf of employed by South African Tourism?	of, or Yes	□ No
If Yes, state particulars :		
Do you, or any person connected with the tenderer, have any relatio (family, friend, other) with a person employed in the depart concerned or with South African Tourism, and who may be involved the evaluation or adjudication of this tender?	ment Vos	□ No
If Yes, state particulars :		
Are you or any person connected with the tenderer, aware of relationship (family, friend, other) between the tenderer and any pemployed by South African Tourism, who may be involved with evaluation or adjudication of this tender?	ersonvec	□ No
If Yes, state particulars :		
Duly signed by authorised person on this day of	2018 a	as
Declaration of Interest for the tendering of:		
TENDER REQUIREMENT, TENDER	DER NUMBER.	
Signature:		
Print Name:	Commission	ner of Oath
In capacity as:		
For and on behalf of:		
COMPANY NAME (TENDERER):	1	

#### 15 ANNEXURE F: DECLARATION OF INTEREST FOR TENDERS (SBD 4)

This declaration must accompany tender documents submitted.

- Any legal person, including persons employed by the state, or persons having a kinship with persons employed by the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid (includes a price quotation, advertised competitive bid, limited bid or proposal). In view of possible allegations of favouritism, should be the resulting bid, or part thereof, be awarded to persons employed by the state, or to persons connected with or related to them, it is required that the bidder or his/her authorized representative declare his/her position in relation to the evaluating/adjudicating authority where-
  - the bidder is self employed by the state; and/or
  - the legal person on whose behalf the bidding document is signed, has a relationship with persons/a person who are/is involved in the evaluation and or adjudication of the bid(s), or where it is known that such a relationship exists between the person or persons for or on whose behalf the declarant acts and persons who are involved with the evaluation and or adjudication of the bid.
- In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

2.1	Full name of bidders or his or her representative:	
2.2	Identity Number:	
2.3	Position occupied in the company (director, trustee, shareholder):	
2.4	Company registration number:	
2.5	Tax reference number:	
2.6	Vat registration number:	

- 2.7 Are you or any person connected with the bidder presently employed by the state? YES / NO
- 2.7.1 If so, furnish the following particulars:

2.7.1.1	shareholder / member:	
2.7.1.2	Name of state institution at which you or the person connected to the bidder is employed:	
2.7.1.3	Position occupied in the state institution:	
2.7.1.4	Any other particulars:	

2.7.2	If you are presently employed by the state to undertake remunerative work outside e	e, did you obtain the appropriate authority	YES / NO
2.7.2.1	If yes, did you attach proof of such author		YES / NO
	(Note: Failure to submit proof of such auth the bid)	nority, where applicable, may result in the disc	qualification of
2.7.2.2	If no, furnish reasons for the non- submission of such proof:		
2.8	Did you or your spouse, or any of the compor their spouses conduct business with the	pany's directors/trustees/shareholders/members state in the previous twelve months?	ers YES / NO
2.8.1	If yes, furnish particulars:		
2.9		bidder, have any relationship (family, friend, e and who may be involved with the evaluatio	YES / NO n
2.9.1	If yes, furnish particulars:		
2.10	Are you, or any person connected with the friend, other) between any other bidder a may be involved with the evaluation and o		YES / NO
2.10.1	If yes, furnish particulars:		

I	f yes, furnish particulars:			
Fu	ll details of directors/trustees/	members/shareholders		
F	Full Name	Identity Number	Personal Tax Reference Number	State Emplo Numbo Persal Numbo

BIDDER

# 16. ANNEXURE G: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS (SBD 6.2)

This Standard Bidding Document (SBD) must form part of all bids invited. It contains general information and serves as a declaration form for local content (local production and local content are used interchangeably).

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

#### 1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

$$LC = [1 - x / y] * 100$$

#### Where

- x is the imported content in Rand
- y is the bid price in Rand excluding value added tax (VAT)

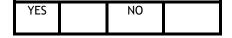
Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on http://www.thedti.gov.za/industrial development/ip.jsp at no cost.

- 1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;
- 3. Does any portion of the goods or services offered

have any imported content?

(Tick applicable box)



3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on www.resbank.co.za

Indicate the rate(s) of exchange against the appropriate currency in the table below (refer to Annex A of SATS 1286:2011):

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

NB: Bidders must submit proof of the SARB rate (s) of exchange used.

2. Where, after the award of a bid, challenges are experienced in meeting the stipulated minimum threshold for local content the dti must be informed accordingly in order for the dti to verify and in consultation with the AO/AA provide directives in this regard.

#### **LOCAL CONTENT DECLARATION**

#### (REFER TO ANNEX B OF SATS 1286:2011)

These conditions form part of the tender and failure to comply therewith may invalidate a tender.

LOCAL CO	ONTENT DEC	LARATION BY CHIEF	FINANCIAL OFFIC	ER OR O	THER LEGALI	LY RESPO	NSIBLE PERSON
NOMINAT	ED IN WRIT	ING BY THE CHIEF I	EXECUTIVE OR S	ENIOR A	MEMBER/PERS	ON WITH	MANAGEMENT
RESPONS	BILITY (CLO	SE CORPORATION, PA	RTNERSHIP OR I	NDIVIDU	(L)		
	(0_0.				,		
IN RESPE	CT OF BID NO	O					
	0. 0. 5.5					•••••	
ISSUED	BY:	(Procurement	Authority	/	Name	of	Institution):
		(* * * * * * * * * * * * * * * * * * *					
•••••					••••	• • • • • • • • • • • • • • • • • • • •	
NB							
.,_							
1	The obligati	ion to complete, duly	v sign and submi	t this de	claration can	not be tra	ansferred to an
	-	horized representativ	, ,				
	o.co.mac aac		c, add.cor or arry		. a pa. ty detiii	5 0 50114	o. co bladeli

2	Guidance on the Calculation of Local Content together with Local Content Declaration Templates
_	·
	(Annex C, D and E) is accessible on <a href="http://www.thedti.gov.za/industrial_development/ip.jsp">http://www.thedti.gov.za/industrial_development/ip.jsp</a> .
	Bidders should first complete Declaration D. After completing Declaration D, bidders should
	complete Declaration E and then consolidate the information on Declaration C. Declaration C
	should be submitted with the bid documentation at the closing date and time of the bid in
	order to substantiate the declaration made in paragraph (c) below. Declarations D and E should
	be kept by the bidders for verification purposes for a period of at least 5 years. The successful
	bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

, the undersigned, (full names),	
do hereby declare, in my capacity as	
of(name bidder entity), the following:	e of

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
- (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

- (d) I accept that the Procurement Authority / Institution has the right to request that the local content be verified in terms of the requirements of SATS 1286:2011.
- (e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement

DATE:
DATE:

17 ANNEXURE H - NATIONAL TREASURY CENTRALISED SUPPLIER DATABASE (this is only applicable for South African registered legal entities).)

To demonstrate compliance to commercial information bidders are required to attach proof of their successful supplier registration on National Treasury's Centralized Supplier Database (CSD).

SA Tourism will not consider any bids from bidders whose tax status is not valid on CSD.

Bidders who are not registered on CSD can do so on <a href="https://secure.csd.gov.za/">https://secure.csd.gov.za/</a>

In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate centralized supplier database registration report.

Failure to submit proof of CSD registration shall invalidate a tender and/or inclusion in any list or database of prospective suppliers.

#### 18. ANNEXURE I - DECLARATION OF BIDDERS'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES (SBD8)

This Standard Bidding Document must form part of all bids invited.

It serves as a declaration to be used by institutions in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

The bid of any bidder may be disregarded if that bidder or any of its directors have-

- abused the institution's supply chain management system;
- committed fraud or any other improper conduct in relation to such system; or
- failed to perform on any previous contract.

In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
18.1	Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector?		No
	(Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).		
	The Database of Restricted Suppliers now resides on the National Treasury's website ( <a href="www.treasury.gov.za">www.treasury.gov.za</a> ) and can be accessed by clicking on its link at the bottom of the home page.		
18.1.1	If so, furnish particulars:		
18.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No	Yes	No
	12 of 2004)?		
	The Register for Tender Defaulters can be accessed on the National Treasury's		
	website ( <u>www.treasury.gov.za</u> ) by clicking on its link at the bottom of the home page.		
	pager		
18.2.1	If so, furnish particulars:		
18.3	Was the bidder or any of its directors convicted by a court of law (including a court outside of the Republic of South Africa) for fraud or corruption during the	Yes	No
	past five years?		

18.3.1	If so, furnish particulars:				
10.3.1	ii 30, Turriisii particulars.				
18.4	Was any contract between the bide	der and any orga	n of state terminated during	Yes	No
	the past five years on account of fa				
	contract?				
10.11	If an formal harmatical area				
18.4.1	If so, furnish particulars:				
CERTIFIC	ATION				
l thouse	dersigned (NAME IN EUL)			cort	ifu that
	dersigned, (NAME IN FULL) mation furnished on this Declaration			, cert	ify that
	that, in addition to cancellation of a			l this	
dectarati	on, made on behalf of the tendering	g company, prove	e to be raise.		
Signature			Date		
Jigilatule	•		Date		
Position			Name of bidder		

Company Confidential

#### 19. ANNEXURE J - CERTIFICATE OF INDEPENDENT BID DETERMINATION (SBD9)

- 19.1 This Standard Bidding Document (SBD) must form part of all bids<sup>1</sup> invited.
- 19.2 Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging).<sup>2</sup> Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
- 19.3 Treasury Regulation 16A9 prescribes that accounting officers and accounting authorities must take all reasonable steps to prevent abuse of the supply chain management system and authorizes accounting officers and accounting authorities to:
- a. disregard the bid of any bidder if that bidder, or any of its directors have abused the institution's supply chain management system and or committed fraud or any other improper conduct in relation to such system.
- b. cancel a contract awarded to a supplier of goods and services if the supplier committed any corrupt or fraudulent act during the bidding process or the execution of that contract.

This SBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.

In order to give effect to the above, the attached Certificate of Bid Determination (SBD 9) must be completed and submitted with the bid:

- <sup>1</sup> Includes price quotations, advertised competitive bids, limited bids and proposals.
- <sup>2</sup> Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

#### 20 CERTIFICATE OF INDEPENDENT BID DETERMINATION (SBD9)

I, the undersigned, in submitting the accompanying bid:
(Bid number and Description)
in response to the invitation for the bid made by:

#### **SOUTH AFRICAN TOURISM**

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: .....that:

(Name of Bidder)

- 1 I have read and I understand the contents of this Certificate;
- I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
- I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder:
- Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign the bid, on behalf of the bidder;
- For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:
- (a) has been requested to submit a bid in response to this bid invitation;
- (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
- (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
- The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium<sup>3</sup> will not be construed as collusive bidding.
- In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
- (a) prices;
- (b) geographical area where product or service will be rendered (market allocation)
- (c) methods, factors or formulas used to calculate prices;
- (d) the intention or decision to submit or not to submit, a bid;
- (e) the submission of a bid which does not meet the specifications and conditions of the bid; or
- (f) bidding with the intention not to win the bid.

In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

- 9 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
  - <sup>3</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.
- I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

Signature	Date
Position	Name of bidder

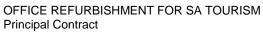
#### 21

21 810	DER DECLARATION						
The	bidder hereby declare the following:						
We o	confirm that(Bidder's Name) will:						
a.	Act honestly, fairly, and with due skill, care and diligence, in the interests of SA Tourism;						
<ul> <li>Employ effectively the resources, procedures and appropriate technological syste proper performance of the services;</li> </ul>							
с.	Act with circumspection and treat SA Tourism fairly in a situation of conflicting interests;						
d. Comply with all applicable statutory or common law requirements applicable to the conduct business;							
<ul> <li>Make adequate disclosures of relevant material information including disclosures of act potential own interests, in relation to dealings with SA Tourism;</li> </ul>							
f.	Avoid fraudulent and misleading advertising, canvassing and marketing;						
g.	Conduct business activities with transparency and consistently uphold the interests and needs or						
	SA Tourism as a client before any other consideration; and						
h.	Ensure that any information acquired by the bidder(s) from SA Tourism will not be used or						
	disclosed unless the written consent of the client has been obtained to do so.						
Signature	Date						
Jigilacure							
Print Name o	of Signatory:						
Designation:							

FOR AND ON BEHALF OF: \_\_\_\_\_(Bidding Company's Name)

# TENDER DOCUMENT (CONTRACT DATA)







PROVISIONAL BILLS OF QUANTITIES								
SUPPLIED AS PART OF THE PRINCIPAL CONTRACT:								
OFFICE REFURBISHMENT								
FOR								
SA TOURISM								
prepared by								
EQUATE CONSULTING (PTY) LTD								
THE CONTRACT FOR THE ABOVEMENTIONED WORK ENTERED INTO ON THE								
CONTRACTOR:	EMPLOYER:							
DATE	DATE							
WITNESS	WITNESS							
DATE	DATE							

## OFFICE REFURBISHMENT FOR SA TOURISM Principal Contract

#### **INDEX TO THE PRINCIPAL CONTRACT DOCUMENT**

INDEX TO CONTRACT DOCUMENT					
PART ONE	NOTES TO TENDERERS	1-1 to 1-2			
PART TWO	PRINCIPAL BUILDING AGREEMENT CONTRACT DATA EC	2-1 to 2-8			
PART THREE	PRINCIPAL BUILDING AGREEMENT CONTRACT DATA CE	3-1 to 3-4			
PART FOUR	NOTES TO CONDITIONS OF CONTRACT	4-1 to 4-2			
PART FOUR (SECTION A)	PRINCIPAL BUILDING AGREEMENT	4-3 to 4-18			
PART FOUR (SECTION B)	PRELIMINARIES	4-19 to 4-24			
PART FOUR (SECTION C)	SPECIFIC PRELIMINARIES	4-25 to 4-40			
PART FOUR (SECTION D)	NOMINATED/SELECTED SUBCONTRACT AGREEMENT	4-41 to 4-50			
PART FIVE	PROVISIONAL BILLS OF QUANTITIES	5-1 to 5-38			
PART SIX	FINAL SUMMARY	6-1			
PART SEVEN (ALTERNATIVE A)	FORM OF TENDER (ALTERNATIVE A)	N/A			
PART SEVEN (ALTERNATIVE B)	FORM OF TENDER (ALTERNATIVE B)	7-4 to 7-6			
	ANNEXURES – STANDARD				
ANNEXURE A	WAIVER OF CONTRACTOR'S LIEN	A-1 to A-5			
ANNEXURE B	DESIGN, MATERIALS AND WORKMANSHIP WARRANTY AND UNDERTAKING	B-1 to B-5			
ANNEXURE C	FORM OF PARENT COMPANY GUARANTEE	C-1 to C-11			
ANNEXURE D	CONSTRUCTION GUARANTEE	D-1 to D-5			
ANNEXURE E	DECLARATION OF INSURANCE	E-1			
ANNEXURE F	ADVANCE PAYMENT GUARANTEE	F-1 to F-2			
ANINEVLIDE O	ANNEXURES – PROJECT SPECIFIC	0.41.00			
ANNEXURE G	PROJECT DRAWINGS LIST	G-1 to G-2			
ANNEXURE H	STRUCTURAL GENERAL NOTES	N/A			
ANNEXURE I	GEOTECHNICAL REPORT	N/A			
ANNEXURE J	HEALTH AND SAFETY SPECIFICATION	TBC			
ANNEXURE K	MECHANICAL SCOPE OF WORKS	K-1			
ANNEXURE L	ELECTRICAL SCOPE OF WORKS	L-1			
ANNEXURE M	FIRE SCOPE OF WORKS				
ANNEXURE N	LIST OF PROPOSED SUBCONTRACTORS	M-1 to M-3			
ANNEXURE O	MODEL PREAMBLES TO TRADES	1 to 59			
ANNEXURE P	CONTRACTOR'S CORRESPONDENCE				
ANNEXURE - CONTRACTOR'S CORRESPONDENCE					
-	CONTRACTOR'S CORRESPONDENCE (POST TENDER)	-			

The tenderer is required to check the numbers of pages and should any be found to be missing or duplicated, or should any of the typing be indistinct, or any doubt or obscurity arise as to the meaning of any description or particular of any item, of if this tender enquiry contains any obvious errors, then the tenderer must immediately inform the **quantity surveyor** and have them rectified or explained in writing as the case may be. No liability whatsoever will be admitted by reason of the tenderer having failed to comply with the foregoing instructions.

No alteration, erasure, omission or addition is to be made in the text and conditions of this tender enquiry. Should any such alterations, amendment, note or addition be made, it will not be recognised. The wording of this tender enquiry, as prepared by the quantity surveyor, shall be adhered to.

# PART ONE NOTES TO TENDERERS





### OFFICE REFURBISHMENT FOR SA TOURISM Principal Contract

#### **PART ONE**

#### **NOTES TO TENDERERS**

Tenderers shall be deemed to have inspected and be fully acquainted with all contract documents prior to their submission.

#### 1. DESCRIPTION OF PROJECT:

The description hereunder is a general guide only and tenderers are referred to the detailed scope of works, drawings and specifications contained within the contract document for tender submission purposes.

#### The scope of work shall include but is not limited to the following:

The complete execution, management and refurbishment of existing offices at the South African Tourism's Head Office including but not limited to the following:

- Related builder's work for the office
- All related fit out installations where needed
- Construction start 15 January 2019
- Practical completion 30 April 2019

#### 2. PRICING OF PRELIMINARIES:

These bills of quantities have been formulated in the conventional manner, whereby the Preliminaries have been included as follows:

- Part Four: Section A: Principal Building Agreement
- Part Four: Section B: Preliminaries
- Part Four: Section C: Specific Preliminaries
- Part Four: Section D: Nominated/Selected Subcontract Agreement

In pricing the preliminaries, part four, tenderers are required to price the relevant items individually, as a single lump sum preliminaries amount will not be accepted.

#### 3. PRICING OF DOCUMENT:

This document is to be priced in its entirety and it is a condition of this tender that the following be handed in together with the tender submission:

- Part Four: Preliminaries Summary (Pages 4-1 to 40)
- Part Five: Provisional Bills of Quantities Summary (Pages 5-1 to 5-38)
- Part Six: Final Summary (Pages 6-1)
  - Part Seven: Forms of Tender (Pages 7-4 to 7-6)

#### 4. INSURANCE:

The **Employer** will affect the following insurances:

- Contract Works
- Public Liability

#### 5. SIGNING POWERS:

In the event of the firm tendering for this contract being a company or other legal person, then the said company or companies or other legal person shall provide at time of submission an extract of the minutes recording resolution by it's board of directors, authorising the signing of all documents in connection with the contract by their nominee.

#### 6. TENDER VALIDITY PERIOD



# OFFICE REFURBISHMENT FOR SA TOURISM Principal Contract

The tender validity period must be 125 calendar days from date of tender closing.

#### 7. SITE BRIEFING SESSION

Please note, there will be a compulsory briefing session to be held. Please refer to the details thereof below:

Date: Friday 23<sup>rd</sup> November 2018

Time: 11H00

Venue: 90 Protea Drive

Chislehurston Sandton

#### 8. CIDB GRADING:

Only those bidders who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a 6GB (5GB PE) class of building work and are registered with the CIDB as having a track record, are eligible to submit a Bid.

# PART TWO PRINCIPAL BUILDING AGREEMENT CONTRACT DATA - EC





### PRINCIPAL BUILDING AGREEMENT Contract Data EC

Project	
Employer	
Contractor	
Contract Date	File Code

#### prepared by the JOINT BUILDING CONTRACTS COMMITTEE Inc

#### RECOMMENDED BY THE JBCC CONSTITUENTS

Association of Construction Project Managers
Association of South African Quantity Surveyors
Master Builders South Africa
South African Association of Consulting Engineers
South African Institute of Architects
South African Property Owners Association
Specialist Engineering Contractors Committee



#### **CONTRACT DATA - EMPLOYER**

#### 1.0 CONTRACTING AND OTHER PARTIES

1.1	Employer				
	Postal address				
	_			Code	
	Tel	Fax	E-mail		
	Tax / VAT registration	n No			
[1.2]	Physical address				
1.2	Principal Agent				
[5.1]	Postal address				
	_			Code	
	Tel	Fax	E-mail		
1.3	Agent (1)				
[5.2]	Agent's service				
	Postal address				
	_			Code	
	Tel	Fax	E-mail		
1.4 [5.2]	Agent (2)				
[0.2]	Agent's service				
	Postal address				
	_			Code	
	Tel	Fax	E-mail		
1.5 <i>[5.2]</i>	Agent (3)				
. ,	Agent's service				
	Postal address				
				Code	
			E-mail		
1.6 <i>[5.2]</i>	3 ( )				
	•				
	Postal address				
	Tel	Fax	E-mail_		
	ı eı	rax	⊢-maii		

1.7 [5.2]	Agent (5)					
[3.2]	Agent's service					
	Postal address					
					Code	
	Tel	Fax _		_ E-mail		
1.8 <i>[5.2]</i>	Agent (6)					
	Agent's service					
	Postal address					
	Tel	Fax _		_ E-mail		
1.9 <i>[5.5]</i>	Interest of principal agent	or other <b>agents</b>	in the project			(yes/no)
	Details where "yes"					
1.10	The <b>principal agent</b> name and must be contacted sho Failure to complete the <b>cor</b>	ould the contrac	tor be uncertain of	the informatio	n provided	or to be provided.
2.0	CONTRACT AND SIT	ΓΕ INFORMA	TION			
2.1 [1.7]	The law applicable to this a	igreement	(country/state)			
2.2	Works identification					
[1.1]						
2.3	Site description					
[1.1]						
2.4 [15.2.1]	Possession of the site is to	be given on		(date)		

2.5 [15.3]	Period for the commente contractor take	(working days)				
2.6 [15.4, 2	Completion of the w	orks in <b>sectio</b>	<b>ns</b> is required	(yes/no)	(N° of sections)	
2.7 [3.3, 31		<b>actor's</b> lien or	right of continuing	possession is required	(yes/no)	
2.8 [16.1]	Defined restrictions described below or			specific requirements are nts	(yes/no)	
2.9 [16.4]	Geotechnic investig Where "yes" results				(yes/no)	
2.10 [16.6]	Existing premises w are described below			specific requirements Iments	(yes/no)	
2.11				yes" the specific requirements		
[16.7] 2.11.1	are described below Water	or detailed in Option A	the contract docu		(yes/no)	
2.11.1	vv atci	Option B Option C	Employer - Employer -	free of charge metered (contractor cost)	(A, B or C)	
2.11.2	Electricity	Option A Option B Option C	Contractor - Employer - Employer -	his cost free of charge metered (contractor cost)	(A, B or C)	
2.11.3	Telecom	Option A Option B Option C	Contractor - Employer - Employer -	his cost free of charge metered ( <b>contractor</b> cost)	(A, B or C)	
2.11.4	Ablutions	Option A Option B	Contractor - Employer -	his cost free of charge	(A or B)	
2.12 [16.8]	Protection of existin Where "yes" the spe contract documen	ecific requireme		below or detailed in the	(yes/no)	

#### 3.0 INSURANCES AND SECURITIES

3.1 [10.1.1,	Contract works insurance to be effected 12.61	(Employer/C	ontractor)			
		Fort	the sum of	(amount)		
		W ith	a deductible of	(amount)		
3.2 [10.1.2,	Supplementary/Special insurance to be e 11.1-3, 12.6]	effecte	ed by (Employer/C	ontractor)		
	,		the sum of	(amount)		
		W ith	a deductible of	(amount)		
3.3 [10.1.3,	Public liability insurance to be effected by 12.6]	,	(Employer/C	ontractor)		
	•	Fort	the sum of	(amount)		
		W ith	a deductible of	` '		
3.4	Support insurance to be effected by the			,		
[11.1.1]			the sum of	(amount)		
		W ith	a deductible of			
3.5 [11.1.2-3	Special insurance to be effected by		(Employer/C			
[11.1.2-0	Type			on contractor)		
	Туре		the sum of	(amount)		
			a deductible of	` ′		
		VV ILII	a deductible of	(amount)		
4.0	PRACTICAL COMPLETION DA	TES	AND PENAL	TIES		
4.1 124 3 11	For the <b>works</b> as a whole: The date for <b>practical completion</b>		D	ate	<b>-</b>	Penalty amount
	and the <b>penalty</b> per <b>calendar day</b>					
	or					
4.2 [24.3.1]	For the works in sections: The date for practical completion		D	ate		Penalty amount
[28.1]	and the penalty per calendar day Section	n 1				
	Section				Ī	
	Section					
	Section				1 🗔	
	Section				Ī	
	Section					
	Section					
	Section					
	000110	•				

#### 5.0 DOCUMENTS AND GENERAL

5.1 [3.7]		Construction document copies to be supplied free of charge	ed to the <b>contract</b>	or	(N° of)		
5.2 [3.9]		The <b>priced document</b> may be used as a spand work methods	pecification of <b>ma</b> t	terials and	d goods (yes/no)		
5.3 [3.10]		The <b>contractor</b> shall provide a schedule of	rates (yes/no	)	(Addendum No)		
5.4 [3.11]		Changes made to JBCC standard document	nts (yes/no	)	(Addendum No)		
5.5 [15.1.1]		On acceptance of the tender the <b>priced do</b> the stated <b>working days</b>	<b>cument</b> is to be s	ubmitted w	vithin (N° of)		
5.6 [22.2]		Work to be undertaken by direct contractor	ors (yes/no	)	(Addendum No)		
5.7 [24.9]		On achievement of practical completion the the <b>works</b> as listed below	contractor is to h	nand over i	manuals etc related to		
	(1)		(2)				
	(3)		(4)				
	(5)		(6)				
			, ,				
5.8 [31.1]	` '	Interim <b>payment certificate</b> to be issued b	, ,		(Date of month)		
6.0	CHANGES MADE TO THE STANDARD JBCC DOCUMENT						
	Note:	All changes in detail must be listed below or	provided in	(Add	dendum N°)		
7.0	DECLARATION BY THE PRINCIPAL AGENT						
	accurat	rincipal agent named in 1.2 above, declare to the at the time of calling for tenders. Where naried, tenderers will be forthwith informed there	necessary, should				
			-		Principal Agent		
			-		Date		

#### **NOTES:**

#### **NOTES:**

# PART THREE PRINCIPAL BUILDING AGREEMENT CONTRACT DATA - CE





## PRINCIPAL BUILDING AGREEMENT Contract Data CE

Project	
Employer	
Contractor	
Contract Date	File Code

#### prepared by the JOINT BUILDING CONTRACTS COMMITTEE Inc

#### RECOMMENDED BY THE JBCC CONSTITUENTS

Association of Construction Project Managers
Association of South African Quantity Surveyors
Master Builders South Africa
South African Association of Consulting Engineers
South African Institute of Architects
South African Property Owners Association
Specialist Engineering Contractors Committee



#### **CONTRACT DATA - CONTRACTOR**

#### 1.0 CONTRACTING PARTY

1.1	Contractor				
	Postal address				
	Code				
	Tel Fax E-mail				
	Tax / VAT registration No				
[1.2]	Physical address				
	Fax E-mail				
2.0	SECURITIES				
2.1	ecurity provisions selected are:				
2.1.1 <i>[14.3]</i>	Variable Construction Guarantee (yes/no)				
2.1.2 [14.4]	Fixed Construction Guarantee and Payment Reduction (yes/no)				
2.1.3 <i>[14.5]</i>	Advanced Payment is required. Where "Yes" (Amount)				
2.1.4 <i>[14.5]</i>	An Advance Payment Guarantee to be provided (yes/no)				
3 N	DAVMENT AND AD HISTMENT OF DDEI IMINADIES				

#### 3.0 PAYMENT AND ADJUSTMENT OF PRELIMINARIES

#### 3.1 Payment of preliminaries

The payment of preliminaries shall be according to the option selected by the **contractor**. The amount included in each monthly **payment certificate** in respect of preliminaries as stated in the **contract data** shall be:

#### 3.1.1 **Option A**

Assessed by the **principal agent** as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the **contract sum** excluding:

- The amount for preliminaries
- Any contingency sum
- Any amount in respect of CPAP

All inclusive of tax

#### 3.1.2 **Option B**

Calculated from the priced items in the **bills of quantities/lump sum document**. The **contractor** and the **principal agent** shall agree on a division of the priced preliminaries items into:

- An initial or establishment charge
- A monthly charge
- A final or disestablishment charge

All inclusive of tax

In arriving at such a division cognisance shall be taken of such factors as:

- Premiums for annually renewable insurance policies
- Plant, scaffolding and the like remaining the property of the contractor or the hiring company and the capital costs thereof not treated as part of the initial charge

Where the initial **construction period** is extended the monthly charge shall be recalculated on the same basis as was originally applied but taking into account the revised **construction period** and the amounts already paid to the **contractor** 

Should the **contractor** and the **principal agent** be unable to agree such division then the **principal agent** shall make a division of the amount of preliminaries to be incorporated in the valuations for each monthly **payment certificate** 

#### 3.2 Adjustment of preliminaries

The amount or items of preliminaries shall be adjusted to take account of the theoretical financial effect which changes in time and/or value have on preliminaries. Such an adjustment shall be based on the particulars provided by the **contractor** for this purpose in terms of Option A or B and shall preclude any further adjustment of preliminaries

Adjustment of preliminaries in terms of Options A or B shall apply notwithstanding the actual employment of resources by the **contractor** in the execution of the **works**. The adjustment of preliminaries shall be based on the option as selected in the **contractor's** tender

For the adjustment of the preliminaries both the contract sum and the contract value shall exclude:

- The amount of preliminaries
- Any contingency sum
- Any amount in respect of CPAP

All inclusive of tax

#### 3.2.1 **Option A**

The amount of preliminaries shall be adjusted in the following categories:

- An amount which shall not be varied
- An amount which shall be varied in proportion to the contract value as compared with the contract sum
- An amount which shall be varied in proportion to the construction period as compared to the initial construction period excluding revisions to the construction period for which the contractor is not entitled to adjustment of the contract value in terms of the agreement

The **contractor** shall, within fifteen (15) working days of taking possession of the **site**, give the **principal agent** a breakdown, subdivided into the above categories, of the amount for preliminaries in tabulated form, all to the satisfaction of the **principal agent** 

Should the **contractor** fail to provide such information within the period stipulated then the amount for preliminaries shall be deemed to be subdivided into the following proportions:

- 10% (ten per cent) which amount shall not be varied
- 15% (fifteen per cent) which amount shall be varied in proportion to the contract value as compared with the contract sum
- 75% (seventy-five per cent) which amount shall be varied in proportion to the construction period as compared with the initial construction period

For a lump sum document, should the contractor fail to identify the amount for preliminaries, then such an amount shall be deemed to be 7,5% (seven and a half per cent) of the contract sum excluding:

- Any contingency sum
- Any amount in respect of CPAP

All inclusive of tax

Where sectional completion is required in terms of the agreement, the contractor shall provide the **principal agent** with the division of the above categorised amounts into sections. Should the **contractor** fail to provide such information within the period stipulated the categorised amounts shall be prorated to the value of each section

#### 3.2.2 **Option B**

The **contractor** shall, within fifteen (15) **working days** of taking possession of the site, provide the **principal agent** with a detailed breakdown of the amount for preliminaries. This breakdown shall set out, among others, full particulars of administrative, supervisory and other personnel, plant, transport and other resources and charges included in the amount for preliminaries. The **contractor** shall show the periods to which the individual items relate with the charge rate for such items by means of a **programme** all to the satisfaction of the **principal agent** 

Where sectional completion is required in terms of the **agreement**, the **contractor** shall provide the **principal agent** with details of the resources required for each section and those that are common to sections. Should the **contractor** fail to provide such information within the period stipulated, Option A shall apply

#### 3.2.3 Payment certificate cash flow

The **contractor** shall provide all reasonable assistance to the **principal agent** in the preparation of cash flow projections of claims for **payment certificates** where required by the **employer**. The projections shall be based on the **programme** and shall be updated as

of this item shall not prejudice his right to receive payment in terms of the agreement 3.2.4 The **contract value** shall be adjusted according **CPAP**[3.1] (yes/no) 3.2.5 Payment of preliminaries [3.1.1-2] 3.2.6 Adjustment of preliminaries [3.2.1-2] **EMPLOYER CHANGES TO JBCC STANDARD DOCUMENTS** 4.0 4.1 Changes (if any) in terms of the Employer's Contract Data are accepted [3.11] (Yes or No) Where "No" an addendum referenced to this clause is to be attached 5.0 THE TENDER 5.1 This tender is to be submitted to the principal agent at the street address provided in the invitation to tender before the tender closing date and time stated therein 5.2 By the submission of this tender to the employer the tenderer offers and agrees to contract for, execute and complete the works for the tender sum as stated below 5.3 Tenders will be opened in public directly after the stated closing time. Only the total tender sum as stated in each tender will be announced 5.4 The lowest or any tender will not necessarily be accepted This tender shall remain in full legal force for thirty (30) calendar days. The tenderer accepts liability 5.5 for damages as may be suffered by the employer should the tender validity period not be honoured 5.6 This tender takes into account all listed items [4.0] for the purpose of preparing and submitting this tender 5.7 The successful tenderer will be appointed in terms of the JBCC Principal Building Agreement **TENDER SUM COMPILATION** 5.8 Amount 5.8.1 Tenderer's work including prime cost amounts 5.8.2 Employer allowances stated by the principal agent 5.8.3 **SUB TOTAL** 5.8.4 Add tax on 5.8.3 5.8.5 **TOTAL TENDER SUM inclusive of tax** 5.8.6 Tender Sum in words Thus done and signed at \_\_\_ Name of signatory Capacity of authorised signatory As witness for and on behalf of the tenderer who

and when the programme requires updating. The cooperation of the contractor in terms

warrants authorisation hereto

## PART FOUR SECTION A PRINCIPAL BUILDING AGREEMENT



PART 4 BILL 1 PRELIMINARIES			
PRELIMINARIES			
	l I		
BUILDING AGREEMENT AND PRELIMINARIES			
The JBCC Series 2000 Principal Building Agreement (July 2007 edition) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described			
The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities			
FULL INTENT AND MEANING OF CLAUSES			
Tenderers are referred to the above mentioned documents for the full intent and meaning of each clause thereof			
These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above mentioned documents			
No claim whatsoever shall be entertained in respect of errors or omissions in pricing due to brevity of descriptions of items, which are fully described when read in conjunction with the relevant clauses of the said principal building agreement, preliminaries and preambles.			
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Bill No. 1 Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd			
	Contract Committee shall be the applicable building agreement, amended as hereinafter described  The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities  FULL INTENT AND MEANING OF CLAUSES  Tenderers are referred to the above mentioned documents for the full intent and meaning of each clause thereof  These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above mentioned documents  No claim whatsoever shall be entertained in respect of errors or omissions in pricing due to brevity of descriptions of items, which are fully described when read in conjunction with the relevant clauses of the said principal building agreement, preliminaries and preambles.  Carried Forward  Bill No. 1  Preliminaries  EP823_SA TOURISM REFURBISHMENT	Contract Committee shall be the applicable building agreement, amended as hereinafter described  The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities  FULL INTENT AND MEANING OF CLAUSES  Tenderers are referred to the above mentioned documents for the full intent and meaning of each clause thereof  These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above mentioned documents  No claim whatsoever shall be entertained in respect of errors or omissions in pricing due to brevity of descriptions of items, which are fully described when read in conjunction with the relevant clauses of the said principal building agreement, preliminaries and preambles.  Carried Forward  Bill No. 1  Preliminaries  EP823_SA TOURISM REFURBISHMENT	Contract Committee shall be the applicable building agreement, amended as hereinafter described  The ASAQS Preliminaries (November 2007 edition) published by the Association of South African Quantity Surveyors for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities  FULL INTENT AND MEANING OF CLAUSES  Tenderers are referred to the above mentioned documents for the full intent and meaning of each clause thereof  These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading and such modifications, corrections or supplements shall take precedence notwithstanding anything contrary contained in the above mentioned documents  No claim whatsoever shall be entertained in respect of errors or omissions in pricing due to brevity of descriptions of items, which are fully described when read in conjunction with the relevant clauses of the said principal building agreement, preliminaries and preambles.  Carried Forward  R  Bill No. 1  Preliminaries  EP823_SA TOURISM REFURBISHMENT

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Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"		
PREAMBLES FOR TRADES		
The Model Preambles for Trades (2008 edition) as 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 Model Preambles will be entertained		
Supplementary preambles are incorporated in these bills of quantities to satisfy the requirements of this project. Such supplementary preambles shall take precedence over the provisions of the said Model Preambles		
The contractor's prices for all items throughout these bills of quantities must take account of and include for all of the obligations, requirements and specifications given in the said Model Preambles and in any supplementary preambles		
Where specifications in the Model Preambles for trades are in conflict with the Specification Document (Annexure "H"), then the Specification Document shall take preference		
PRICING OF PRELIMINARIES		
Should the contractor select Option A in terms of sub clause 3.2.1 in the Contract Data - Subcontractor to Employer (SE) for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T)		
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SECTION A:		
PRINCIPAL BUILDING AGREEMENT		
Definitions		
Clause 1.0 - Definitions and interpretation		
The following new sub clause is hereby added to this clause:		
1.5.6 The rule of construction that if general words or terms are used in association with specific words or terms that are a species of a particular genus or class, the meaning of the general words or terms shall be restricted to that same class shall not apply, and whenever the word "including" is used followed by specific examples, such examples shall not be interpreted so as to limit the meaning of any word or term to the same genus or class as the examples given;		
1.5.7 The rule of construction that the agreement shall be interpreted against or to the disadvantage of the party responsible for the drafting or preparation of this agreement shall not apply;		
1.5.8 Time is of the essence in the performance of the parties' respective obligations.		
1.5.9 The references to the provisions of any law shall include such provisions as amended, re-enacted or consolidated from time to time in so far as such amendment, re-enactment or consolidation applies or is capable of applying to any works under this agreement;		
1.5.10 References to a statutory provision include any subordinate legislation made from time to time under that provision and include that provision as modified or re-enacted from time to time;		
1.5.11 References to a "person" include a natural person, company or any other artificial person or other corporate entity, a charity, trust, partnership, joint venture, syndicate, or any other association of persons;		
1.5.12 References to a "subsidiary" or a "holding		
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company" shall be references to a direct or indirect	
subsidiary or holding company as defined in the law of	
the jurisdiction of the place of incorporation of the	
company that has a subsidiary or holding company and	
1.5.13 References to any party to this agreement	
include its successors or permitted assigns;	
1.5.14 Deferences to the contractor include the	
1.5.14 References to the contractor include the obligations of its personnel;	
obligations of its personner,	
1.5.15 References to this agreement and any deed,	
agreement or instrument are deemed to include	
references to this agreement or such other deed,	
agreement or instrument as amended, novated,	
supplemented, varied or replaced from time to time;	
1.5.16 References to "month" shall be to a calendar	
month;	
monus,	
1.5.17 References to any amount shall mean that	
amount exclusive of VAT, unless the amount expressly	
includes VAT;	
1.5.19 If a definition impaces substantive rights and	
1.5.18 If a definition imposes substantive rights and obligations on a party, such rights and obligations shall	
be given effect to and shall be enforceable,	
notwithstanding that they are contained in a definition;	
Hotwitistanding that they are contained in a definition,	
1.5.19 Where any word is defined within the context of	
any particular clause in this agreement, that word,	
unless it is clear from the clause in question that word	
has limited application only to the relevant clause, shall	
bear the meaning ascribed to it for all purposes in terms	
of this agreement, notwithstanding that word has not	
been defined in Clause 1.1;	
1.5.20 Words defined in this agreement shall bear the	
same meanings in any annexes or schedules to this	
agreement unless the annexes or schedules contain	
their own definitions of such words;	
1. F. 24 Whore any number of days is prescribed these	
1.5.21 Where any number of days is prescribed, those	
days shall be reckoned exclusively of the first and inclusively of the last day unless the last day falls on a	
day that is not a working day, in which event the last	
day shall be the next succeeding working day;	
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Bill No. 1	
Preliminaries	
EP823_SA TOURISM REFURBISHMENT	
EQUATE Consulting (Pty) Ltd	
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1.5.22 Words and abbreviati technical or trade meanings in accordance with such rec	are used in the agreement			
1.5.23 Reference to "Scheding have the same meaning as				
F: V:		Item		
Objective and preparations	s			
Clause 2.0 - Offer acceptand obligations				
F:V:		Item		
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EQUATE Consulting (Pty)				

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3	Clause 3.0 - Documents			
	Clause 3.1 shall be deemed to be deleted in its entirety.			
	Clause 3.3 shall be deemed to be deleted and replaced with the following:			
	"The employer requires the contractor to waive his lien or right of continuing possession of the works. The contractor shall sign the JBCC Waiver of Contractor's Lien form at the same time as the signing of this agreement."  The second sentence of sub-clause 3.5 is deleted The last sentence of sub-clause 3.6 is deleted and replaced with the following: "The original signed set of contract documents shall be held by the employer or other person stated in the contract data."  Sub-clause 3.8 is deleted and replaced with the following: "Information contained in the contract documents and other documents flowing from this agreement shall: 3.8.1 Be treated as confidential by the parties 3.8.2 Be used only for the purposes of implementing the agreement; and 3.8.3 Not be published be published or disclosed without the prior written consent of the employer"			
	F: T:	Item		
4	Clause 4.0 - Design responsibility			
	Clause 4.0 is deemed to be amended by the addition of the following sub clause:			
	4.4 If the contractor fails to obtain the necessary design warranties and/or indemnities from the subcontractors, the design responsibility shall be deemed to devolve upon the contractor."			
	F:V: T:	Item		
	Carried Forward		R	
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and (2)."		
7.3 "Without limiting the generality of the provisions of clause 7.0, the contractor's attention is drawn to the provisions of the Construction Regulations, 2014 issued in terms of the Occupational Health and Safety Act 1993. The contractor shall price for this item or compliance with act and specifications and including health and environmental (SHE) specifications for contractors."		
7.4 "The contractor will comply with (and will procure that all its employees, directors, officers or agents comply) all laws, regulations or policies relating to economic sanctions, trade sanctions and/or export controls and the prevention and combating of bribery, corruption and money laundering ("Anti-Corruption and Sanctions Regulations"), to which it or ACSA is subject.		
7.4.1 The contractor undertakes not to, and will procure that its employees, directors, officers or agents do not:		
7.4.1.1 pay, promise to pay or offer to pay, or authorise payment of any commission, success fee, bribe, pay off or kickback, related to the woks that violates any Anti-Corruption and Sanction Regulation or enter into any agreement pursuant to which such any commission, success fee, bribe, pay off or kickback may, or will at any time be paid;		
7.4.1.2 offer, promise or give any undue pecuniary or other advantage, whether directly or indirectly to any public official, with the intent of influencing the actions or decisions of such official in performance of his/her official duties, with the purpose of obtaining or retaining business or other improper benefit."		
7.5 "Any breach by the contractor of the provisions of this clause shall be a material breach of this agreement and shall entitle the employer to cancel this agreement immediately on notice to the contractor."		
7.6 "The cost of compliance with all applicable laws, regulations and procedures provided for in this agreement and generally shall be borne by the contractor."		
F: V:		
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	T:	Item		
8	Clause 8.0 - Works risk			
	F: T:	Item		
9	Clause 9.0 - Indemnities			
	F: T:	Item		
10	Clause 10.0 - General insurances			
	F:T:T:	Item		
11	Clause 11.0 - Special insurances  F:	ltem		
12	Clause 12.0 - Effecting insurances			
	Clause 12.2 – Delete and replace with new Clause 12.2  "The contractor shall make available to the employer, before the commencement of the construction period, documentary evidence that insurances required in terms of the Contract Data have been effected. A copy of the insurance policies shall be provided to the employer within twenty four (24) calendar days of the commencement of the construction period. Approval by the employer shall be deemed unless a reasonable objection is lodged within fourteen (14) calendar days of receipt of such policies. Where required, the contractor shall provide evidence of renewal to the employer before the expiry of the current period of insurance."	Item		
	Carried Forward		R	
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	Brought Forward		R	
13	Clause 13.0 - Assignment F:V:			
	T:	Item		
14	Clause 14.0 - Security			
	Clause 14.0 is deemed to be amended by the addition of the following sub-clause:			
	Clause 14.9 In the event that the value of the works (inclusive of tax but excluding adjustments in terms of CPAP were to increase during the course of the contract by an amount of ten percent (10%) or more of the contract sum, the contractor shall, upon written request from the principal agent, immediately arrange to have the construction guarantee (guaranteed sum) increased accordingly, the verified cost of which shall be added to the contract sum.			
	F:V:	Item		
	Execution			
15	Clause 15.0 - Preparation for and execution of the works			
	F: T:	Item		
16	Clause 16.0 - Site and access			
	F: T:	Item		
17	Clause 17.0 - Contract instructions			
	Clause 17.0 is deemed to be amended by the addition of the following clause:			
	"17.1.21 Acceleration"			
	F: T:	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd			

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18	Clause 18.0 - Setting out of the works			
	F: V:T:	Item		
9	Clause 19.0 - Temporary works and plant			
	Sub-clause 19.1.1 - Enclosure of the works Sub-clause 19.1.2 - Office accommodation Clause 19.2 - Notice boards			
	F: T:	Item		
0	Clause 20.0 - Nominated subcontractors			
	Clause 20.0 deemed to be amended by addition of the following sub-clause:			
	20.11 General attendance of the n/s agreement for pricing by the contractor shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may be reasonably be required by such n/s subcontractor for the execution of the relevant subcontractor work			
	F: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
21	Clause 21.0 - Selected subcontractors			
	Clause 21.0 deemed to be amended by addition of the following sub-clause:			
	21.11 General attendance of the n/s agreement for pricing by the contractor shall be in accordance with the n/s agreement. Notwithstanding this provision, general attendance shall be deemed to include for the contractor to provide free of charge to any n/s subcontractor such scaffolding as may be reasonably be required by such n/s subcontractor for the execution of the relevant subcontractor work			
	F: T:	Item		
22	Clause 22.0 - Employer's direct contractors			
	Clause 22.0 is deemed to be amended by the addition of the following sub-clauses:			
	22.6 "The contractor shall not be entitled to any percentage profit or discount on the value of any work executed by direct contractors but shall nevertheless allow direct contractors and the employer's tenants and employees to have access to the works, allocate reasonable space in the building for the storage, of their materials, tools and equipment, all to the satisfaction of the principal agent. The contractor shall also allow the direct contractors, etc. to use, free of charge, the ablution facilities and water and power supply on the site, and shall not in any way hinder or prevent the execution of their work. Attendance may be priced against the relevant specified items in the bills of quantities."  F:			
	T:	Item		
23	Clause 23.0 - Contractor's domestic subcontractors F:V:			
	T:	Item		
	Carried Forward		R	
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Completion			
Clause 24.0 - Practical completion:			
Clause 24.5.2 is deemed to be amended by the addition of the following sentence:			
"whichever is later"			
Amend sub-clause 24.7 by deleting the words "subject to the contractor's lien or right of continuing possession of the works."			
F:V:			
T:	Item		
Clause 25.0 - Works completion			
F: T:	Item		
Clause 26.0 - Final completion F: V:	Item		
Clause 27.0 - Latent defects liability period			
F: T:	Item		
Clause 28.0 - Sectional completion			
·			
T:	Item		
Clause 29.0 - Revision of date for practical completion			
"Clause 29.3 shall be amended by addition of the following sub-clause: 29.3.1 The removal and replacement of materials and/or workmanship which do not conform to specification or drawing shall not constitute grounds for the extension of the construction period nor for the adjustment of the contract value.			
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Bill No. 1 Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd		K	
	Clause 24.0 - Practical completion:  Clause 24.5.2 is deemed to be amended by the addition of the following sentence:  "whichever is later"  Amend sub-clause 24.7 by deleting the words "subject to the contractor's lien or right of continuing possession of the works."  F:	Clause 24.0 - Practical completion:  Clause 24.5.2 is deemed to be amended by the addition of the following sentence:  "whichever is later"  Amend sub-clause 24.7 by deleting the words "subject to the contractor's lien or right of continuing possession of the works."  F:	Clause 24.0 - Practical completion:  Clause 24.5.2 is deemed to be amended by the addition of the following sentence:  "whichever is later"  Amend sub-clause 24.7 by deleting the words "subject to the contractor's lien or right of continuing possession of the works."  F:

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29.4.4 "the reasonable practical steps taken by the <b>contractor</b> to avoid the delay. If no such practical steps were taken, detailed reasons for the <b>contractor</b> 's failure to take such steps. The <b>contractor</b> shall mitigate his losses."			
The following new sub-clauses 29.9 and 29.10 are added to clause 29:			
29.9 "Revision to the date for practical completion shall only be considered when work on the critical path of the agreed programme is delayed.			
29.10 Acceleration			
29.10.1 Irrespective of whether the <b>principal agent</b> rules that the <b>contractor</b> is entitled to a revision of the date for practical completion, the <b>principal agent</b> shall nevertheless at any time, be entitled to instruct the <b>contractor</b> , in writing, to accelerate the progress of the remaining works, to ensure that the works are completed by the practical completion.			
29.10.2 Upon receipt of such instruction, the <b>contractor</b> shall take necessary steps to ensure that the works are completed timeously, including the provision by him of additional resources, plant, manpower, etc. and the working of overtime beyond that contemplated at the time of tender (at all times adhering to the regulations and requirements of all authorities) and by all other adequate and proper means and methods. The <b>contractor</b> shall prove that such steps are being taken if called upon to do so.			
29.10.3 The <b>contractor</b> 's entitlement to compensation arising out of or in respect of any revision to the date for practical completion that may have been granted by the <b>principal agent</b> , or alternatively, where the <b>principal agent</b> has instructed the <b>contractor</b> to accelerate, shall be adjudicated strictly in terms of Clause 3.0 of the 'Contract Data - <b>Contractor</b> to Employer' hereof. The <b>contractor</b> shall not be entitled to any compensation of any nature whatsoever, other than that provided for in terms of Clause 3.0 of the 'Contract Data - <b>Contractor</b> to Employer."			
F: V: T:	Item		
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30	Clause 30.0 - Penalty for late or non-completion  F:  T:	Item		
	Payment	110111		
24				
31	Clause 31.0 - Interim payment  Notwithstanding this or any other clause, materials and goods stored off site shall not be included in the amount authorized for payment			
	The first sentence of Clause 31.9 is deemed to be deleted and replaced with the following:			
	The employer shall pay to the contractor the amount certified in an interim payment certificate within thirty (30) calendar days of the date for issue of the payment certificate.			
	The first sentence of Clause 31.10 is deemed to be deleted and replaced with the following:			
	The employer shall pay the contractor compensatory interest on all amounts certified in an interim payment certificate issued after thirty one (31) calendar days of the date of agreement of practical completion or the agreement of final account, whichever is the latter.			
	F: T:	Item		
	Carried Forward		R	
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32	Clause 32.0 - Adjustment to the contract value			
	Notwithstanding clause 32.13, all fluctuations in costs, with the exception of fluctuations in the rate of Value Added Tax, shall be for the account of the contractor The following new subclause is hereby added to this clause:			
	32.16 Where prices are submitted by the contractor or n/s subcontractor during the progress of the works in respect of contract instructions or in regard to a claim under the terms of the contract 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 final payment certificate, it shall be in writing			
	F: T:	Item		
33	Clause 33.0 - Recovery of expense and loss F: T:	Item		
34	Clause 34.0 - Final account and final payment			
	The first sentence of Clause 34.10 is deemed to be deleted and replaced with the following: "The employer shall pay to the contractor the amount certified for payment in the final payment certificate within twenty thirty (30) calendar days of the date of issue of the final payment certificate, subject to the contractor issuing the employer a tax invoice for the amount due."			
	Subclause 34.11 is hereby amended by the substitution of the words "practical completion" in the fourth line by the words "final completion".			
	F: T:	Item		
	Carried Forward		R	
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35	Clause 35.0 - Payment to other parties			
	F: V: T:	Item		
	Termination			
36	Clause 36.0 - Termination by employer - contractor's default			
	Add the following sub-clauses to clause 36.1: 36.1.3 "is in material breach of its obligations under this agreement;			
	36.1.4 Where the <b>employer</b> effects insurances, consequent on the <b>contractor's</b> default [12.3]." The following is added as a new sub-clause 36.4: "The employer may, furthermore cancel this agreement by giving written notice of termination where the <b>contractor</b> becomes bankrupt or insolvent, goes into liquidation, is placed in business rescue, compounds with his creditors or carries on business under a receiver, trustee, business rescue practitioner or manager for the benefit of his creditors, or if any act is done or event occurs which (under the applicable law) has a similar effect to any of these acts or events."			
37	F:V: T: Clause 37.0 - Termination by employer - loss and	ltem		
O1	damage			
	F: V: T:	Item		
38	Clause 38.0 - Termination by contractor - employer's default			
	F: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
39	Clause 39.0 - Termination - cessation of the works F:V:			
	T:	Item		
	Dispute			
40	Clause 40.0 - Settlement of disputes			
	40.2.2 Delete the words "Association of Arbitrators (Southern Africa)" and replace with the "Johannesburg Bar Council"			
	Delete the last sentence of sub-clause 40.2.2 and replace with the following:			
	"The Arbitration Foundation of Southern Africa rules current at the time shall apply."			
	F: T:	Item		
	Contract agreement			
41	Clause 41.0 - Post tender provisions			
		Item		
	The required post tender information shall be inserted in the post tender provisions after consultation with the contractor			
42	Clause 42.0 - Contractual agreement	Item		
	The required information of the contracting parties and the amount of the accepted contract sum shall be inserted in the contractual agreement for signature of the agreement by the contracting parties			
	Carried Forward		R	
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	Brought Forward		R	
	CONTRACT DATA - EMPLOYER TO CONTRACTOR			
	The contractor shall allow for all costs deemed to be incurred in the fulfilment of all contractual obligations as stated in the JBCC Principal Building Agreement Contract Data EC.			
	Should the contractor select Option A in terms of sub clause 3.2.1 in the Contract Data - Contractor to Employer (CE) for the purpose of adjustment of these preliminaries, the amount entered into the amount column in these preliminaries is to be divided into one or more of the three categories provided namely Fixed (F), Value Related (V) and Time Related (T)			
	SECTION B:			
	PRINCIPAL CONTRACTOR PRELIMINARIES			
	Definitions and interpretation			
43	Clause 1.0 - Definitions and interpretation F:V:			
	T:	Item		
	Documents			
44	Clause 2.1 - Checking of documents F:V:			
	T:	Item		
5	Clause 2.2 - Provisional bills of quantities			
	F: T:	Item		
6	Clause 2.3 - Availability of construction documentation			
	F: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
	Previous work and adjoining properties			
47	Clause 3.1 - Previous work - dimensional accuracy F:V:			
	T:	Item		
	Clause 3.2 - Previous work - defects F:V:			
	T:	Item		
	Clause 3.3 - Inspection of adjoining propertiesF:V:	Item		
		item		
	Samples, shop drawings and manufacturer's instructions			
0	Clause 4.1 - Samples of materials			
	Clause 4.1 is hereby amended by the addition of the following:			
	The principal agent may reject any materials or colours not corresponding with the approved samples. The approved samples shall be kept on site until completion of the works.			
	Should any materials or items specified prove to be either unavailable, in poor supply or likely to cause delay to the works, the contractor shall notify the principal agent in sufficient time for suitable alternatives to be considered. Any claims for delays resulting from the contractor not conforming with the terms of this clause will not be entertained or allowed.			
	F: T:	Item		
	Clause 4.2 - Workmanship samples F: V: T:	Item		
2	Clause 4.3 - Shop drawings			
	F: T:	Item		
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53	Clause 4.4 - Compliance with manufacturer's instructions F:	I Item		
	Deposits and fees			
54	Clause 5.1 - Deposits and fees F: V:	Item		
	Temporary services			
55	Clause 6.1 - WaterF: V: T:	Item		
56	Clause 6.2 - ElectricityF: V:T:	Item		
57	Clause 6.3 - Telecommunication facilitiesF:	Item		
58	Clause 6.4 - Ablution facilitiesF: V:	Item		
	Prime cost amounts			
59	Clause 7.1 - Responsibility for prime cost amountsF:V:	Item		
	Special attendance on n/s subcontractors			
60	Clause 8.1 - Special attendance			
	Clause 8.1 is hereby amended by addition of the following:			
	Scaffolding and hoisting provision shall be allowed for façade installations i.e. Aluminium shopfronts, curtain walls, cladding, marmoran finishes, and other special façade finishes			
	F: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
	General			
31	Clause 9.1 - Protection of the worksF:	Item		
62	Clause 9.2 - Protection/isolation of existing/sectionally occupied works			
	F: T:	Item		
33	Clause 9.3 - Security of the worksF: V:T:	Item		
64	Clause 9.4 - Notice before covering work F:V:			
	T:	Item		
65	Clause 9.5 - Disturbance F: V:	Item		
66	Clause 9.6 - Environmental disturbance			
	F: T:	Item		
67	Clause 9.7 - Works cleaning and clearingF:V:			
	T:	Item		
68	Clause 9.8 - VerminF: V: T:	Item		
69	Clause 9.9 - Overhand workF: V: T:	Item		
	Schedule of variables			
	Information necessary for elections and completion of those clauses contained in the schedule which are necessary for tender purposes is given hereunder.  Where no information is given it shall mean that no specific requirements are expected or that the clause is not relevant to this specific contract			
	Carried Forward		R	
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	Brought Fo	orward	R	
10.1 -	Provisional bills of quantities [clause 2.2] The quantities are provisional	Yes		
10.2 - [clause	Availability of construction documentation e 2.3]  Construction documentation is complete	No		
10.3 - 3.1]	Previous work - dimensional accuracy [clau	use		
N/A				
10.4 -	Previous work - defects [clause 3.2]			
	N/A			
10.5 -	Inspection of adjoining properties [clause 3	.3]		
Yes				
10.6 -	Water [clause 7.2]			
	Option A (by contractor)	1400		
	Option B (by employer - free of charge)	yes		
	Option C (by employer - metered)	no no		
10.7 -	Electricity [clause 7.3]			
	Option A (by contractor)	V00		
	Option B (by employer - free of charge)	yes no		
	Option C (by employer - metered)	no		
	Carried Forv	vard	R	

	Bı	ought Forward	R
10.8 -	Telecommunications [clause 7.4]		
	Telephone	yes	
	Facsimile	no	
	E-mail	yes	
10.9 -	Ablution facilities [clause 7.5]		
	Option A (by contractor)	1/00	
	Option B (by employer)	yes no	
10.10 -	Protection of the works [clause 9.	1]	
10.11 -	Protection/isolation of existing/sec occupied works [clause 9.2] Prote is required		
10.12 -	Disturbance [clause 9.5]		
10.13 -	Environmental disturbance [clause	9.6]	
	Carı	ried Forward	R

	Brought Forward		R	
	SECTION C:			
	PRINCIPAL CONTRACTOR SPECIFIC PRELIMINARIES			
70	Contractor to be responsible			
	The contractor acknowledges that the principal objective of his appointment is his expert knowledge in the execution of the scope of work of this contract. The contractor shall therefore be solely responsible for all aspects of the construction of the works including but not limited to management, resourcing, programming, co-ordination, etc. all as required for the type of project described within the time limits and quality standards specified.  F:			
	T:	Item		
71	Site instructions			
	Instructions issued on site are to be recorded in triplicate in a site instruction book which is to be maintained on site by the contractor (These constitute Contract Instructions)			
	F:V: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
72	Services			
	Various existing services including but not limited to stormwater, sewer, water, telephone and electrical across the site. The contractor shall make all necessary allowances for all deviations and protection of services in their programme.			
	The contractor shall be solely responsible for ensuring that every necessary precaution is taken to protect all existing services from any damage. The contractor shall furthermore ensure that no services are cut off to any of the existing trading areas during deviations and the like. Should this, however, not be possible then the contractor shall timeously notify the principal agent of this so that arrangements may be made with the employer for identification as to when such work may be executed.			
	F: V: T:	Item		
73	Warranties for material and workmanship			
	Where warranties for materials and/or workmanship are called for, the contractor shall obtain a written warranty, addressed to the employer, from the firm supplying the materials and/or doing the work and shall deliver same to the principal agent on the certified completion of the contract. The warranty shall state that workmanship, materials and installation are warranted for a specified period from the date of final completion and that any defects that may arise during the specified period shall be made good at the expense of the firm supplying the materials and/or doing the work, upon written notice to do so. The warranty will not be enforced if the work is damaged by defects in the construction of the building in which case the responsibility for replacement shall rest entirely with the contractor			
	F:T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
74	Warranties for design and material			
	The contractor warrants and undertakes in favour of the employer that:			
	Insofar as the works or any part of the works has been or will be designed by him, he will exercise reasonable, due and proper skill and care in such design.			
	Insofar as any part of the materials and goods for the works has been or will be selected by him, he will exercise due and proper skill and care in such selection of materials and goods.			
	He is suitable qualified and competent to carry out such design work and selection of materials and goods.			
	He shall comply with and satisfy any performance specifications or requirements insofar as such performance specification or requirements are included or referred to in the contract.			
	F:T:	Item		
75	Testing of windows for water tightness			
	Each window shall be tested for water tightness with water sprayed on using adequate pressure. If in the opinion of the principal agent, the pressure proves to be inadequate, then the pressure shall be boosted by means of compressed air or other approved means.			
	F:T:	Item		
76	Testing of flat roof waterproofing for water tightness			
	Flat roof waterproof areas shall be prepared with small sand dykes around them of a size and enclosing an area approved by the principal agent, flooded with water and kept 'ponded' for at least 36 hours as a test to ensure the water tightness of the waterproofing and before any further construction work is carried out above the waterproofing.			
	F:T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
77	Overtime			
	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorized in writing, prior to the execution thereof, that costs for such overtime are to be borne by the employer.			
	F: T:	Item		
78	Work Permits			
	The Contractor shall allow to obtain works permits for all staff, contractors and specialist sub-contractors who are not citizens of South Africa and ensure that permits are valid for the full period of the contract			
	F: T:	Item		
79	Final Account			
	The Contractor shall be obliged to timeously do everything necessary and to timeously provide all information required by the Quantity Surveyor for the purpose of enabling the Quantity Surveyor to compile the Final Account. The Contractor shall be obliged within 30 calendar days after receipt of the Final Account to signify his acceptance of same or to advance any claims he may have in respect thereof for the consideration of the Quantity Surveyor. Failing such further claims in writing within 30 calendar days of receipt of the said Final Account by the Contractor, it shall be deemed that the Contractor has accepted the Final Account and no further claims in connection with the works will be entertained.			
	T:	Item		
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	Carried Forward		R	
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80	Non cession of monies			
	The contractor shall not cede or assign or transfer his rights or claims to any monies due or to become due under this contract and no such cession, assignment or transfer will be recognised by the Employer.  F:	Item		
81	Cleaning			
	The Contractor shall provide all necessary dust sheets, covers, etc., and shall exercise all necessary care to prevent marking the surfaces of joinery, walls, floors, ceilings, glass, aluminium, electrical fittings, etc., and shall keep all parts of the works perfectly clean and free at all times from spotting, accumulation of rubbish, debris or dirt arising from painting operations. Any surface disfigured or otherwise damaged shall be completely renovated or replaced as necessary, to the Principal Agent approval, by the Contractor at his own expense. Particular care is to be taken that all glass is cleaned of all paint spots, smears and is to be thoroughly cleaned on both sides. The premises shall be left clean and fit for occupation on completion of the works.  The Contractor shall provide for a deep clean prior to Practical Completion for all building areas on two occasions as agreed with the Principal Agent  F:	Item		
	Carried Forward		R	
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	Brought Forward		R	
82	Checking of drawings and specifications			
	Upon receipt of detail drawings for any work, the Contractor shall, before putting that work in hand, ascertain that the dimensions given on the detail drawings correspond with the dimensions of any work already built and which governs the sizes of any work for which details are now issued. In the event of the details drawings not agreeing with the work already built, the discrepancy shall be brought to the Principal Agent's attention and the detail drawings shall be returned at once for alteration.			
	Furthermore, it shall be the Contractor's responsibility to ensure, by checking against the drawing registers issued by the various consultants, that he is working to the latest revision of the drawings.			
	F: T:	Item		
83	Information required for construction			
	Simultaneously with the presentation of the programme, the Contractor shall submit a proposed "Schedule of Information Required" to all parties concerned, indicating dates upon which information and details are required and the dates on which Contractors are to be appointed in relation to the building programme. Such dates are to take cognisance of lead times and commissioning periods.			
	The schedule shall be directly related to the agreed Construction Programme and shall not contain any requirements which are in the Principal Agent's opinion, unreasonable or premature.			
	Thereafter timeous advance notice is to be given by the Contractor of further detailed information or drawings which are required on site.			
	F: T:	ltem		
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84	Labour Records			
	At the end of every second week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day.			
	F: T:	Item		
85	The <b>Contractor</b> is to provide local labour records. Local Labour shall mean any person residing in the City of Johannesburg Metropolitan area. The <b>Contractor</b> shall achieve a minimum of 90% unskilled local labour during the construction period. Should the <b>Contractor</b> fail to comply with this 90% minimum requirement within 30 days of being alerted of this clause. The Employer reserves the right to cancel this clause as in accordance with clause 36.0.	Item		
86	Plant Records			
	At the end of every second week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number, type and capacity of all plant, excluding hand tools, currently used on the works.			
	F:V: T:	Item		
87	Programme for the Works			
	In addition to and based on the programme systems and format dictated in Clause 15, the contractor shall devise Detailed Working Programmes. These shall be drawn on a regular basis (at least monthly), to the satisfaction of the principal agent  Such working programmes shall at all times relate to the constraints of the current programme.			
	F: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
88	Mode of Procedure			
	Notwithstanding anything to the contrary contained herein the principal agent at all times reserves the right to direct the order in which the various parts of the works are to be executed. The contractor shall give priority to any individual section or portion of the works that, in the opinion of the principal agent, requires to be expedited.			
	Should the contractor and/or principal agent be of the opinion that such instruction warrants a revision to the Programme, then the provisions of the Special Preliminary "Programme of Works" shall apply.			
	Should it appear, in the principal agent's opinion, that work in any area is not being executed in accordance with the requirements of the Programme, the contractor shall provide additional manpower and resources and shall work additional overtime and do everything else required to bring the work back to programme to the satisfaction of the principal agent.			
	F: T:	Item		
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89	Overalls  The contractor to allow for new overalls, with their company logo on, for each employee working on the premises. The employees are to wear these overalls at all times, for the full duration of the Contract.  F:	ltem		
00				
90	Safety Helmets  The contractor shall provide and keep on site an adequate supply of clean safety helmets for the use of all employers' agents and authorised visitors.  F:	ltem		
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91	Unauthorised person/workmen on premises			
	The Contractor shall at all times strictly exclude all unauthorised persons from the works and the site and shall set up notice boards to that effect.			
	F: T:	Item		
92	Access to Site			
	Access to the site shall be restricted to one entrance and one exit point only as directed by the principal agent.			
	F: T:	Item		
93	Security Procedures			
	The contractor shall ensure that all personnel, including all subcontractors, comply with the employer's access and security procedures.			
	No workmen or labourers shall be allowed, under any circumstances, to sleep or deposit any belongings on the premises. The contractor must provide an independent shelter or shed required for any labour or watchman left on the site after working hours. The facility required and security arrangement are to be specifically agreed in writing with the principal agent.			
	The contractor shall take all measures necessary to ensure that no workmen are allowed into the operational areas without the permission of the principal agent.			
	<u>F</u> :V:	14		
	T:	Item		
	Carried Forward		R	
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94	Use of public pavement			
	The Contractor must conform with Municipal Local Authorities regulations should it be necessary to encroach on public pavements and the like, and shall give all necessary notices, obtain permits and pay all fees, costs and charges in connection herewith for the duration of the Contract.			
	However, there is no warranty given or implied that the Contractor will be permitted to utilise public pavement or the like and shall make whatever arrangement he may deem necessary for the execution of the work under those conditions.			
	The contractor shall conduct a condition survey of the Municipal roads and pedestrian footpaths surrounding the site at the outset of the construction work and shall be approved by the Principal Agent.			
	Th contractor shall be responsible for repairs to any roads or pedestrian pathways surrounding the site due to construction work on this site			
	F: T:	Item		
95	Removal and making good of temporary work, etc., on completion			
	The Contractor shall remove all temporary works and services used for this Contract and shall make good any damages.			
	F: T:	Item		
	Carried Forward		R	
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Special works				
The Employer shall have the right to employ other Contractors (hereinafter referred to as "Direct Contractors") to execute any special or other works under this Contract. In addition, The Contractor shall not be entitled to any percentage, profit or discount on the value of any work executed by "Direct Contractors".				
F: T:	Item			
Pricing of the Bill of Quantities				
All prices 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 packing, duties, taxes, imposts, establishment charges, overheads, profit and all other obligations arising out of the contract				
Items left unpriced will be deemed to be covered in prices against other items throughout these <b>bills of quantities</b> and no claim for any extras arising out of the omission to price any item will be entertained.				
Prices for all plant, temporary works, services and other items provided shall include for the supply, maintenance, operating cost and subsequent removal and making good as necessary.				
F: T:	Item			
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	Special works  The Employer shall have the right to employ other Contractors (hereinafter referred to as "Direct Contractors") to execute any special or other works under this Contract. In addition, The Contractor shall not be entitled to any percentage, profit or discount on the value of any work executed by "Direct Contractors".  F:	Special works  The Employer shall have the right to employ other Contractors (hereinafter referred to as "Direct Contractors") to execute any special or other works under this Contract. In addition, The Contractor shall not be entitled to any percentage, profit or discount on the value of any work executed by "Direct Contractors".  F:	Special works  The Employer shall have the right to employ other Contractors (hereinafter referred to as "Direct Contractors") to execute any special or other works under this Contract. In addition, The Contractor shall not be entitled to any percentage, profit or discount on the value of any work executed by "Direct Contractors".  F:	Special works  The Employer shall have the right to employ other Contractors (hereinafter referred to as "Direct Contractors") to execute any special or other works under this Contract. In addition, The Contractor shall not be entitled to any percentage, profit or discount on the value of any work executed by "Direct Contractors".  F:

	Brought Forward		R	
98	Omission of work for which Provisional Sums have been allowed			
	The nominated / selected subcontract amounts allowed in these bills of quantities include work to be executed in accordance with employers, requirements. The contractor accepts that, such work may, at the principal agent's discretion, be omitted from this contract and executed under separate contract/s. In such case, the contractor shall allow access to the handed over areas of the works to allow such separate contractors to proceed with such work prior to handover and/or expiry of the defects liability period.  The contractor hereby accepts that he shall not be entitled to any profit mark-up on the omitted work and			
	that no claim for loss of profit shall be entertained.			
	F: T:	Item		
99	Test and inspection prior to completion			
	All specialist plant and equipment, subject to the principal agent's sole discretion, is subject to acceptance tests, which shall be arranged in the works of the contractor and/or subcontractors supplier within 20 days of notification that such plant or equipment is available for testing. The contractor and/or subcontractor shall inform the principal agent in writing, indicating the exact dates for these acceptance tests during the course of the last month of manufacture of such plant or equipment.			
	In the event that the principal agent or his representatives cannot witness such tests, the employer may:			
	appoint a specialist inspection organisation to witness such tests at his expense on behalf of principal agent or his representatives;  OR  accept the contractor and/or subcontractor's certificate testifying as to the quality and performance of the specialist plant/equipment so supplied.			
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Should no inspection have been made by the date indicated by the contractor and/or subcontractor as set out above, the equipment will be deemed as accepted and packed accordingly for delivery.			
The final acceptance will take place on site in the presence of the contractor and/or subcontractor responsible for the commissioning of the equipment. The principal agent's representative shall also be present.			
The contractor and/or subcontractor shall demonstrate to the principal agent the full scope of operation of the installation and shall ensure that he is satisfied that the principal agent is fully aware of all the operational aspects of the installation prior to handover at practical completion stage.			
The principal agent shall be afforded access at all reasonable times to such part of the works on site or at the contractor and/or subcontractor's premises or the premises of the manufacturer of component parts, as may be necessary for the purpose of inspecting, examining and testing the materials, workmanship and performance of any plant or equipment for the works.			
The contractor and/or subcontractor shall be responsible for the tests required by any local statute, building regulation, etc.			
Any breakdown or mechanical failure and any damage or consequential losses which may arise from such breakdown, mechanical or structural failure, will be the responsibility of the contractor and/or subcontractor.			
F: T:	Item		
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100	Interpretation of drawings, specifications and bills of quantities			
	Should any part or parts of the drawings, specifications or bills of quantities not be clearly intelligible to the contractor, or the material or articles to be used in the execution of the works be considered insufficiently described or the manner in which the work is to be carried out not be clear, the contractor must obtain from the Principal Agent the necessary information to clarify such drawings, specifications, bills of quantities or instructions which request shall be in writing.			
	The contractor shall be held solely responsible for and shall, at his own expense, rectify any errors arising out of incorrect interpretation of the drawings, specification, bills of quantities or instructions.			
	F: T:	Item		
101	Co-ordination			
	The contractor shall be solely responsible for the coordination of all sub-contracts, whether nominated or otherwise, into the general programme of work. He shall be required to convene meetings with subcontractors and suppliers as and when required for this purpose and must keep under constant review his own and all sub-contract labour force and supply of materials and equipment in order to adhere to the building programme.  F:			
	T:	Item		
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	Brought Forward		R	
102	Copyright			
	The ownership of the copyright in and to: all drawings, specifications, models and documents of any nature delivered to the contractor or produced by or on behalf of the contractor in connection with the works; and, the artistic character and/or artistic design of the works, shall remain vested in and/or is hereby assigned to the employer by the contractor.			
	F: T:	Item		
103	Confidentiality			
	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.			
	No information regarding this project shall be published or disclosed without the prior written consent from the employer.			
	F: T:	Item		
104	Health and Safety			
	HSEQ File and conformance to employer policies and procedures			
	F: T:			
		Item		
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Item	
Item	
Item	
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	SECTION D:			
	NOMINATED / SELECTED SUBCONTRACT AGREEMENT			
	Definitions			
106	Clause 1.0 - Definitions and interpretation			
	F: T:	Item		
	Objective and preparations			
107	Clause 2.0 - Offer acceptance and performance			
	F: T:	Item		
108	Clause 3.0 - Documents and principal agreement			
	The terms and conditions of the principal agreement as included in part four will form part of this contract. This clause shall be deemed to be amended in line with clause 3.0 of the principal agreement.			
	F: T:	Item		
109	Clause 4.0 - Design responsibility			
	Clause 4.0 is amended by the addition of the following clause:			
	"4.4 Warranties in accordance with the enclosed Annexure "B", as appropriate, shall be sought by the contractor from all subcontractors undertaking any design responsibility."			
	F: T:	Item		
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110	Clause 5.0 - Employer's agents			
	F: T:	Item		
111	Clause 6.0 - Site representatives			
	F:V:	Item		
112	Clause 7.0 - Compliance with regulations			
	F: T:	Item		
113	Clause 8.0 - N/S Works risk			
	F: T:	Item		
114	Clause 9.0 - Indemnities			
	F: T:	Item		
115	Clause 10.0 - Works and N/S works insurance  Clause 10.0 is amended by the addition of the following clause:  "10.4 The <b>subcontractor</b> shall be liable for and pay the deductibles."			
	F: T:	Item		
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	Brought Forward		R	
116	Clause 11.0 - Liability insurances			
	Clause 11.0 is amended by the addition of the following clause:			
	"11.3 The subcontractor shall be liable for and pay the deductibles."			
	F: T:	Item		
117	Clause 12.0 - Effecting insurances			
	F: T:	Item		
118	Clause 13.0 - Assignment			
	F: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
119	Clause 14.0 - Security			
	Where the subcontractor has formed a new company or joint venture company to execute the works, the subcontractor will be required to provide a "form of parent company guarantee".			
	The approved form of the construction guarantee as issued by the joint building contracts committee shall be issued by a recognised bank, insurance company, or other financial institutions acceptable to the contractor			
	Clause 14.7.1 shall be deemed to be amended with the addition of the following sentence:			
	"No interest will be paid on such sum/s withheld."			
	Clause 14.0 is deemed to be amended by the addition of the following sub clause:			
	"14.9 In the event that the value of the works (excluding adjustments in terms of CPAP) were to increase during the course of the subcontract by an amount of 15% or more of the subcontract sum, upon written request from the contractor the subcontractor shall immediately arrange to have the construction guarantee "guaranteed sum" increased accordingly, the verified cost of which shall be added to the subcontract sum."			
	F: T:	Item		
	Execution			
120	Clause 15.0 - Preparation for and execution of the N/S works			
	F: T:	Item		
	Carried Forward		R	
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	Brought Forward		R	
121	Clause 16.0 - Access to the N/S works			
	F: T:	Item		
122	Clause 17.0 - Contractor's instructions			
	F: T:	Item		
123	Clause 18.0 - Setting out of the N/S works			
	F: T:	Item		
124	Clause 19.0 - Assignment			
	F: T:	Item		
125	Clause 20.0 - Contractor's attendance			
	F: T:	Item		
126	Clause 21.0 - Subcontractor's plant and services			
	F: T:	Item		
127	Clause 22.0 - Other subcontractors			
	F: T:	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd			

	Brought Forward		R	
	Completion			
128	Clause 23.0 - Interim completion			
	F: T:	Item		
129	Clause 24.0 - Practical completion			
	F: T:	Item		
130	Clause 25.0 - Works completion			
	F: T:	Item		
131	Clause 26.0 - Final completion			
	F: T:	Item		
132	Clause 27.0 - Latent defects liability period			
	F: T:	Item		
133	Clause 28.0 - Sectional completion			
	F: T:	Item		
134	Clause 29.0 - Revision of date for interim completion			
	F: T:	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd			

	Brought Forward		R	
135	Clause 30.0 - Damages due to non performance			
	F:V:			
	T:	Item		
	Payment			
136	Clause 31.0 - Interim payment to the subcontractor			
	"The first sentence of Clause 31.9 is deemed to be deleted and replaced with the following:			
	"The employer shall pay to the contractor the amount certified in an interim payment certificate within thirty (30) calendar days of the date for issue of the payment certificate."			
	The first sentence of Clause 31.10 is deemed to be deleted and replaced with the following:			
	"The employer shall pay the contractor compensatory interest on all amounts certified in an interim payment certificate issued after thirty one (31) calendar days of the date of agreement of practical completion or the agreement of final account, whichever is the latter."			
	F: T:	Item		
137	Clause 32.0 - Adjustment to the N/S contract value			
	F: T:	Item		
138	Clause 32.0 - Recovery of expense and loss			
	F: T:	Item		
	Carried Forward		R	
	Bill No. 1 Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd			

	Brought Forward		R	
139	Clause 34.0 - N/S final account and final payment			
	F: T:	Item		
	T	item		
140	Clause 35.0 - Direct payment to subcontractor/other parties			
	F: T:	Item		
	Cancellation			
141	Clause 36.0 - Cancellation by contractor - subcontractor's default			
	F: T:	Item		
142	Clause 37.0 - Cancellation by contractor - loss or damage			
	F:V: T:	Item		
143	Clause 38.0 - Suspension and cancellation by subcontractor - contractor's / employer's default			
	F: T:	Item		
144	Clause 39.0 - Cancellation - cession of the works			
	F:V:	Itom		
	T:	Item		
	Carried Forward		R	
	Bill No. 1			
	Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd			

	Brought Forward		R	
	Dispute			
145	Clause 40.0 - Dispute settlement			
	F: T:	Item		
	Substitute Provisions			
146	Clause 41.0 - State clauses			
	F: T:	N/A		
	SUMMARY OF CATEGORIES			
147	Category : Fixed R			
	Category : Value R			
	Category : Time R			
	Total:	Item		
	Carried to Final Summary		R	
	Bill No. 1 Preliminaries EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd			

	FINAL SUMMARY				
Section		Page		Amount	
No		No			
1	Preliminaries	49			
					_
	Carried to Form of Tender		R		
					=
	EP823_SA TOURISM REFURBISHMENT EQUATE Consulting (Pty) Ltd				
	LEGATE Consulting (i.ty) Ltd				

## PART FIVE PROVISIONAL BILLS OF QUANTITIES



Item No		Quantity	Rate	Amount
	PART 5			
	SECTION 1			
	BILL NO. 1			
	<u>PRELIMINARIES</u>			
	"PRELIMINARIES FOR INCLUSION IN BILLS OF QUANTITIES AND LUMP SUM DOCUMENTS BASED ON THE JBCC SERIES 2000 DOCUMENTATION"			
1	(1) Section A	Item		
2	(2) Section B	Item		
3	(3) Section C	Item		
	TOTAL transferred from PRICING SCHEDULE PRELIIMINARIES SUMMARY: COLLECTION incorporating Preliminaries (Sections A, B and C)			
	Carried to Final Summary  Section No. 1 PART 4 - PRELIMINARIES Bill No. 1 EMPTY BILL - SYSTEM GENERATED PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD		R	

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO.2			
	ALTERATIONS (PROVISIONAL)			
	PREAMBLES			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	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 occupants/tenants and 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			
	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			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 1 Alterations PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

Brought forward	R	
The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.		
Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.		
SUPPLEMENTARY PREAMBLES		
<u>View site</u>		
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 building 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		
<u>Explosives</u>		
No explosives whatsoever may be used for demolition purposes unless otherwise stated		
Removal from site		
Where "remove from", "spoil" or "taking out" occurs in terms, it shall include for all loading and carting away from the site to a suitable dumping site found by the contractor and the contractor shall pay all fees etc in this regard.		
Carried forward	R	
Section No. 2 PART 5 - BUILDING WORKS Bill No. 1 Alterations		
PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD		

Brought forward	R	
<u>General</u>		
Old Materials		
Old materials from the alterations, except where described to be re-used or handed over, as well as all rubbish, etc., must be regularly carted from the site to a dumping site located by the contractor. Cost of carting away shall be deemed to be included in the contract rates.		
Contractor to transport all materials in mobile seal proof containers with rubber or nylon wheels to prevent any floor damage.		
Skips to be placed in the hoarded off laydown areas and removed when full to prevent overloading at any point and shade cloth to be placed over the skips to prevent any dust pollution.		
Handing over of materials		
Where certain materials or articles from demolitions are described as to be handed over by the contractor to the employer, such materials or articles shall be properly stored by the contractor, until handing over thereof. The contractor must obtain an official receipt listing the materials or articles and dates of handing over. If the contractor fails to submit the receipt when requested, it shall be deemed that the materials or articles are still in his possession and he will be held liable for the full replacement value thereof, which amount will be deducted from any monies due to the contractor		
REMOVAL OF EXISTING WORK		
Carried forward	R	
Section No. 2 PART 5 - BUILDING WORKS Bill No. 1 Alterations PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD		

	Brought forward			R	
	Hacking up/off and removing carpet tiles floor covering, tiles from floor and wall finishes, retaining mortar bed or backing where possible and preparing concrete or brick surfaces for new tile finish, plaster or skim coat and cart rubble off site:				
1	Carpet floor tiles, including backing/adhesives and prepare to receive new floor tiles	m2	17		
2	Wall tiles and prepare to receive new wall tiles	m2	6		
	Taking down and removing roofs, floors, panelling, ceilings, partitions, etc				
3	Drywall partitioning	m2	721,97		
	Taking down and removing roofs, floors, panelling, ceilings, partitions, etc store for re-use including refixing in position				
4	Acoustic tile / Drop-in suspended ceilings including cornices, suspension grid, hangers, etc. for allowance to work in ceiling space for services	m2	1 278,85		
	Taking down and removing doors, view panels including aluminium frames, etc store for re-use				
5	View panels in drywall partitioning: Size: 611mm x 2143mm high	No	34		
	Taking down and removing doors, view panels including wooden frames, etc store for re-use				
6	View panels in drywall partitioning: Size: 1043mm x 2275mm high	No	1		
7	Single doors including aluminium frame in drywall partitioning	No	31		
	Carried forward  Section No. 2 PART 5 - BUILDING WORKS Bill No. 1			R	
	Alterations PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				

	Brought forward			R
8	Double doors including wooden frame in drywall partitioning and brick wall	No	4	
	Taking out and removing ironmongery			
9	Hinges from doors and frames	No	96	
10	Door closer	No	24	
11	Door handles and lockset to doors	No	24	
	Refixing of existing doors, windows, view panels etc (removal and setting aside elsewhere)			
12	Setting up and building in steel or aluminium door frame in drywall partitioning and rehanging door	No	7	
13	Setting up and building in view panels including frames to drywall partitioning and refit	No	7	
	Taking out ironmongery and set aside for re-use including refixing in position			
14	Hinges from doors and frames	No	28	
15	Door closer	No	7	
16	Door handles and lockset to doors	No	7	
	Sundries			
17	Provision for new ceiling tees (Grid work to accommodate new LED Light)	n2	318	
18	Provision for Removing redundant airconditioning wall console units	No	50	
	MAKING GOOD OF FINISHES ETC			
19	Making good suspended ceiling & cornices where partitioning including tracks, accessories etc was removed	m	279,83	
	Carried forward Section No. 2			R
	PART 5 - BUILDING WORKS Bill No. 1 Alterations PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Brought forward			R	
20	Making good floor finish & skirtings where partitioning including tracks, accessories etc. was removed	m	279,83		
21	Provision for aligning existing lay-in ceilings, where ceiling levels changed	m2	1 060		
	PROVISIONAL BUDGETARY ALLOWANCES				
	The following are budgetary allowances for possible work, the extent and possibility of the work occurring which is unknown/ uncertain at tender stage.				
	These amounts will be adjusted and re-measured on an incurring basis using the available rates or negotiated rates or invoices.				
	These amounts may be omitted in part or in full at the discretion of the Quantity Surveyor				
22	Allow an amount of R 55 000.00 (Fifty Five Thousand Rands) for stripping out of existing finishes, services, etc. in accordance with the Architect's and Engineer's Specification		Item		55 000,00
23	Allow an amount of R 77 800.00 (Seventy Seven Thousand Eight Hundred Rands) for or sundry builder's work related to alterations				
			Item		77 800,00
	CREDIT FOR SALVAGED MATERIALS				
24	Allow for credit for salvaged material		Item		
	Carried Forward to Sectional Summary: 2			R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 1				
	Alterations PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO. 3			
	MASONRY			
	PREAMBLES			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works.  Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS BIII No. 2 MASONRY PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Brought forward			R	
	Samples				
	Samples of all masonry building units, except those for walls described as "load bearing", shall consist of a minimum of six units. Samples of building units to be used in walls described as "load bearing" shall consist of thirty units from every thirty thousand units delivered to site.				
	SUPPLEMENTARY PREAMBLES				
	Sizes in descriptions				
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick.				
	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.				
	BRICKWORK				
	SUPERSTRUCTURE				
	Brickwork of NFP bricks in class II mortar				
1	Half brick walls	m2			Rate Only
2	One brick walls	m2	30,60		
	BRICKWORK SUNDRIES				
	Brickwork reinforcement				
3	75mm Wide reinforcement built in horizontally	m			Rate Only
4	150mm Wide reinforcement built in horizontally	m	89,96		
	Carried Forward to Sectional Summary: 2			R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 2 MASONRY PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				
			I	l	

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 4			
	WATERPROOFING			
	PREAMBLES			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	General			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	SUPPLEMENTARY PREAMBLES			
	Carried forward  Section No. 2 PART 5 - BUILDING WORKS Bill No. 3 WATERPROOFING		R	
	PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Brought forward			R	
	Proprietary items or materials				
	Proprietary items or materials where specified are to be of the brand specified - or other approved - by the client or the client's agent				
	Waterproofing				
	Waterproofing of roofs, basements, etc shall be laid under a ten year guarantee. 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				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 375 micron "Consol Plastics Brikgrip DPC" embossed damp proof course				
1	In walls	m2	14,70		
	Coprox masonry waterproofing cement additive solution				
2	On walls	m2	30,60		
	Carried Forward to Sectional Summary: 2			R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 3 WATERPROOFING PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 5			
	CARPENTRY AND JOINERY			
	PREAMBLES			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	SUPPLEMENTARY PREAMBLES			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS BIII No. 4 CARPENTRY AND JOINERY PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

Brought forward	R	
Proprietary items or materials		
Proprietary items or materials where specified are to be of the brand specified - or other approved - by the client or the client's agent		
Joinery		
Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc		
Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes		
Fixing		
Unless otherwise described all carpentry and joinery work shall be deemed to be fixed complete with all sawn timbers spiked on and all wrought timbers nailed on. Other methods of fixing are specially described as follows:		
a. "Bolted on" shall mean fixed with bolts, the bolts and the holes elsewhere measured		
b. "Plugged" shall mean fixed with hardened steel nails or with spikes or wire nails as is suitable for the member concerned to and including hardwood plugs set in brickwork, blockwork or concrete		
c. "Plugged and screwed" shall mean fixed with screws to and including patent fibre or plastic plug set in brickwork, blockwork or concrete		
d. "Plugged and pelleted" shall mean plugging as last described and screwing with the heads of screws sunk and pelleted with pellets of same timber as that being fixed, glued in		
Carried forward	R	
Section No. 2 PART 5 - BUILDING WORKS Bill No. 4 CARPENTRY AND JOINERY PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD		

	Brought forward		R	
	Specifications and Drawings			
	Tenderers shall refer to and comply with the drawings and specifications included as annexes to this document when pricing all items contained in this bill of quantities. Failure to do so will be the complete responsibility of the Tenderer and no claims whatsoever will be entertained in this regard			
	Tenderer shall allow for all sub frames and support to ensure that the joinery are sturdy and can carry all reasonable anticipated weight it will be exposed to.			
	The following fittings have been measured as complete units i.e. the components of the units have not been separately measured. The descriptions, therefore, of such units shall be deemed to include all components, assembling, housing, notching, chamfering, gluing, blocking, planting on and screwing with countersunk screws, edge strips, glass, ironmongery, metalwork, stonework, joint sealants, paint or varnish finishes, etc.			
	Specific notes to tenderers			
	All details, layouts, finishes and ironmongery to be designed and specified by the specialist subcontractor Workshop drawings to be provided and approved by the architect All measurements to be confirmed on site			
	KITCHEN UNIT			
1	5010 x 600 x 900mm high kitchen shopfitting unit fixed to wall comprised of 2 180 x 900mm high top hung cupboard, doors to be 16mm Formica Wood finish (or similar approved or match existing pause areas) finish, top shelf to be 16mm Formica Wood (or similar approved) finish. All internal side panels and shelves to be 16mm standard white Melamine with matching straight edges. Doors to have good quality hinges. 5010mm x 200mm high open area fixed with Mosaic splash back in accordance with wall finishes schedule. Openings to be created for sink/prep bowl. 30mm Granite counter top finishing schedule above bottom cupboards. Unit to be shopfitted with 80mm Silver Formica finish Kickplate with stainless steel finish.Drawing Ref: SAT-01-07-DT	1		
	Carried Forward to Sectional Summary: 2		R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 4 CARPENTRY AND JOINERY PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 6			
	CEILINGS, PARTITIONS AND ACCESS FLOORING			
	PREAMBLES			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	SUPPLEMENTARY PREAMBLES			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 5 CEILINGS ETC PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

Brought forward	R	
Proprietary items or materials		
Proprietary items or materials where specified are to be of the brand specified - or other approved - by the client or the client's agent		
Proprietary suspended ceilings		
Electrical light fittings, diffusers, panels, etc. generally are "lay in "units of the same dimensions as the suspension grid described and allowance must 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 is to take cognizance thereof)		
Fixing		
Unless otherwise described all carpentry and joinery work shall be deemed to be fixed complete with all sawn timbers spiked on and all wrought timbers nailed on. Other methods of fixing are specially described as follows:		
a. "Bolted on" shall mean fixed with bolts, the bolts and the holes elsewhere measured		
b. "Plugged" shall mean fixed with hardened steel nails or with spikes or wire nails as is suitable for the member concerned to and including hardwood plugs set in brickwork, blockwork or concrete		
c. "Plugged and screwed" shall mean fixed with screws to and including patent fibre or plastic plug set in brickwork, blockwork or concrete		
d. "Plugged and pelleted" shall mean plugging as last described and screwing with the heads of screws sunk and pelleted with pellets of same timber as that being fixed, glued in		
PARTITIONING (PROVISIONAL)		
Rhino drywall partitioning		
Carried forward Section No. 2	R	
PART 5 - BUILDING WORKS Bill No. 5		
CEILINGS ETC PROJECT: SA TOURISM OFFICE REFURBISHMENT		
EQUATE CONSULTING (PTY) LTD		
1		

	Brought forward			R	
	Rhino-Drywall partitioning shall comprise 63.5mm UltraSTEEL Drywall studs inserted at 600mm centres into 63.5mm Drywall steel track at top and bottom and clad both sides with 12.5mm Rhinoboard fixed with 25mm Drywall streaker screws spaced at 220mm centres, stagger joints between boards, all joints to be taped and jointed as per manufacturer's instructions. (Add weldmesh reinforcing inside frame before cladding.)				
	Intersections and abutments are measured separately and descriptions shall be deemed to include any additional studs, corner beads, jointing compound, tape, etc.				
	Note: All to be to underside of existing ceiling with Aluminium skirting, height to match existing.				
	Wall paper and/or paint and varnish finishes are measured elsewhere				
1	Rhino Drywall partitioning 2.575m high comprising of 12.5i thick Rhino boards to both sides of steel studs and with joints including aluminium skirting both sides (Finish elsewhere measured)				
		m	96		
2	Extra over partition 2.575m high for corner, intersections etc	No	20		
	Carried Forward to Sectional Summary: 2			R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 5 CEILINGS ETC PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 7			
	METALWORK			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	SUPPLEMENTARY PREAMBLES			
	_			
	Carried forward Section No. 2		R	
	PART 5 - BUILDING WORKS BIII No. 6 METALWORK PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

Brought forward			R	
Proprietary items or materials				
Proprietary items or materials where specified are to be of the brand specified - or other approved - by the client or the client's agent				
Descriptions				
Descriptions of bolts shall be deemed to include nuts and washers				
Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete				
Metalwork described as "holed for bolt(s)" shall be deemed to exclude the bolts unless otherwise described				
Specific notes to tenderers				
All details, layouts, finishes and ironmongery to be designed. priced and specified by the specialist subcontractor Workshop drawings to be provided and approved by the architect All measurements to be confirmed on site				
ALUMINIUM WINDOWS & DOORS				
Natural anodized aluminium shopfronts as per approved system, complete with sub-frames,ironmongery, doors with 6.5mm laminated clear safety glass, to match existing, sealing, etc and fixing to brickwork/partitioning as per attached drawings				
Shopfront 4920 x 2575mm high (GL002)	No	2,00		
Shopfront 4910 x 2575mm high (GL003)	No	1,00		
Carried forward			R	
Section No. 2 PART 5 - BUILDING WORKS BIII No. 6 METALWORK PROJECT: SA TOURISM OFFICE REFURBISHMENT				
METALWORK				

	Brought forward	ı		R	
	Natural anodized aluminium shopfronts as per approved system, complete with subframes, ironmongery, with 6.5mm laminated clear safety glass, to match existing, sealing, etc and fixing to brickwork as per attached drawings				
3	Door, 840 x 2575mm high D1 (D002/SAT01)	No	1		
4	Door, 840 x 2575mm high D2 (D01/SAT01); (D02/SAT01); (D03/SAT01)	No	3		
5	Door, 840 x 2575mm high D2 (D04/SAT01); (D05/SAT01); (D06/SAT01);(D07/SAT01)	No	4		
	Carried Forward to Sectional Summary: 2  Section No. 2  PART 5 - BUILDING WORKS  Bill No. 6  METALWORK  PROJECT: SA TOURISM OFFICE REFURBISHMENT  EQUATE CONSULTING (PTY) LTD			R	

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 8			
	PLASTERING			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	SUPPLEMENTARY PREAMBLES			
	Carried forward Section No. 2		R	
	PART 5 - BUILDING WORKS BIII No. 7 PLASTERING PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Brought forward			R	
	Proprietary items or materials				
	Proprietary items or materials where specified are to be of the brand specified - or other approved - by the client or the client's agent				
	SCREEDS				
	Screeds steel trowelled, on concrete				
1	25mm Thick on floors and landings	m2	17,02		
	INTERNAL PLASTER				
	One coat Rhinolite finish or similar approved				
2	On walls	m2	492,78		
	Opmind Forward to Open 1 10				
	Carried Forward to Sectional Summary: 2 Section No. 2			R	
	PART 5 - BUILDING WORKS Bill No. 7				
	PLASTERING PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 9			
	TILING			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works.  Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	SUPPLEMENTARY PREAMBLES			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS BIII No. 8 TILING PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Brought forward			R	
	Proprietary items or materials				
	Proprietary items or materials where specified are to be of the brand specified - or other approved - by the client or the client's agent				
	Fixing				
	Tiling shall be fixed with an approved tile epoxy adhesive to a plaster backing. Plaster backing is measured elsewhere				
	FLOOR TILING				
	Provision for floor tiling, black polished porcelain tile 600x600 (PC Allowance R150,00/m2) fixed with adhesive and flush pointed as per manufacturer and to Architect's approval and executed complete				
1	On floors	m2	17,02		
2	150mm High cut tile skirting	m	16,83		
	EDGE TRIMS				
	10mm Aluminium slim square tile edge trim fixed with adhesive to tiling from Kirk Marketing, or similar				
3	Straight edge trim around exposed edges	m	20,84		
	SUNDRIES				
4	5mm Thick movement joint in polysulphate infill to match grout	m	16,83		
	Carried Forward to Sectional Summary: 2			R	
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 8				
	TILING PROJECT: SA TOURISM OFFICE REFURBISHMENT				
	EQUATE CONSULTING (PTY) LTD				

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 10			
	<u>PAINTWORK</u>			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	SUPPLEMENTARY PREAMBLES			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS BIII No. 9 PAINTWORK PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

Brought forward			R	
Proprietary items or materials		li		
Proprietary items or materials where specified are to be of the brand specified - or other approved - by the client or the client's agent				
Descriptions				
Descriptions of paintwork shall be deemed to include for all cutting in				
PREPARATORY WORK TO EXISTING WORK				
Previously painted plastered surfaces				
Surfaces shall be thoroughly washed down and allowed to				
dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall				
be opened, filled with a suitable filler and finished smooth				
Previously painted metal surfaces				
Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal				
Previously painted wood surfaces				
Surfaces shall be thoroughly cleaned and sanded down. Blistered or peeling paint shall be completely removed and				
cracks and crevices shall be primed, filled with suitable filler and finished smooth				
PAINTWORK, ETC TO NEW WORK				
Primer: Universal Undercoat and two coats "Dulux" Luxurious silk paint (code: TBC By Architect ) Paint colour: to match existing				
On internal walls, dry walls etc	m2	355,69		
Carried forward			R	
Section No. 2				
PART 5 - BUILDING WORKS BIII No. 9				
PAINTWORK PROJECT: SA TOURISM OFFICE REFURBISHMENT				

	Brought forward	t l		R	
1	One coat "Dulux" plaster primer and two coats "Dulux" Luxurious silk paint (code: 45YY 71/664) paint colour: True Yellow (Yellow)				
2	On internal walls, dry walls etc	m2	41,23		
	One coat "Dulux" plaster primer and two coats "Dulux" Luxurious silk paint (code: 90G 21/472) paint colour: Treehouse (Green)				
3	On internal walls, dry walls etc	m2	41,10		
	One coat "Dulux" plaster primer and two coats "Dulux" Luxurious silk paint (code:58BB 12/390) paint colour: Kingdom (Blue)				
4	On internal walls, dry walls etc	m2	41,02		
	One coat "Dulux" plaster primer and two coats "Dulux" Luxurious silk paint (code: 19YR 13/558) paint colour: Flaming Sword (Red)				
5	On internal walls, dry walls etc	m2	25,18		
	Carried Forward to Sectional Summary: 2  Section No. 2  PART 5 - BUILDING WORKS  Bill No. 9  PAINTWORK  PROJECT: SA TOURISM OFFICE REFURBISHMENT  EQUATE CONSULTING (PTY) LTD			R	

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO 11			
	<u>PAPERHANGING</u>			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	PREPARATORY WORK TO EXISTING WORK			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS BIII No. 10 PAPERHANGING PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Brought forward			R	
	Previously painted plastered surfaces				
	Surfaces shall be thoroughly washed down and allowed to dry completely before any paint is applied. Blistered or peeling paint shall be completely removed and cracks shall be opened, filled with a suitable filler and finished smooth				
	Previously painted metal surfaces				
	Surfaces shall be thoroughly rubbed and cleaned down. Blistered or peeling paint shall be completely removed down to bare metal				
	Previously painted wood surfaces				
	Surfaces shall be thoroughly cleaned and sanded down. Blistered or peeling paint shall be completely removed and cracks and crevices shall be primed, filled with suitable filler and finished smooth				
	PAPERHANGING TO NEW WORK				
	Custom printed graphic wallpaper (PC R350/m2), as per Architect specification				
1	On internal walls; drywalls etc	m2	65		
	PAPERHANGING TO EXISTING WORK				
	Custom printed graphic wallpaper (PC R350/m2) as per Architect specification				
2	On previously painted internal walls; drywalls etc	m2	13		
	Carried Forward to Sectional Summary: 2			R	
	Section No. 2 PART 5 - BUILDING WORKS				
	Bill No. 10 PAPERHANGING				
	PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				

Item No		Quantity	Rate	Amount
	PART 5			
	BILL NO. 12			
	BUDGETARY ALLOWANCES			
	PREAMBLES			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	<u>General</u>			
	Tenderers are to note that these Bills of Quantities have been prepared in accordance with the Standard System of Measuring Builders Work (Sixth Edition) 1999, as published by the Association of South African Quantity Surveyor			
	Tenderers are to inspect the drawings issued with these bills of quantities and to satisfy themselves as to the nature and the requirements of the Contract works. Failure to do so will be the complete responsibility of the tenderer and no claims whatsoever will be entertained in this regard.			
	The descriptions contained in these bills of quantities are to be read in conjunction with the drawings and project specifications and are intended as a means of identifying the various facets of the works. Tenderers shall allow for all costs in connection with the various items taking full cognisance of drawings, specifications and bills of quantities descriptions.			
	Where specifications and descriptions in these bills of quantities are in conflict with previous specifications (Preambles), then the specifications or descriptions in these bills of quantities shall take preference.			
	Carried forward		R	
	Section No. 2 PART 5 - BUILDING WORKS BIII No. 11 BUDGETARY ALLOWANCES PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Brought forward		R		
	GENERAL NOTES TO TENDERERS				
	NOTE: Budgetary allowances listed below are for work to be executed by the Principal Contractor and will be measured and valued in terms of rates submitted against similar items in these bills.				
	NOTE: These items are to be taken into account in the pricing of the Preliminaries as they will NOT attract separate Preliminaries of their own. Mark-ups are included in the values.				
	The following budgetary allowances are for work to be executed by the PRINCIPAL CONTRACTOR				
1	Provide the amount as indicated for builder's work related to space planning; finishes etc.	Item		94 171,	25
2	Provide the amount as indicated for builder's work related to IT Room	Item		252 242,	31
3	Provide the amount as indicated for builders work in connection with the services etc.	Item		375 533,	54
	Carried Forward to Sectional Summary: 2		R		
	Section No. 2 PART 5 - BUILDING WORKS Bill No. 11				
	BUDGETARY ALLOWANCES PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				
				II I	

	Section No. 2			
	PART 5 - BUILDING WORKS			
Bill No	SECTION SUMMARY - PART 5 - BUILDING WORKS	Page No		Amount
1	Alterations	7		
2	MASONRY	9		
3	WATERPROOFING	11		
4	CARPENTRY AND JOINERY	14		
5	CEILINGS ETC	17		
6	METALWORK	20		
7	PLASTERING	22		
8	TILING	24		
9	PAINTWORK	27		
10	PAPERHANGING	29		
11	BUDGETARY ALLOWANCES	31		
	Carried to Final Summary  Section No. 2  PART 5 - BUILDING WORKS  PROJECT: SA TOURISM OFFICE REFURBISHMENT		R	
	EQUATE CONSULTING (PTY) LTD			

Item No		Quantity	Rate	Amount	
	SECTION NO. 3				
	BILL NO. 1				
	PROVISIONAL SUMS - STRUCTURE & FINISHES				
	PREAMBLES				
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.				
	SUPPLEMENTARY PREAMBLES				
	Supplementary preamble items described in other Sections and Bills, shall equally apply to this Bill.				
	Attendance				
	The amounts allowed for "attendance" must provide for all services rendered, attendance of making good of all trades after "specialists", also for the use of any scaffolding and equipment.				
	GENERAL NOTES TO TENDERERS				
	General notes, described in Section No. 1, Bill No. 1, shall equally apply to this Bill.				
	PLUMBING INSTALLATION				
1	Provision for plumbing and drainage	Item		9 000,	00
2	Profit		%		
3	Attendance		%		
	Carried forward  Section No. 3 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS - STRUCTURE & FINISHES PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD		R		

# EP823\_SA TOURISM OFFICE REFURBISHMENT FOR SA TOURISM

	Brought forward		R	
	SANITARY FITTINGS			
4	Provision for sanitary fittings	Item		5 595,00
5	Profit		%	
6	Attendance		%	
	BATHROOM FITTINGS			
7	Provision for bathroom fittings	Item		5 000,00
8	Profit		%	
9	Attendance		%	
	IRONMONGERY			
10	Provision for ironmongery	Item		17 000,00
11	Profit		%	
12	Attendence		%	
	Carried Forward to Sectional Summary: 3		R	
	Section No. 3 PROVISIONAL SUMS			
	BIII No. 1 PROVISIONAL SUMS - STRUCTURE & FINISHES			
	PROVISIONAL SUMS - STRUCTURE & FINISHES PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			
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Item No		Quantity	Rate	Amount
	SECTION NO. 3			
	BILL NO. 2			
	PROVISIONAL SUMS - SERVICES			
	PREAMBLES			
	NOTE: Tenderers are advised to study the "MODEL PREAMBLES FOR TRADES" (2008 Edition) as recommended and published by the Association of South African Quantity Surveyors before pricing this bill.			
	SUPPLEMENTARY PREAMBLES			
	Supplementary preamble items described in other Sections and Bills, shall equally apply to this Bill.			
	Attendance			
	The amounts allowed for "attendance" must provide for all services rendered, attendance of making good of all trades after "specialists", also for the use of any scaffolding and equipment.			
	GENERAL NOTES TO TENDERERS			
	General notes, described in Section No. 1, Bill No. 1, shall equally apply to this Bill.			
	ELECTRICAL INSTALLATION			
1	Provision for electrical installation	Item		666 600,00
2	Profit		%	
3	Attendance		%	
	HVAC INSTALLATION			
4	Provision for HVAC installation	Item		721 600,00
	Carried forward		R	
	Section No. 3 PROVISIONAL SUMS Bill No. 2 PROVISIONAL SUMS - SERVICES PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD		· ·	

# EP823\_SA TOURISM OFFICE REFURBISHMENT FOR SA TOURISM

	Brought forward		R	
5	Profit		%	
6	Attendance		%	
	FIRE AND SMOKE DETECTION AND CONTROL			
7	Provision for fire protection	Item		69 300,00
8	Profit		%	
9	Attendance		%	
	Carried Forward to Sectional Summary: 3		R	
	Section No. 3 PROVISIONAL SUMS Bill No. 2 PROVISIONAL SUMS - SERVICES PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

	Section No. 3	1	]	
	PROVISIONAL SUMS			
Bill	SECTION SUMMARY - PROVISIONAL SUMS	Page		Amount
No		No		
1	PROVISIONAL SUMS - STRUCTURE & FINISHES	34		
2	PROVISIONAL SUMS - SERVICES	36		
	Carried to Final Summary		R	
	Section No. 3 PROVISIONAL SUMS			
	PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD			

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	FINAL SUMMARY				
Section No		Page No		Amount	
1	PART 4 - PRELIMINARIES	1			
2	PART 5 - BUILDING WORKS	32			
	SUB TOTAL		R		
3	PROVISIONAL SUMS	37			
Ü	VALUE ADDED TAX	37			
	VALUE ADDED TAX		R		
	Carried to Form of Tender		R		
	PROJECT: SA TOURISM OFFICE REFURBISHMENT EQUATE CONSULTING (PTY) LTD				

### SA TOURISM REFURBISHMENT

## SUBJECT: SCHEDULE OF RATES

## ELECTRICAL INSTALLATION

ITEM	DESCRIPTION	UNIT	RATE
	LIGHTING		
1	Supply, deliver, install, connect, test and commissioning the following light fittings		
1,1	Type A (600 x 600 - 36W LED Panel , standard non dimmable c/w driver & 3meter cord ending in 6A plug top)		
1.1.1 1.1.2	Supply Installation	No No	
1,2 1.2.1	Supply and Install accessories to boxes 6A, 3-pin socket outlets to trunking	No	
1,3	Multi Technology (PIR/Ultrasonic) - Occupancy Sensor - 360°, with 9000mm detection radius	No	
	WIRING AND TERMINALS		
2	Supply, Deliver and installation of Cu Conductors:		
2,1	4mm² PVC insulated conductor		
2.1.1 2.1.2	Supply and delivery Installation	Meter Meter	
2,2	2.5mm² PVC insulated conductor		
2.2.1 2.2.2	Supply and delivery Installation	Meter Meter	
2,3	2.5mm² bare copper earth wire		
2.3.1 2.3.2	Supply and delivery Installation	Meter Meter	
2,4	4mm² bare copper earth wire		
2.4.1 2.4.2	Supply and delivery Installation	Meter Meter	
2,5	2.5mm², 3 core Surfix, white		
2.5.1 2.5.2	Supply and delivery Installation	Meter Meter	
2.5.3	Termination	No	
	SMALL POWER		
3	Supply, delivery and installation of power outlets		
3,1	Corporate Connection - installed flush mounted on desk including 1 x 230V, 16A, 3 pin RSA SSO, 1 x Euro 3 Pin SSO, 1 x 230V, 16A 3pin Red SSO, space for 2 x RJ45, c/w 1.5m interconnecting cables		
3.1.1 3	Supply Installation	No No	
4	Supply, delivery and installation of socket outlets (Crabtree or Similar Approved)		

	Lot of the Life Coo	<del>, , , , , , , , , , , , , , , , , , , </del>	
4,1	16 A, 3-pin standard white SSO		
4.1.1	Flush Mounted	No	
4.1.2	Surface mounted	No	
4.1.3	Mounted in power skirting	No	
4.1.4			
4.1.4	Mounted on power pole/panel	No	
1.0	40.4.0.1.1.1.1.000		
4,2	16 A, 3-pin dedicated red SSO		
4.2.1	Flush Mounted	No	
4.2.2	Surface mounted	No	
4.2.3	Mounted in power skirting	No	
4.2.4	Mounted on power pole	No	
4,3	Supply and installation of isolators		
4.3.1	20A double pole	No	
4.3.2	30A double pole	No	
4.3.3	30A double pole - Weather Proof Lockable Rotary	No	
4.3.4	30A triple pole - Lockable Rotary Isolator	No	
1 1	Supply two compartment, two cover powder coated steel power		
4,4	skirting complete with all accessories.		
	G P		
4.4.1	Supply and delivery	Meter	
4.4.2	Installation		
		Meter	
4.4.3	Bends	No	
4.4.4	Ends	No	
	Supply, delivery and install 3m Power Pole, c/w all accesorries and		
5	including 1 x 16A normal SSO, 1 x 16A red SSO, 6 x data blanks		
ľ			
5,1	Cupply and delivery	No	
	Supply and delivery		
5,2	Installation	No	
	<u>WIREWAYS</u>		
	Supply, delivery and installation of PVC conduits, surface mounted in		
6	ceiling voids and fixed to walls or cast-in or built into walls, including		
6	all fixing materials, bends, terminations, draw boxes, etc.		
	an fixing materials, bends, terrimations, araw boxes, etc.		
6,1	32mm diameter		
6.1.1	Supply and delivery	Meter	
6.1.2			
0.1.2	Installation	Meter	
6.0	25 man aliama atau		
6,2	25mm diameter	[	
6.2.1	Supply and delivery	Meter	
6.2.2	Installation	Meter	
6,3	20mm diameter		
6.3.1	Supply and delivery	Meter	
6.3.2	Installation	Meter	
0.0.2	iniotanation		
<b> </b> -	Comply, delivery and installation of Complete contacts become		
7	Supply, delivery and installation of Conduit outlets boxes		
<u> </u>			
7,1	50mm Round box		
7.1.1	Supply and delivery	No	
7.1.2	Installation	No	
7,2	100 x 100 x 50 mm		
11.4	<del></del>	i I	
	Supply and delivery	No I	I
7,2 7.2.1 7.2.2	Supply and delivery Installation	No No	

### SA TOURISM REFURBISHMENT

## SUBJECT: SCHEDULE OF RATES

## FIRE PROTECTION INSTALLATION

ITEM	DESCRIPTION	UNIT	RATE	AMOUNT
1.	Supply, delivery and installation of analoque addressable fire detection and alarm system in accordance with SANS 10139			
1.1 1.1.1 1.1.2	Optical smoke detector (including base) Supply and delivery Installation	No. No.		R0,00 R0,00
1.2 1.2.1 1.2.2	Alarm sounder c/w strobe (including base) Supply and delivery Installation	No. No.		R0,00 R0,00
1.3 1.3.1 1.3.2	Manual call point (including base) Supply and delivery Installation	No. No.		R0,00 R0,00
1.4 1.4.1 1.4.2	Loop isolators Supply and delivery Installation	No. No.		R0,00 R0,00
1.5 1.5.1 1.5.2	Interface units Supply and delivery Installation	No. No.		R0,00 R0,00
1.6 1.6.1 1.6.2	PH30 fire rated cable Supply and delivery Installation	Meter Meter		R0,00 R0,00
1.7 1.7.1 1.7.2	Fire detection control panel Supply and delivery Installation	No. No.	Existing Existing	Existing Existing
1.8 1.8.1 1.8.2	Wireways Supply and delivery Installation	Meter Meter	Existing Existing	Existing Existing
1.9	Service existing fire detection control panel and devices i.e detectors, sounder, call points			
1.9.1	Flat rate to service both Ground & First Floor	No.		Rate only
2.	Supply, delivery and installation of 190 modules photoluminescent statutory emergency signage in accordance with SANS 1186 c/w with hanging & fixing details			
2.1 2.1.1 2.1.2	Fire detection control panel Supply and delivery Installation	No. No.		R0,00 R0,00

### SUBJECT: BILL OF QUANTITIES

### PART C2.3.1 PAGE 1 OF 10

### **BILL No. 1 - PRELIMINARIES**

Item no.		Fixed	Value Related	Time Related
	Note 1 Principal building agreement			
	The agreement entered into between the employer and the contractor is the May 1998 (Code 2101) Principal Building Agreement prepared by the Joint Building Contracts Committee and recommended by the JBCC Constituents, as amplified and amended by:			
	<ul><li>1.1 The May 1998 (Code 2103) JBCC Preliminaries.</li><li>1.2 The Specification.</li><li>1.3 The bills of quantities.</li></ul>			
	1.4 Such other documents as are identified in the schedule to the agreement.			
	(The documents referred to in Note 1 above and comprising the principal building agreement, the preliminaries, the bills of quantities, and such other documents as are identified in the schedule shall collectively be referred to as the principal agreement)			
	Note 2 Nominated/selected subcontract agreement. The selected subcontract agreement to be entered into between the contractor and the subcontractor shall be referred to as the N/S agreement and shall:			
	2.1 not conflict with any of the provisions of the principal agreement as defined in Note 1 above; and			
	2.2 conform to and incorporate the May 1998 Code 2102)			
	Nominated/Selected Subcontract Agreement prepared by the Joint Building Contracts Committee as amplified and/or amended by:			
	2.2.1 these preliminaries;			
	2.2.2 the N/S contract documents as defined in clause 1 of the N/S agreement.			
	Note 3 In the event of a conflict between any provision contained in these preliminaries on the one hand and any provision contained in the N/S agreement on the other hand, the relevant provisions of these preliminaries shall prevail.			

## PART C2.3.1 PAGE 2 OF 10

Item no.		Fixed	Value Related	Time Related
	Note 4  The tenderer is referred to the N/S agreement identified in Note 2.2 above for the full intent and meaning of each clause thereof. These clauses are hereinafter referred to by clause number and heading only. Where standard clauses or alternatives are not applicable to this N/S agreement such modifications/corrections as are necessary are given under each relevant clause heading. Changes to any clauses shall be identified clearly. They tenderer shall allow apposite each clause for any cost involved in complying with such clauses.	Fixed	Value Related	Time Related

## PART C2.3.1 PAGE 3 OF 10

### PRINCIPAL BUILDING AGREEMENT (SECTION A ) REFER PART C1.3

Item no.			Fixed	Value Related	Time Related
	DEFINITIONS				
	Clause 1.0: Definitions and interpretation	ltem			
	OBJECTIVE				
	Clause 2.0: Offer Acceptance and Performance	ltem			
	PREPARATION				
	Clause 3.0: Documents	ltem			
	Clause 4.0: Design Responsibility	ltem			
	Clause 5.0: Employer's Agents	ltem			
	Clause 6.0: Site Representative	ltem			
	Clause 7.0: Compliance with Regulations	ltem			
	Clause 8.0: Works Risk	ltem			
	Clause 9.0: Indemnities	ltem			
	Clause 10.0: Works Insurances	ltem			
	Clause 11.0: Liability Insurances	ltem			
	Clause 12.0: Effecting Insurances	ltem			
	Clause 13.0: Insurances - Government Contracts	ltem			
	Clause 14.0: Security	ltem			
	EXECUTION				
	Clause 15.0: Preparation for and Execution of the Works	ltem			
	Clause 16.0: Access to the Works	ltem			
	Clause 17.0: Contract Instructions	ltem			
	Clause 18.0: Setting out of the Works	ltem			
	Clause 19.0: Assignment	ltem			
	Clause 20.0: Nominated Subcontractors	ltem			
	Clause 21.0: Selected Subcontractors	ltem			
	Clause 22.0: Work by Others	ltem			

## PART C2.3.1 PAGE 4 OF 10

Item no.			Fixed	Value Related	Time Related
	COMPLETION				
	Clause 23.0: No clause	Item			
	Clause 24.0: Practical Completion	Item			
	Clause 25.0: Works Completion	ltem			
	Clause 26.0: Final Completion	Item			
	Clause 27.0: Latent Defects Liability Period	Item			
	Clause 28.0: Sectional Completion	ltem			
	Clause 29.0: Revision of Date for Practical Completion	Item			
	Clause 30.0: Penalty for Non-completion	Item			
	PAYMENT				
	Clause 31.0: Interim Payment to the contractor	Item			
	Clause 32.0: Adjustment to the Contract Value	Item			
	Clause 33.0: Recovery of Expense and Loss	Item			
	Clause 34.0: Final Account and Final Payment	Item			
	Clause 35.0: Payment to third parties	ltem			
	CANCELLATION				
	Clause 36.0: Cancellation by Employer - Contractor's Default	Item			
	Clause 37.0: Cancellation by Employer - Loss or Damage	Item			
	Clause 38.0: Cancellation by Contractor - Employer Default	ltem			
	Clause 39.0: Cancellation - Cessation of the Works	Item			
	DISPUTE				
	Clause 40.0: Settlement of Disagreements and Disputes	ltem			
	SCHEDULE Clause 41.0: Pre-tender information	Item			
	Clause 41.0. Fre-tender information	ILEIII			

## PART C2.3.1 PAGE 5 OF 10

## NOMINATED/SELECTED SUB-CONTRACT AGREEMENT (SECTION A) - REFER PART C1.4

Item			Fixed	Value Related	Time Related
no.	DECINITIONS				
۸1	DEFINITIONS  Clause 1.0. Definitions and interpretation	laner			
A1.	Clause 1.0: Definitions and interpretation	ltem			
4.0	OBJECTIVE	lkomo			
A2.	Clause 2.0: Offer Acceptance and Performance	ltem			
	PREPARATION				
A3.	Clause 3.0: Documents and Principal Agreement	Item			
A4.	Clause 4.0: Design Responsibility	ltem			
A5.	Clause 5.0: Employer's Agents	Item			
A6.	Clause 6.0: Site Representatives	ltem			
A7.	Clause 7.0: Compliance with Regulations	Item			
A8.	Clause 8.0: N/S Works Risk	Item			
A9.	Clause 9.0: Indemnities	Item			
A10.	Clause 10.0: Works and N/S Works Insurances	Item			
A11.	Clause 11.0: Liability Insurances	Item			
A12.	Clause 12.0: Effecting Insurances	Item			
A13.	Clause 13.0: Insurances - Government Contracts	Item			
A14.	Clause 14.0: Security	Item			
	EXECUTION				
A15.	Clause 15.0: Preparation for and Execution of the N/S Works	Item			
A16.	Clause 16.0: Access to the N/S Works	ltem			
A17.	Clause 17.0: Contractor's Instructions	ltem			
A18.	Clause 18.0: Setting out of the N/S Works	ltem			
A19.	Clause 19.0: Assignment	Item			
A20.	Clause 20.0: Contractor's Attendance	Item			
A21.	Clause 21.0: Subcontractor's Plant and Services	Item			
A22.	Clause 22.0: Work by Others	Item			

## PART C2.3.1 PAGE 6 OF 10

ltem no.			Fixed	Value Related	Time Related
	COMPLETION				
A23.	Clause 23.0: Interim Completion	Item			
A24.	Clause 24.0: Practical Completion	Item			
A25.	Clause 25.0: Works Completion	ltem			
A26.	Clause 26.0: Final Completion	Item			
A27.	Clause 27.0: Latent Defects Liability Period	Item			
A28.	Clause 28.0: Sectional Completion	Item			
A29.	Clause 29.0: Revision of Date for Interim Completion	Item			
A30.	Clause 30.0: Damages due to Non-performance	Item			
	PAYMENT				
A31.	Clause 31.0: Interim Payment to the Subcontractor	ltem			
A32.	Clause 32.0: Adjustment to the N/S Contract Value	ltem			
A33.	Clause 33.0: Recovery of Expense and Loss	Item			
A34.	Clause 34.0: N/S Final Account and Final Payment	Item			
A35.	Clause 35.0: <i>No clause</i>	Item			
	CANCELLATION				
A36.	Clause 36.0: Cancellation by Contractor - Subcontractor's Default	Item			
A37.	Clause 37.0: Cancellation by Contractor - Loss or Damage	Item			
A38.	Clause 38.0: Suspension and Cancellation by Subcontractor - Contractor's/Employer's Default	Item			
A39.	Clause 39.0: Cancellation - Cessation of the Works	Item			
	DISPUTE				
A40.	Clause 40.0: Settlement of Disagreements and Disputes	ltem			

## PART C2.3.1 PAGE 7 OF 10

Item no.			Fixed	Value Related	Time Related
	N/S SCHEDULE				
A41.	Clause 41.0: Pre-tender Information	Item			
	"The enquirer to fill in all the relevant information prior to issue of tender documentation".				
	Information necessary for contract purposes concerning variables referred to in the N/S agreement is contained in the attached schedule.	5			
A41.	Clause 41.0: Post-tender Information "This portion to be filled in after award of tender".	Item			
	ADDITIONAL CLAUSES				
	The following clauses shall be added to this nominated/selected subcontract:				
A42.	CLAUSE S1: WAIVER OF LIEN				
	The subcontractor shall simultaneously with the signing of the subcontract agreement deliver to the contractor a waiver in respect of contractor's lien which:				
	(i) shall conform to the specimen Waiver of Contractor's Lien which is attached hereto as Annexure 'C'; and				
	(ii) shall be so signed on behalf of the relative selected sub-contractor by an official duly authorized thereto by the sub-contractor; proof of which authority in the form of a certified extract of the minutes of the directors of members (as the case may be) of the relative selected subcontractor, shall also be so delivered to the principal agent by the contractor. There shall be no obligation on the employer to provide the contractor or relevant selected subcontractor with any security in consideration of the signing and delivery of the undertaking and cession in respect of contractor's lien in the manner referred to above.				
A43.	CLAUSE S2: SUBCONTRACTOR TO PROVIDE EVERYTHING NECESSARY				
	The subcontractor shall provide everything necessary for the proper execution of the subcontract works according to the true intent and meaning of the subcontract documents, whether the same may or may not be particularly shown or described, provided that the same is reasonable to be inferred there from, and if the subcontractor finds any discrepancy therein, he shall immediately and in writing refer the same to the contractor, who shall decide the procedure. Figured dimensions shall be followed in preference to scale.				

## PART C2.3.1 PAGE 8 OF 10

Item no.		Fixed	Value Related	Time Related
A44.	DOCUMENTS			
	The following supplementary documents, the provisions of which form an integral part of the N/S Contract Documents, and thus this N/S Agreement to which the subcontractor is bound, are bound into these Bills of Quantities -			
	PART C4.1 - Schedule of Drawings			
	PART C4.2 - Waiver of Contractor's Lien			
	PART C4.3 - Form of indemnity			
	PART C4.4 - N/S Construction Guarantee (Pro Forma)			
	PART C4.5 - Extract of Preliminaries to Bills of Quantities under the Principal Agreement.			
	PART C4.6 - Unfixed materials Guarantee			
	PART C4.7 - Maintenance agreement			

## PART C2.3.1 PAGE 9 OF 10

Item no.			Fixed	Value Related	Time Related
	JBCC PRELIMINARIES (SECTION B) - REFER PART C.2				
	NOTES				
	Note 1				
	Ine JBCC Preliminaries May 1998 (Code 2103) edition for use with the JBCC Principal Building Agreement May 1998 (Code 2101) and JBCC N/S Subcontract Agreement May 1998 (Code 2102) is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intent and meaning each clause.				
	Where standard clauses or alternatives are not applicable to the contract, such modifications or corrections as are necessary are given under each relevant clause.  Note 2				
	The tenderer must allow opposite each clause for any costs in which he may be involved in executing the works in accordance with the said JBCC Preliminaries.				
B1.	Clause 1.0: Definitions and Interpretations	Item			
B2.	Clause 2.0: Documents	Item			
В3.	Clause 3.0: The Site	Item			
B4.	Clause 4.0: Management of Contract	Item			
B5.	Clause 5.0: Samples and Shop Drawings	Item			
В6.	Clause 6.0: Temporary Works and Plant	Item			
B7.	Clause 7.0: Temporary Services	Item			
B8.	Clause 8.0: Prime Cost Amounts	Item			
B9.	Clause 9.0: Attendance on N/S Subcontractors	Item			
B10.	Clause 10.0: Financial Aspects	Item			
B11.	Clause 11.0: General	Item			
B12.	Clause 12.0: Schedule of Variables	Item			

### PART C2.3.1 PAGE 10 OF 10

Item no.		Fixed	Value Related	Time Related
C17	SPECIAL CONDITIONS OF SUBCONTRACT AGREEMENT (SECTION C) (Refer Part C1.5) Section 01: Definitions and Abbreviations			
C18	Section 02: General			
C19	Section 03: Drawings and Submissions			
C20	Section 04: Work provided by Others			
C21	Section 05: Compliance with Standards and Regulations			
C22	Section 06: Safety			
C23	Section 07: Hoisting and Rigging			
C24	Section 08: Year 2000 Compliance			
C25	Section 09: Programming			
C26	Section 10: Contract Management			
C27	Section 11: Organization and Staff of Subcontractor			
C28	Section 12: Protection Against Damage			
C29	Section 13: Access to Equipment and Systems			
C30	Section 14: Cleaning and Start-up			
C31	Section 15: Testing, Balancing, Commissioning, Operation of Plant and Handover			
C32	Section 16: Guarantee			
C33	Section 17: Quality Management System, Testing and Inspection			
C34	Section 18: Operating and Maintenance Manuals			
C35	Section 19: One Year's Maintenance			
C36	Section 20: Special Attendance			
C37	Section 21: Preparation of Pre-Start up Checklist			
C38	Section 22 : Completion of Subcontract work			
	Subtotals			

FIXED	
VALUE RELATED	
TIME RELATED	
TOTAL TRANSFERRED TO ITEM 1 OF THE SUMMARY OF TENDER SUMS PART C.2.4	

### PART C2.3.2 PAGE 1 OF 5

### BILL No. 2 - OFFICE FLOORS, SA TOURISM REFURBISHMENT

MAJOR EQUIPMENT   Fresh Att Vulti in accordance with Part C3 Section 11.02.01	Item	Description	Unit	Quantity	Tariff	Amount
Fresh Air Unit in accordance with Part C3 Section 11.92.01						
1,002   Supply and inlet ducting connections c/w canvass collars.		Fresh Air Unit in accordance with Part C3 Section 11.02.01				
1,003	1,001	mounted on the roof slab complete with:				
1,005	1,002	-Supply and inlet ducting connections c/w canvass collars.				
1,006   -50mm Spare set of Filters   1,006   -50mm Spare set of Filters   1,007   -MCC Panel   1,008   -Unistrut Support Frame   Reference No's   1,009   FAU 01: 2933 l/sec @250 Pa c/w 48kW Electrical Heater   No   No   1,010   FAU 02: 4820 l/sec @250 Pa c/w 75kW electrical Heater   No   Axial Fan complete with AVM's, electrical wiring & canvass   1,011   collars in accordance with Part C.3 Section 08.02   Reference No's   1,012   FA01: 0400 510 L/s @ 250 Pa   No   No   1,013   Sound attenuators in accordance with Part C3 Section 18.01   Reference No's   1,014   SA01: 1500 X 500 X 1200 long c/w splitters   No   No   No   No   No   No   No   N						
1,006 -Somm Spare set of Filters 1,007 -McC Panel 1,008 -Unistrut Support Frame Reference No's 1,009 FAU 01: 2933 Issec @250 Pa c/w 48kW Electrical Heater 1,000 FAU 01: 2933 Issec @250 Pa c/w 75kW electrical Heater No 1,010 FAU 02: 4620 Issec @250 Pa c/w 75kW electrical Heater No 1,011 collars in accordance with Part C.3 Section 08.02 Reference No's 1,012 FA01: 900 510 Us @ 250 Pa No 1,013 Sound attenuators in accordance with Part C3 Section 18.01 Reference No's 1,014 SA01: 1500 X 500 X 1200 long c/w splitters 1,015 SA02: 3000 X 500 X 1200 long c/w splitters 1,016 SA03: 9400 (2.00) POD Cassette split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,018 -Indoor unit 1,019 -Interconnecting refrigeration piping 1,020 - Electrical wiring 1,021 - Condensate drain 1,022 - Filters 1,024 - Wall mounted controller 1,025 - Inverter 1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4.0 kW (Heating) 1,028 SCUI 02 5.0 kW (Cooling) 7.2 kW (Heating) 1,039 SCUI 03 7.2 kW (Cooling) 7.2 kW (Heating) 1,030 SCUI 04 8.8 kW (Cooling) 7.2 kW (Heating) 1,031 Section 14.02 of specification, complete with: 1,032 - Indoor unit 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Titlers 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Filters 1,031 - Filters 1,032 - Filters 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Filters 1,030 - Filters 1,031 - Filters 1,032 - Filters 1,033 - Filters - Filters 1,033 - Filters - Filters 1,034 - Filters 1,035 - Filters 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Filters 1,030 - Filters 1,031 - Filters - Filters 1,032 - Filters 1,033 - Filters - Filters 1,034 - Filters 1,035 - Filters 1,035 - Filters 1,036 - Filters 1,037 - Filters 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Filters 1,040 - Filters 1,040 - Filters 1,040 - Filters 1,040 - F	1,004	-Electrical wiring				
1,007   AMCC Panel	1,005	-AVM				
1,008   -Unistrut Support Frame   Reference No's						
Reference No's						
1,010 FAU 01: 2933 I/sec @250 Pa c/w 48kW Electrical Heater No No Axial Fan complete with AVM's, electrical Heater No Reference No's 1,011 FA01: Ø400 510 L/s @ 250 Pa 1,012 FA01: Ø400 510 L/s @ 250 Pa 1,013 Sound attenuators in accordance with Part C3 Section 18.01 Reference No's 1,014 SA01: 1500 X 500 X 1200 long c/w splitters 1,015 SA02: 1500 X 500 X 1200 long c/w splitters 1,016 SA03: Ø400 (2.0D) POD Cassette split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,018 - Indoor unit 1,021 - Condensate drain 1,022 - Outdoor unit 1,023 - Filters 1,024 - Wall mounted controller 1,025 - Inverter 1,026 Reference No's No Midwall split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,021 - Condensate drain 1,022 - Outdoor unit 1,023 - SCUI 03 3.5 kW (Cooling) 4.0 kW (Heating) No 1,028 SCUI 04 8.8 kW (Cooling) 5.0 kW (Heating) No Midwall split heat pump units, all in accordance with Part C.3 1,031 Section 14.02 of specification, complete with: 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter Reference No's 1,040 SMUI 03 - 3.5 kW (Cooling) 1.7 kW (Heating) No	1,008	-Unistrut Support Frame				
1,010 FAU 01: 2933 //sec @250 Pa c/w 48kW Electrical Heater 1,010 FAU 02: 4620 //sec @250 Pa c/w 75kW electrical Heater  Axial Fan complete with AVM's, electrical wiring & canvass 1,011 Collars in accordance with Part C.3 Section 08.02  Reference No's 1,012 FA01: Ø400 510 L/s @ 250 Pa  1,013 Sound attenuators in accordance with Part C3 Section 18.01  Reference No's 1,014 SA01: 1500 X 500 X 1200 long c/w splitters 1,015 SA02: 1000 X 500 X 1200 long c/w splitters 1,016 SA03: Ø400 (2.0D) POD  Cassette split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,018 - Indoor unit 1,021 - Condensate drain 1,022 - Outdoor unit 1,023 - Filters 1,024 - Wall mounted controller 1,025 - Inverter 1,026 Reference No's 1,021 SCUI 03: 3,5 kW (Cooling) 4,0 kW (Heating) 1,028 SCUI 02: 5,0 kW (Cooling) 5,0 kW (Heating) 1,030 SCUI 04: 8,8 kW (Cooling) 9,2 kW (Heating) 1,031 - Condensate drain 1,032 - Indoor unit 1,033 - Filters 1,031 - Interconnecting refrigeration piping 1,034 - Berticola wiring 1,035 - Condensate drain 1,036 - Condensate drain 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Interconnecting refrigeration piping 1,039 - Interconnecting refrigeration piping 1,039 - Interconnecting refrigeration piping 1,031 - Interconnecting refrigeration piping 1,032 - Indoor unit 1,033 - Interconnecting refrigeration piping 1,034 - Interconnecting refrigeration piping 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01: 3,5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02: 2,8 kW (Cooling) 3,2 kW (Heating) 1,042 SMUI 03: 4,5 kW (Cooling) 3,2 kW (Heating) 1,040 SMUI 03: 4,5 kW (Cooling) 3,2 kW (Heating) 1,041 SMUI 03: 4,5 kW (Cooling) 3,5 kW (Heating) 1,042 SMUI 03: 4,5 kW (Cooling) 5,0 kW (Heating) 1,042 SMUI 03: 4,5 kW (Cooling) 5,0 kW (Heating) 1,042 SMUI 03: 4,5 kW (Cooling) 5,0 kW (Heating)		Reference No's				
1,010 FAU 02: 4620 l/sec @250 Pa c/w 75kW electrical Heater  Axial Fan complete with AVM's, electrical wiring & canvass collars in accordance with Part C.3 Section 08.02  Reference No's 1,012 FA01 : Ø400 510 L/s @ 250 Pa  1,013 Sound attenuators in accordance with Part C3 Section 18.01  Reference No's 1,014 SA01 : 1500 X 500 X 1200 long c/w splitters 1,015 SA02 : 1000 X 500 X 1200 long c/w splitters 1,016 SA03 : Ø400 (2.0D) POD  Cassette split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,019 - Inderconnecting refrigeration piping 1,020 - Electrical wiring 1,021 - Condensate drain 1,022 - Outdoor unit 1,023 - Filters 1,024 - Wall mounted controller 1,025 - Inverter 1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating) 1,038 SCUI 02 5,0 kW (Cooling) 7,2 kW (Cooling) 7,2 kW (Heating) 1,039 SCUI 03 7,2 kW (Cooling) 7,2 kW (Heating) 1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating) 1,031 Section 14.02 of specification, complete with: 1,032 - Inderconnecting refrigeration piping 1,035 - Condensate drain 1,036 - Condensate drain 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Interconnecting refrigeration piping 1,031 - Interconnecting refrigeration piping 1,035 - Condensate drain 1,036 - Condensate drain 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Wall mounted controller 1,039 - Wall mounted controller 1,039 - Wall mounted controller 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) No	1.009		No			
Axial Fan complete with AVM's, electrical wiring & canvass 1,011 collars in accordance with Part C.3 Section 08.02  Reference No's 1,012 FA01: Ø400 510 L/s @ 250 Pa  1,013 Sound attenuators in accordance with Part C3 Section 18.01  Reference No's 1,014 SA01: 1500 X 500 X 1200 long c/w splitters 1,015 SA02: 1000 X 500 X 1200 long c/w splitters No 1,016 SA03: Ø400 (2.0D) POD  Cassette split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,019 - Interconnecting refrigeration piping 1,020 - Electrical wiring 1,021 - Condensate drain 1,022 - Filters 1,024 - Wall mounted controller 1,025 - Inverter 1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4.0 kW (Heating) 1,028 SCUI 02 5.0 kW (Cooling) 7.2 kW (Heating) No 1,029 SCUI 04 8,8 kW (Cooling) 7.2 kW (Heating) No Midwall split heat pump units, all in accordance with Part C.3 1,031 - Merconnecting refrigeration piping 1,032 - Indoor unit 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter Reference No's 1,040 SMMU 02 - 2,8 kW (Cooling) 1,7 kW (Heating) No			-			
1,011   collars in accordance with Part C.3 Section 08.02   Reference No's     1,012   FA01 : Ø400 510 Us @ 250 Pa	.,	7710 021 1020 7000 @ 200 1 4 5/11 7 5/11 5/104104 1104101				
Reference No's		Axial Fan complete with AVM's, electrical wiring & canvass				
1,012 FA01 : Ø400 510 L/s @ 250 Pa  1,013 Sound attenuators in accordance with Part C3 Section 18.01  Reference No's 1,014 SA01 : 1500 X 500 X 1200 long c/w splitters 1,015 SA02 : 1000 X 500 X 1200 long c/w splitters 1,016 SA03 : Ø400 (2.0D) POD  Cassette split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,018 - Indoor unit 1,019 - Interconnecting refrigeration piping 1,020 - Electrical wiring 1,021 - Condensate drain 1,022 - Uutdoor unit 1,023 - Filters 1,024 - Wall mounted controller 1,025 - Inverter  1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating) 1,028 SCUI 03 7.2 kW (Cooling) 7,2 kW (Heating) 1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating) No Midwall split heat pump units, all in accordance with Part C.3 1,031 Section 14.02 of specification, complete with: 1,032 - Interconnecting refrigeration piping 1,033 - Interconnecting refrigeration piping 1,034 - Indoor unit 1,037 - Filters 1,038 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter Reference No's SMUI 03 1,5 kW (Cooling) 1,7 kW (Heating) No	1,011	, ,				
1,012 FA01 : Ø400 510 L/s @ 250 Pa  1,013 Sound attenuators in accordance with Part C3 Section 18.01  Reference No's 1,014 SA01 : 1500 X 500 X 1200 long c/w splitters 1,015 SA02 : 1000 X 500 X 1200 long c/w splitters 1,016 SA03 : Ø400 (2.0D) POD  Cassette split heat pump units, all in accordance with Part C.3 1,017 Section 14.02 of specification, complete with: 1,018 - Indoor unit 1,019 - Interconnecting refrigeration piping 1,020 - Electrical wiring 1,021 - Condensate drain 1,022 - Uutdoor unit 1,023 - Filters 1,024 - Wall mounted controller 1,025 - Inverter  1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating) 1,028 SCUI 03 7.2 kW (Cooling) 7,2 kW (Heating) 1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating) No Midwall split heat pump units, all in accordance with Part C.3 1,031 Section 14.02 of specification, complete with: 1,032 - Interconnecting refrigeration piping 1,033 - Interconnecting refrigeration piping 1,034 - Indoor unit 1,037 - Filters 1,038 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter Reference No's SMUI 03 1,5 kW (Cooling) 1,7 kW (Heating) No	,					
1,013   Sound attenuators in accordance with Part C3 Section 18.01   Reference No's		Reference No's				
Reference No's   SA01 : 1500 X 500 X 1200 long c/w splitters   No   No   SA02 : 1000 X 500 X 1200 long c/w splitters   No   No   SA03 : Ø400 (2.0D) POD   No   No   Sa03 : Ø400 (2.0D) POD   No   Section 14.02 of specification, complete with:   1,011	1,012	FA01 : Ø400 510 L/s @ 250 Pa	No			
Reference No's   SA01 : 1500 X 500 X 1200 long c/w splitters   No   No   SA02 : 1000 X 500 X 1200 long c/w splitters   No   No   SA03 : Ø400 (2.0D) POD   No   No   Sa03 : Ø400 (2.0D) POD   No   Section 14.02 of specification, complete with:   1,011						
Reference No's   SA01 : 1500 X 500 X 1200 long c/w splitters   No   SA02 : 1000 X 500 X 1200 long c/w splitters   No   No   SA03 : Ø400 (2.0D) POD   No   No   Sa03 : Ø400 (2.0D) POD   No   Sa03 : Ø400 (2.0D) POD   No   Section 14.02 of specification, complete with:   1,019   Independent of the property of the prope						
1,014   SA01 : 1500 X 500 X 1200 long c/w splitters	1,013	Sound attenuators in accordance with Part C3 Section 18.01				
1,014   SA01 : 1500 X 500 X 1200 long c/w splitters		Reference Nois				
1,015   SA02 : 1000 X 500 X 1200 long c/w splitters   No   No   No    Cassette split heat pump units, all in accordance with Part C.3	1 01/		No			
1,016 SA03 : Ø400 (2.0D) POD  Cassette split heat pump units, all in accordance with Part C.3  1,017 Section 14.02 of specification, complete with: 1,018 - Indoor unit 1,029 - Electrical wiring 1,020 - Electrical wiring 1,021 - Condensate drain 1,022 - Outdoor unit 1,023 - Filters 1,024 - Wall mounted controller 1,025 - Inverter  1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating) 1,029 SCUI 02 5,0 kW (Cooling) 5,0 kW (Heating) 1,029 SCUI 03 7,2 kW (Cooling) 7,2 kW (Heating) 1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating) No  Midwall split heat pump units, all in accordance with Part C.3  1,031 Section 14.02 of specification, complete with: 1,032 - Indoor unit 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) No No SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) No		9 1	-			
Cassette split heat pump units, all in accordance with Part C.3  1,017 Section 14.02 of specification, complete with:  1,018 - Indoor unit  1,019 - Interconnecting refrigeration piping  1,021 - Condensate drain  1,022 - Outdoor unit  1,023 - Filters  1,024 - Wall mounted controller  1,025 - Inverter  1,026 Reference No's  1,027 SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating)  1,028 SCUI 02 5,0 kW (Cooling) 5,0 kW (Heating)  1,029 SCUI 03 7.2 kW (Cooling) 7,2 kW (Heating)  1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating)  Midwall split heat pump units, all in accordance with Part C.3  Section 14.02 of specification, complete with:  1,031 - Interconnecting refrigeration piping  1,035 - Condensate drain  1,036 - Outdoor unit  1,037 - Filters  1,038 - Wall mounted controller  1,039 - Inverter  Reference No's  Reference No's  1,040 SMUII 01 3.5 kW (Cooling) 1,7 kW (Heating)  No  No  No  No  No  No  No  No  No  N		ğ ,				
1,017	1,010	0.000 : \$2.00 (2.00) ( 0.00	NO			
1,017		Cassette split heat pump units, all in accordance with Part C.3				
1,018	1.017	· · · · · · · · · · · · · · · · · · ·				
1,019   Interconnecting refrigeration piping     1,020   Electrical wiring     1,021   Condensate drain     1,023   Filters     1,024   Wall mounted controller     1,025   Inverter     1,026   Reference No's     1,027   SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating)     1,028   SCUI 02 5,0 kW (Cooling) 5,0 kW (Heating)     1,029   SCUI 03 7,2 kW (Cooling) 7,2 kW (Heating)     1,030   SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating)     No     Midwall split heat pump units, all in accordance with Part C.3     Section 14.02 of specification, complete with:     1,031   Interconnecting refrigeration piping     1,034   Electrical wiring     1,035   Condensate drain     1,036   Outdoor unit     1,037   Filters     1,038   Wall mounted controller     1,040   SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)     No     No     1,040   SMUI 03 2,8 kW (Cooling) 3,2 kW (Heating)     No     No     No     No     SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)     No     SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)     No     No     No						
1,020						
1,021						
1,022		· ·				
1,023 - Filters 1,024 - Wall mounted controller 1,025 - Inverter  1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating) 1,028 SCUI 02 5,0 kW (Cooling) 5,0 kW (Heating) 1,029 SCUI 03 7,2 kW (Cooling) 7,2 kW (Heating) 1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating) No  Midwall split heat pump units, all in accordance with Part C.3 1,031 Section 14.02 of specification, complete with: - Indoor unit - Indoor unit - Indoor unit - Indoor unit - Filters - Outdoor unit - Filters - Wall mounted controller - Inverter - Reference No's SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) No						
1,024	1,023	- Filters				
1,026 Reference No's 1,027 SCUI 01 3.5 kW (Cooling) 4,0 kW (Heating) 1,028 SCUI 02 5,0 kW (Cooling) 5,0 kW (Heating) 1,029 SCUI 03 7,2 kW (Cooling) 7,2 kW (Heating) 1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating) No  Midwall split heat pump units, all in accordance with Part C.3 Section 14.02 of specification, complete with: 1,032 - Indeor unit 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) No 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) No 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No	1,024	- Wall mounted controller				
1,027   SCUI 01	1,025	- Inverter				
1,027   SCUI 01		D.C. N.I.				
1,028   SCUI 02 5,0 kW (Cooling) 5,0 kW (Heating)   No   1,029   SCUI 03 7,2 kW (Cooling) 7,2 kW (Heating)   No   1,030   SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating)   No    Midwall split heat pump units, all in accordance with Part C.3   1,031   Section 14.02 of specification, complete with:   1,032   Indoor unit   1,033   Interconnecting refrigeration piping   1,034   Electrical wiring   1,035   Condensate drain   1,036   Outdoor unit   1,037   Filters   1,038   Wall mounted controller   1,039   Inverter    Reference No's   1,040   SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)   1,041   SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating)   1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,043   No   1,044   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,045   No   1,046   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,047   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,048   No   1,049   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,040   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,040   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,041   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,043   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,044   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,045   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,046   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,047   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,047   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,048   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,049   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,040   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,040   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,040   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,041   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   1,043   SMUI 03 4,5 k			١			
1,029 SCUI 03 7,2 kW (Cooling) 7,2 kW (Heating) 1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating)  Midwall split heat pump units, all in accordance with Part C.3 Section 14.02 of specification, complete with: 1,032 - Indoor unit 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,030 SCUI 04 8,8 kW (Cooling) 9,2 kW (Heating)  Midwall split heat pump units, all in accordance with Part C.3  1,031 Section 14.02 of specification, complete with:  1,032 - Indoor unit  1,033 - Interconnecting refrigeration piping  1,034 - Electrical wiring  1,035 - Condensate drain  1,036 - Outdoor unit  1,037 - Filters  1,038 - Wall mounted controller  1,039 - Inverter  Reference No's  1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)  1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating)  1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)						
Midwall split heat pump units, all in accordance with Part C.3  1,031 Section 14.02 of specification, complete with:  1,032 - Indoor unit  1,033 - Interconnecting refrigeration piping  1,034 - Electrical wiring  1,035 - Condensate drain  1,036 - Outdoor unit  1,037 - Filters  1,038 - Wall mounted controller  1,039 - Inverter  Reference No's  1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)  1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating)  1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)			-			
1,031   Section 14.02 of specification, complete with:  1,032 - Indoor unit  1,033 - Interconnecting refrigeration piping  1,034 - Electrical wiring  1,035 - Condensate drain  1,036 - Outdoor unit  1,037 - Filters  1,038 - Wall mounted controller  1,039 - Inverter    Reference No's   SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)   No    1,041   SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating)   No    1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,043   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,044   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,045   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,046   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,047   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,048   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,049   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,040   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,041   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,044   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,045   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,046   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,047   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,048   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,049   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,040   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,041   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,042   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,044   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,045   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,046   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,047   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,048   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,048   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,048   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,048   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No    1,048   SMUI 03 4,5 kW (Cooli	1,030	SCOT 04 6,6 KW (Cooling) 9,2 KW (Healing)	INO			
1,031   Section 14.02 of specification, complete with: 1,032 - Indoor unit 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter    Reference No's   SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)   No   No   No   No   No   No   No   N		Midwall split heat nump units, all in accordance with Part C.3				
1,032 - Indoor unit 1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,033 - Interconnecting refrigeration piping 1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter    Reference No's   SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)   No   SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating)   No   No   No   SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)   No   No   No   No   No   No   No   N	-	·				
1,034 - Electrical wiring 1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) No 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,035 - Condensate drain 1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,036 - Outdoor unit 1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,037 - Filters 1,038 - Wall mounted controller 1,039 - Inverter  Reference No's 1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,038 - Wall mounted controller 1,039 - Inverter  Reference No's  1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,039 - Inverter    Reference No's						
Reference No's  1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating)  1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating)  1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating)  No						
1,040 SMUI 01 3.5 kW (Cooling) 1,7 kW (Heating) No 1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) No 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No	,					
1,041 SMUI 02 2,8 kW (Cooling) 3,2 kW (Heating) No 1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No						
1,042 SMUI 03 4,5 kW (Cooling) 5,0 kW (Heating) No			No			
			No			
1,043 SMUI 04 6,8 kW (Cooling) 7,0 kW (Heating)			No			
			No			
<del>` ' ' '                                </del>			<u> </u>	l		<del>                                     </del>

### PART C2.3.2 PAGE 2 OF 5

#### BILL No. 2 -OFFICE FLOORS, SA TOURISM REFURBISHMENT

Item	Description	Unit	Quantity	Tariff	Amount				
	DUCTING		,	-					
2,001	Galvanised sheet metal ducting - Internal Ducting								
	Rectangular ducting supported from concrete soffit.								
	Category 1	m²							
	Category 2	m²							
	Category 3	m²							
,									
	Extra over for rectangular fittings supported from concrete								
2,006	soffit.								
2,007	- Extra over fittings - Bends								
2,008	Category 1	No							
	Category 2	No							
	Category 3	No							
	<b>5</b> ,								
2,011	- Extra over fittings - Transformations								
	Category 1	No							
2,013	Category 2	No							
2,014	Category 3	No							
	•								
2,015	- Extra over fittings - Shoes								
	Category 1	No							
2,017	Category 2	No							
2,018	Category 3	No							
	•								
2,019	- Extra over fittings - Stop Ends								
	Category 1	No							
2,021	Category 2	No							
	Category 3	No							
2,023	- Extra over fittings - Spigots								
2,024	Round ducting Ø150	No							
2,025	Round ducting Ø200	No							
2,026	Round ducting Ø250	No							
	Flexible ducting								
2,028	Acoustic flexible ducting (1.5m long)								
2,029	Ø150	No							
2,030	Ø200	No							
2,031	Ø250	No							
TOTAL	TDANICEEDDED TO DILL No. 2 CLIMMADY DAGE FOR F								
TOTAL	TOTAL TRANSFERRED TO BILL No. 3 SUMMARY - PAGE 5 OF 5								

### PART C2.3.2 PAGE 3 OF 5

### BILL No. 2 - OFFICE FLOORS, SA TOURISM REFURBISHMENT

Item	Description	Unit	Quantity	Tariff	Amount
	Galvanised sheet metal ducting - External Ducting complete				
3,001	with cladding				
3,002	Rectangular ducting supported on concrete roof slab.				
	Category 2	m²			
3,004	Category 3	m²			
3,005	Category 4	m²			
	Extra over for rectangular fittings supported on concrete roof				
3,006	9 ,,				
	- Extra over fittings - Bends				
	Category 2	No			
	Category 3	No			
	Category 4	No			
0,0.0					
3.011	- Extra over fittings - Transformations				
	Category 2	No			
	Category 3	No			
	Category 4	No			
0,0					
3 015	- Extra over fittings - Shoes				
	Category 2	No			
	Category 3	No			
	Category 4	No			
3,010	oatogory 4	140			
TOTAL	TRANSFERDED TO BULL No. 2 CHIMANA DV. DA CE E CE E				
IUIAL	TRANSFERRED TO BILL No. 3 SUMMARY - PAGE 5 OF 5				

## PART C2.3.2 PAGE 4 OF 5

### BILL No. 2 - OFFICE FLOORS, SA TOURISM REFURBISHMENT

Item	Description	Unit	Quantity	Tariff	Amount
	GRILLES AND DIFFUSERS				
	Constant Volume Terminals, with plenum box,spigot and				
4,001	damper				
4,002	Fresh Air Grilles: 600 x 600 c/w Ø150 spigot connection	No			
	Fresh Air Grilles: 600 x 600 c/w Ø200 spigot connection	No.			
	Fresh Air Grilles: 600 x 600 c/w Ø250 spigot connection	No.			
4,005	Disc Valve : DIA 150	No.			
	CONTROL SYSTEM				
4,006	Seven day timer (c/w wiring etc. mounted in MCC's)	No.			
4,007	MCC for roof fans	No.			
TOTAL	TOTAL TRANSFERRED TO BILL No. 3 SUMMARY - PAGE 5 OF 5				

#### PART C2.3.2 PAGE 5 OF 5

#### BILL No. 2 - OFFICE FLOORS, SA TOURISM REFURBISHMENT

BROUGHT FROM PAGE	AMOUNT
Page 1	
Page 2	
Page 1 Page 2 Page 3 Page 4	
Page 4	

PART C2.3- BIL - QTY - SCH - July 02.xls VII.2.2/15

#### SUBJECT: PROVISIONAL AMOUNTS

#### PART C2.3.3 PAGE 1 OF 1

ITEM	DESCRIPTION	UNIT	QTY	TARRIF	AMOUNT
1 2 3	Allowance for Strip Out PC Sum for On Site Ducting Coordination Cranage	Lot Lot Lot			R10.000,00 R 15.000,00 R 50.000,00
	TOTAL TRANSFERRED TO ITEM 5.8.2 OF THE FORM OF TENDI	ĒR			R 75.000,00

VII.4/16

SUBJECT: SUMMARY OF TENDER SUMS

PART C.2.4 PAGE 1 OF 1

		BILL			
ITEM	No.	DESCRIPTION	FROM PART NO.	PAGE NO.	AMOUNT
1 2 3	2	Preliminaries HVAC - Ground Floor Provisional Amounts	C2.3.1 C2.3.2 C2.3.3	10 5 1	R 75.000,00

# PART SIX FINAL SUMMARY





#### OFFICE REFURBISHMENT FOR SA TOURISM

Principal Contract November 2018

#### PART SIX - FINAL SUMMARY

OFFICE REFURBISHMENT FOR SA TOURISM

FOR SA TOURISM BOARD

FINAL SUMMARY	Page No.	Alternative "A" (Subject to CPAP)	Alternative "B" (Fixed Price)
PART FOUR: SUMMARY OF PRELIMINARY & GENERAL	4-50	N/A	ZAR
PART FIVE: PROVISIONAL BILLS OF QUANTITIES	5-38	N/A	ZAR
SUBTO	OTAL - A	N/A	ZAR
HAYLETT ESCALATION			
(FORM OF TENDER ALTERNATIVE "A")		N/A	ZAR
PRICE FIXING			ZAR
(FORM OF TENDER ALTERNATIVE "B")		N/A	ZAIN
SUBTO	OTAL - B	N/A	ZAR
CONTINGENCIES			
Allow a contingency to be expended at the discretion of the Prir Agent and to be omitted in part or whole if not required.	ncipal	N/A	NIL
TOTAL (EXCLUDI	NG VAT)	ZAR	
ADD VA	Г @ 15%	ZAR	
TOTAL (INCLUDII (CARRIED TO FORM OF TENDER ALTERNATIVE "A, F		ZAR	
		TOTAL (EXCLUDING VAT)	ZAR
	ZAR		
(CARRIED TO FORM	ZAR		

# PART SEVEN ALTERNATIVE B



# THE JOINT BUILDING CONTRACTS COMMITTEE JBCC SERIES 2000

# FORM OF TENDER ALTERNATIVE B – FIXED PRICE

THIS DOCUMENT IS FOR USE WITH JBCC PRINCIPAL, NOMINATED/SELECTED AND MINOR WORKS AGREEMENTS

PROJECT	OFFICE REFURBISHMENT FOR SA TOURISM		
PRINCIPAL AGENT or AGENT	MWK ENGINEERING		
EMPLOYER	SA TOURISM BOARD		
TENDERER			
WORKS DESCRIPTION	PRINCIPAL CONTRACT		
TENDER CLOSING DATE	10th December 2018	TIME	12H00

#### Sealed submissions to be endorsed:

OFFICE REFURBISHMENT FOR SA TOURISM PRINCIPAL CONTRACT

and is to be delivered to the following address:

Supply Chain Sourcing Manager SA TOURISM BOARD 90 Protea Road, Bojanala House Sandton 2146

For Attention: Mrs Pulane Muligwa

#### Prepared by the JOINT BUILDING CONTRACTS COMMITTEE Inc

#### RECOMMENDED BY THE JBCC CONSTITUENTS

Association of Contract Project Managers
Association of South African Quantity Surveyors
Master Builders South Africa
South African Association of Consulting Engineers
South African Institute of Architects
South African Property Owners Association
Specialist Engineering Contracts Committee

#### FORM OF TENDER

in terms of a:

Principal Building Agreement
N/S Subcontract Agreement
Minor Works Agreement

<b>ALTERNATIVE B</b>	(FIXED	PRICE
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Principal Agent or Agent	MWK ENGINEERING					
Street address	139 WELTEVREDEN	139 WELTEVREDEN ROAD, NORTHCLIFF 2195				
Tel	+27 11 678 0875 <b>F</b> a	ax 086 598 3728	E-mail	henriette.nel@evolvepm.co.za		
Employer	SA TOURISM BOARD					
[N/S tender only] Contractor						
Tenderer						
Postal address						
			Code			
Tel		Fax	E-mail			
Project	OFFICE REFURBISHMEN	NT FOR SA TOURISM				
Works	PRINCIPAL CONTRACT					

#### 1.0 CONDITIONS OF TENDER

#### 1.1 PRINCIPAL, NOMINATED/SELECTED AND MINOR WORKS AGREEMENTS

- 1.1.1 The successful tenderer will be appointed in terms of the JBCC Principal Building Agreement, JBCC N/S Subcontract Agreement or JBCC Minor Works Agreement
- 1.1.2 Additions and alterations to such agreement are clearly detailed in the schedule of the agreement
- 1.1.3 All pre-tender information is set out in the Schedule. Variables requiring selection by the tenderer are to be clearly marked for later inclusion in the Schedule
- 1.1.4 Any conditions or qualifications that are appended by the tenderer, which are at variance with the conditions in this or the tender enquiry document, may invalidate the submitted tender
- 1.1.5 Details of the amount of item 2.4.2 of tender sum are to be clearly designated in the tender documentation provided by the principal agent or agent
- 1.1.6 This tender is to be submitted to the principal agent or agent at the street address stated above before the tender closing date and time stated on the cover hereof
- 1.1.7 Tenders will be opened in public.
- 1.1.8 The lowest or any tender will not necessarily be accepted

#### 1.2 NOMINATED / SELECTED SUBCONTRACT AGREEMENT ONLY

- 1.2.1 The contractor has been or will be appointed in terms of the JBCC Principal Building Agreement
- 1.2.2 Where the tenderer is advised of the appointment of the contractor after submission of this tender, the tenderer shall be entitled to make reasonable objection to being appointed by the contractor
- 2.0 This tender is submitted to the principal agent or agent who is authorised in terms of the Principal Building Agreement to instruct the contractor to appoint the successful tenderer as a nominated/selected subcontractor

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3.U			WULN

- 3.1 By the submission of this tender to the employer the tenderer offers and agrees to contract for, execute and complete the works/subcontract works for the tender sum as stated below
- 3.2 This tender shall remain in full legal force for one hundred and twenty five (125) calendar days from the tender closing date in the case of Principal or Nominated/Selected Contracts and thirty (30) calendar days for Minor Works Contracts. The tenderer accepts liability for damages as may be suffered by the employer should the tender validity period not be honoured

Document list or addendum identification
TENDER SUM COMPILATION
Tenderer's work including Prime Cost and Provisional Amounts
Budgetary allowances [amount stated by the principal agent or agent]
SUB TOTAL
Add tax on 2.4.3
TOTAL TENDER SUM inclusive of tax
Tender Sum in words

#### 3.5 TENDERER'S SELECTIONS (Fill in Yes, No, Nil etc as appropriate)

Selection Item			PBA	N/S	Minor	Addendums	N°/s
Preliminaries	Payment	Alternative A					
		Alternative B					
	Adjustment	Alternative A					
		Alternative B					
Security	Cash deposit						
	Variable construction guarantee Fixed construction guarantee						
Retention (Payment reduction)							
	Advance payment guarantee						
	Payment guara	ntee required				(Amount)	

Thus done and signed at	on
Name of signatory	Capacity of authorised signatory
As witness	for and on behalf of the tenderer who by signature hereof

## **ANNEXURE "A"**

**WAIVER OF CONTRACTOR'S LIEN** 

#### **ANNEXURE "A"**

#### WAIVER OF CONTRACTOR'S LIEN ("Waiver")

(To be granted by the Principal Contractor)

1	WAIVER OF CONTRACTOR'S LIEN ("Guarantee") by:		
1.1	[ ] (Note 1.1) ("Principal Contractor")		
	in favour of -		
1.2	[ ] (Note 1.2) ("Employer")		
2	DEFINITIONS		
	In this Waiver, unless the context requires otherwise -		
2.1	"Employer" shall mean the company identified in 1.2;		
2.2	"Principal Contractor" shall mean the building or other Contractor identified in 1.1;		
2.3	"Principal Agreement" shall mean the building, construction or other contract entered into or to be entered into between the Employer and the Principal Contractor in terms of which the Principal Contractor has been or shall be employed to complete the Works;		
2.4	"Works" shall mean [ ] (Note 2);		
2.5	"Site" shall mean the following site upon which the Works are to be completed in terms of the Principal Agreement [ ] (Note 3);		
2.6	words or phrases which appear herein and which have been defined in the Principal Agreement, shall have the meaning ascribed thereto in the Principal Agreement.		

#### 3 BASIS

3.2

It is the basis of this Waiver that -

3.1 The Employer is or will become the owner of the Site (or any part thereof), or is entitled to or shall become entitled to possession and/or occupation of the Site;

The Employer has entered into or may enter into the Principal Agreement in terms of which the Principal Contractor has been or shall be employed to complete the Works on the Site; and

3.3 The Principal Contractor has acquired or shall acquire a contractor's or other lien and/or right of retention (hereafter collectively referred to as "the lien") over and in respect of the Site (or any part thereof) in consideration of the erection thereon of the Works or any part thereof and the contract price outstanding therefor from time to time under the Principal Agreement.

#### 4 THE WAIVER AND UNDERTAKING

On the basis of the facts recorded in 3 the Principal Contractor -

4.1 waives in favour of the Employer, the lien or any other right of retention in respect of the Site and/or the Works arising under the Principal Agreement or otherwise whatsoever; and

4.2 undertakes, in favour of the Employer, upon termination of the Principal Agreement for any reason, or upon the date or dates stated in the relevant certificate(s) of Practical Completion on which Practical Completion of the Works, or any section thereof, shall have been achieved, to deliver occupation and possession of the Site (or the relevant section thereof in the case of sectional practical completion) to the Employer and no other person (unless otherwise directed by the Employer in writing) irrespective of whether or not the Employer is indebted to, or alleged to be indebted to, the Principal Contractor under the Principal Agreement and/or from any other cause whatsoever; and

4.3

acknowledges and agrees that the Waiver and Undertaking set forth in 4.1 and 4.2 does hereby take place under renunciation by the Principal Contractor of all benefits arising from the legal exception "ordinis seu excussionis" with the full force and meaning the Principal Contractor hereby declares itself to be fully acquainted; so that the Principal Contractor's claim under the Lien or any other right of retention in respect of the Site, the Works or any part thereof shall not come into competition or be entitled to come into competition with the Employer's rights of ownership, occupation and/or possession in regard to the Site, the Works or any part thereof and the Employer's rights of ownership, possession and/or occupation of the Site, the Works and/or any part thereof, shall at all times rank in priority to and have precedence and preference over the Principal Contractor's Lien and/or any other right of retention.

This waiver is without prejudice to the Employer's right to rely on Clause 8 (e) of the Tacit Hypothecs Act Cap. 12:01 i.e. that the contractor's common law lien has been abolished by statute

#### 5 **GENERAL**

5.1

The Principal Contractor hereby chooses domicilium citandi et executandi at the following address (at which address all process relating to this Waiver may be served and all notices and communications may be addressed to the Principal Contractor and all notices addressed to the Principal Contractor at the following address and delivered by hand to the following address shall be deemed to have reached the Principal Contractor on the date of delivery) -

[ ] (Note 4)

5.2

This document constitutes the sole record of the agreement between the Employer and the Principal Contractor in regard to the subject matter hereof.

5.3

Neither the Principal Contractor nor the Employer shall be bound by any express or implied term, representation, warranty, promise or the like not recorded herein, but the provisions hereof are without prejudice to such other rights as the Employer may have at law.

5.4	No addition to, variation, or unilateral or consensual cancellation of this Waiver shall be of any force or effect unless in writing and signed by or on behalf of the Employer and the Principal Contractor.			
5.5	No indulgence which may be granted to the Principal Contractor by the Employer shall constitute a waiver of any of the rights of the Employer which shall not thereby be precluded from exercising any right against the Principal Contractor which may have arisen in the past or which may arise in the future.			
5.6	If any provision of this Waiver should be found by a competent court to be wholly or partly invalid or unenforceable then this Waiver shall be severable in respect of the provision in question (to the extent that it is invalid, unenforceable or unlawful) and the remaining provisions of this Waiver shall remain in full force and effect.			
6	EXECUTION			
	SIGNED at [ ] on this [ ] day of [ ] 20 by (Note 5) (hereafter "signatory") on behalf of the Principal Contractor, which signatory -			
6.1	has been duly authorised to bind the Principal Contractor to this Waiver by virtue of the attached resolution; (Note 6) and			
6.2	in his personal capacity (that is not representative capacity) hereby warrants in favour of the Employer that he has been invested with the necessary authority to bind the Principal Contractor to this Waiver.			
	AS WITNESSES:			
	1.			
	2 The Signatory on behalf of the Principal Contractor.			

Note 1.1: Insert the name of the Principal Contractor.

Note 1.2: Insert the name of the Employer

Note 2: Insert a description of the Contract Works.

Note 3: Insert a description of the Site.

Note 4: Insert the Principal Contractor's full physical address (not post box number).

Note 5: Insert Signatory's name.

Note 6: Attach a certified copy of a resolution of the directors of the Principal Contractor

authorising the Signatory to sign this Waiver on behalf of the Principal Contractor.

Note 7: Each page must be initialed by the Signatory and the witnesses and 5 must also be

signed in full by the Signatory and witnesses.

## **ANNEXURE "B"**

DESIGN, MATERIALS AND WORKMANSHIP WARRANTY AND UNDERTAKING

#### **ANNEXURE "B"**

# **DESIGN, MATERIALS AND WORKMANSHIP WARRANTY AND UNDERTAKING** ("Agreement")

(To be provided by Selected Subcontractor)

## BETWEEN AN EMPLOYER AND A SUBCONTRACTOR SELECTED UNDER THE PRINCIPAL BUILDING AGREEMENT

This	Agreement is entered into by and between:		
("Em	ployer")		
and			
	(Note 1)		
("Suk	ocontractor")		
1	BASIS		
	It is the basis of this Agreement that -		
1.1	The Subcontractor has been invited to tender as a selected subcontractor, for the carrying out of the design, fabrication, construction, manufacture, supply, assembly and/or installation of [ ] (Note 2) (Subcontract Works") to the Employer's building project and/or works as more fully specified and defined in the Principal Contract hereafter referred to and which specification and definition are deemed to be incorporated herein, as a selected or nominated subcontractor to the principal contractor [ ] (Note 3) ("Principal Contractor") pursuant to the terms of certain Principal Building Agreement entered into by the Employer and the Principal Contractor on the [ ] (Note 4) ("Principal Contract") for the carrying out and completion of the Employer's aforementioned building project and/or works ("Works").		
1.2	The Subcontractor acknowledges that he has been furnished with a copy of, and is conversant with the terms of the Principal Contract.		
1.3	It is intended that this Agreement will come into force only if and when the subcontract agreement between the Principal Contractor and the Subcontractor ("Subcontract") for the performance of the Subcontract Works is concluded and signed by both or on behalf of both of those parties.		
1.4	The Employer has appointed [ ] (Note 5) ("Principal Agent") to be the Principal Agent for the Works.		
1.5	The Employer has appointed [ ] (Note 6) ("Agent") to be the consulting agent for the Subcontract Works.		
2	THE WARRANTY AND UNDERTAKING		

It is agreed between the Employer and the Subcontractor as follows -

This agreement shall come into force and be binding upon the Employer and the Subcontractor only if and when the Subcontract between the Subcontractor and the Principal Contractor is concluded and signed, and until then it shall be of no force or effect. 2.2 As the responsibility for the design of the Subcontract Works and the selection of the material therefor is that of the Subcontractor -2.2.1 the Subcontractor warrants and undertakes in favour of the Employer that -2.2.1.1 as the Subcontract Works or any part of the Subcontract Works has been or will be designed by him, he will exercise reasonable due and proper skill and care in such design and shall be responsible towards the Employer for the proper design thereof; and 2.2.1.2 as the materials or goods for the Subcontract Works has been or will be selected by the Subcontractor, he will exercise due and proper skill and care in such selection of materials or goods; and 2.2.1.3 the Subcontractor is suitably qualified and competent to carry out such design work and selection of materials and goods; 2.2.1.4 the Subcontractor shall comply with and satisfy any performance, specification or requirement insofar as such performance specification or requirement is included or referred to in the Subcontract: and 2.2.2 the Subcontractor undertakes and shall be obliged to pay and make good to the Employer all loss or damage which the Employer may suffer as a result of his noncompliance with the warranties set out in sub-clause 2.2.1 above. 2.3 Without limiting any other warranty and/or undertaking (including the warranties and undertakings in 2.2) by the Subcontractor in terms of this Agreement and, in addition thereto, the Subcontractor does hereby warrant and undertake in favour of the Employer that the Subcontract Works shall, for a period of [ 2.3.1 ] (Note 7) years, reckoned from the date of the issue by the Principal Agent under the Principal Contract of a Certificate of Practical Completion in respect of the Works which include the Subcontract Works as a whole, be free of any defects or damage, whether patent, latent or of whatsoever nature resulting from and/or occasioned by -2.3.1.1 faulty and/or defective design of or in connection with the Subcontract Works; and/or 2.3.1.2 incorrect selection of goods and/or materials in respect of the Subcontract Works; 2.3.1.3 the Subcontract Works failing to comply with any performance specification relative to design which has been included in the subcontract; and 2.3.2 the Subcontract Works shall for a period of [ ] (Note 8) years, reckoned from the date of issue by the Principal Agent under the Principal Contract of a Certificate of Practical Completion in respect of the Works which include the Subcontract Works as a whole, be free from any defects or damage, whether patent or latent or of whatsoever nature resulting from or occasioned by -2.3.2.1 defective workmanship and/or defective materials employed in connection with the Subcontract Works; and/or the Subcontract Works failing to comply with any performance specification 2.3.2.2 relative to workmanship and/or materials which has been included in the Subcontract;

2.1

- the Subcontractor shall at his cost (without limit to the amount of such cost) and without delay in each case, replace or repair the Subcontract Works, or any part thereof, which are found, during the period referred to in 2.3.1, to be defective and/or damaged as a result of and/or occasioned by defective design and/or defective selection of materials or goods and/or defective performance and/or which are found during the period referred to in 2.3.2 to be defective or damaged as a result of or occasioned by defective workmanship or defective materials or defective performance referred to in 2.3.2; provided, however, that the undertaking and warranty set forth in 2.3.1, 2.3.2 and this 2.3.3 shall be subject to the following terms and conditions -
- 2.3.3.1 the Subcontractor's liability under the warranty and undertaking as set forth in this clause 2.3 shall be limited to the obligation at its expense to repair or replace the defective Subcontract Works, as set forth in 2.3.1, 2.3.2 and/or 2.3.3 and shall therefore not extend to consequential loss or damage whatsoever and howsoever it might arise; provided, however, that the decision whether to repair or replace such Subcontract Works shall be that of the Principal Agent on behalf of the Employer;
- 2.3.3.2 the Subcontractor shall at all times while it is liable to the Employer hereunder, be afforded adequate and reasonable access to the Subcontract Works and any fault or defect which may have manifested itself therein;
- 2.3.3.3 the Subcontractor shall be entitled, in rectifying defective Subcontract Works hereunder, to deviate from original design and/or method of repair should such deviation prove to be more suitable and effective and be approved by the Principal Agent.

#### 3 GENERAL

- 3.1 For the purpose of this Agreement, the terms "Employer". "Principal Agent", "Agent" and "Principal Contractor" shall mean the persons indicated as such in the Principal Contract documents and in the event of -
- 3.1.1 no agent being appointed by the Employer, all references to the agent in this Agreement shall for all purposes be deemed to be deleted; and
- 3.1.2 no Principal Contractor being indicated as aforesaid, the term "Principal Contractor" shall mean the person to be appointed by the Employer as Principal Contractor.
- 3.2 Except to the extent set out herein, nothing contained in this Agreement shall create any privity of contract between the Employer and Subcontractor in respect of the Principal Contract or the Subcontract, and the parties hereto expressly agree that this Agreement contains the whole contract between the parties and that there are no representations, warranties or terms hereof which are not expressly set out herein.
- 3.3 The rights of the Employer under this Agreement shall in no way be affected or diminished if the Employer at any time obtains additional warranties, undertakings, suretyships, guarantees, securities or indemnities in connection with the obligations of the Subcontractor hereunder.
- Upon receipt by the Subcontractor of any written notice from the Employer stating that the Subcontractor is in default of the Obligations and that the Subcontractor is consequently obliged to perform any Obligation to the Employer, in terms of this Agreement, the Subcontractor shall, notwithstanding that the Subcontractor may dispute its liability to make such payment or performance, immediately perform such obligation or pay such amount, in cash, without set-off or deduction of any nature whatever, into the bank account stipulated by the Employer in writing for this purpose. The Subcontractor shall not be entitled to withhold such payment or performance even if the Subcontractor contends that the Subcontractor is not obliged to make such payment or performance on the basis of any fact or allegation which would constitute a legal or equitable defence to or discharge of any claim by the Employer under this Agreement. Notwithstanding the aforegoing provisions of this 3.4, this 3.4 shall not

be construed as preventing the Subcontractor from reclaiming any amount paid or any other performance rendered by it under protest pursuant to a claim by the Employer in terms of this 3.4 if the Subcontractor contends that it was not obliged to pay such amount or render such performance. The reference in this clause 3.4 to "Obligations" are the debts, undertakings and obligations of the Subcontractor arising under this Agreement.

3.5 The Subcontractor hereby chooses domicilium citandi et executandi at the following address (at which address all process relating to this Agreement may be served and all notices and communications may be addressed to the Subcontractor and all notices addressed to the Subcontractor at the following address and delivered by hand to the following address shall be deemed to have reached the Subcontractor on the date of delivery)

[ ] (Note 9)

- As part of the Subcontractor's liability in terms hereof, the Subcontractor shall pay the amount of any costs, charges and expenses of whatever nature incurred by the Employer in securing or endeavouring to secure fulfilment of the Subcontractor's obligations hereunder, including, without limitation, collection commission and legal costs on the scale as between an attorney and his own client, insurance premiums, storage charges, costs and expenses of valuation, maintenance, advertising, realisation (including agent's and auctioneer's commissions and other charges and disbursements), stamp duties, taxes and other fiscal charges.
- 3.7 This document constitutes the sole record of the Agreement between the Employer and the Subcontractor in regard to the subject matter hereof.
- 3.8 Neither the Employer nor the Subcontractor shall be bound by any express or implied term, representation, warranty, promise or the like not recorded herein, but the provisions hereof are without prejudice to such other rights as the Employer may have at law.
- 3.9 No addition to, variation, or unilateral or consensual cancellation of this Agreement shall be of any force or effect unless in writing and signed by or on behalf of the Employer and the Subcontractor.
- 3.10 No indulgence which may be granted to the Subcontractor by the Employer shall constitute a waiver of any of the rights of the Employer which shall not thereby be precluded from exercising any right against the Subcontractor which may have arisen in the past or which may arise in the future.
- 3.11 If any provision of this Agreement should be found by a competent court or arbitrator to be wholly or partly invalid or unenforceable then this Agreement shall be severable in respect of the provision in question (to the extent that it is invalid, unenforceable or unlawful) and the remaining provisions of this Agreement shall remain in full force and effect.

#### 4 ARBITRATION

- 4.1 Any disputes arising from or in connection with this Agreement shall be finally resolved in accordance with the rules of the Botswana Institute of Arbitrators by an arbitrator or arbitrators appointed by association.
- 4.2 Each party to this Agreement -
- 4.2.1 expressly consents to any arbitration in terms of the aforesaid rules being conducted as a matter of urgency;
- 4.2.2 irrevocably authorises the other to apply, on behalf of all parties to such dispute, in writing, to the secretariat of the Association of Arbitrators for any such arbitration to be conducted on an urgent basis.

5 <b>E</b>	EXE	CUTIO	V			
5.1		This Agreement is signed and executed on behalf of the Subcontractor by [ ] (Note 10) under the authority of a resolution of the board of directors or the members for the Subcontractor (a certified copy of which is attached) (Note 11).				
5.2			done and signed at [ nce of the undersigned witne		] day of [	] 20 in the
		AS W	ITNESSES:			
		1.				
					on behalf of the Sub	ocontractor
		2.				
5.3			done and signed at [ of the undersigned witnesses		] day of [	] 20 in the pres-
		AS W	ITNESSES:			
		1.				
						<del> </del>
					on behalf of the Em	pioyer
		2.	(Note 12)			
NOTES	<b>S</b> :					
Note 1	-		Insert the name and registra	ation number of	f the Subcontractor.	
Note 2	-		Describe the Subcontract W	orks.		
Note 3	-		Insert Principal Contractor's name.			
Note 4	-		Insert date of last signature of the Principal Contract.			
Note 5	-		Insert name of Principal Agent appointed to the project in respect of the Works.			
Note 6	-		Insert name of Agent appointed to the project.			
Note 7	-		Insert period of cover under the design warranty.			
Note 8	-		Insert period of cover under the materials and workmanship warranty.			
Note 9	-		Insert Subcontractor's physical (not post box number) address.			
Note 10	0 -		Insert name of signatory authorised to sign this Agreement on behalf of the Subcontractor.			
Note 11	1 -		Certified copy of the resoluti	on referred to	in 5.1 must be attach	ed.

Note 12 -

The witnesses and signatories must initial each page and sign 5.2 and 5.3 in full.

# **ANNEXURE "C"**

FORM OF PARENT COMPANY GUARANTEE (TO BE PROVIDED BY THE PRINCIPAL CONTRACTOR)

#### **ANNEXURE "C"**

FORM OF PARENT COMPANY GUARANTEE
(TO BE PROVIDED BY THE PRINCIPAL CONTRACTOR)

[insert name of Guarantor]			
and			
[Employer]			
PRINCIPAL CONTRACTOR PARENT COMPANY GUARANTEE  IN RESPECT OF THE			
IN RESPECT OF THE			
[Project]			

This Guar	ntee is given on the [ ] 20		
by			
1	[ ] (Note 1) of [whose registered office is at [ ]] (Note 2) ("Guarantor")		
to			
2	of [ ] (Note 3) ("Employer") which such defined term shall include any person to whom the Employer's rights and obligations are ceded, assigned or otherwise transferred, as referred to in the Construction Contract (as defined below).		
3	BASIS		
	It is the basis of this Guarantee that -		
3.1	[ ] (Note 4) ("Contractor") is about to enter or has entered into a contract with the Employer in terms of which the Contractor has undertaken to, or shall undertake to execute and complete the following work [ ] (Note 5) (as may be amended from time to time or as ceded, assigned or otherwise transferred in accordance with the terms thereof) ("Principal Building Agreement");		
3.2	the Guarantor hereby acknowledges that it is aware of all the provisions of the Principal Building Agreement which are deemed to be incorporated into this Guarantee;		
3.3	the Guarantor being the ultimate holding company of or [the beneficial owner of [ ] (Note 6) per cent of the issued share capital of the Contractor warrants that it has a material interest in binding itself in terms of this Guarantee which is entered into for its benefit;		
3.4	the Guarantor hereby agrees to guarantee all the obligations of the Contractor under the Principal Building Agreement in the terms set forth herein; and		

3.5

capitalised words and expressions in this Guarantee shall, unless otherwise defined, have the same meaning given to them in the Principal Building Agreement.

#### 4 THE GUARANTEE

4.1

In consideration of the Employer entering into the Principal Building Agreement, the Guarantor, for itself, its successors and assigns, hereby irrevocably and unconditionally -

4.1.1

guarantees to the Employer as principal obligor or principal debtor the due, proper and punctual performance by the Contractor, its successors and assigns, of all the terms, conditions, obligations, warranties and undertakings of the Contractor under or pursuant to the Principal Building Agreement (including, without limitation, the payment of monies) ("Guaranteed Obligations"); and

4.1.2

undertakes to indemnify and keep indemnified the Employer against any and all losses, damages, expenses, liabilities, claims, costs or proceedings which the Employer may suffer or incur by reason of any failure by the Contractor to perform or fulfil any of the Guaranteed Obligations,

provided always that the Guarantor's liability under this Guarantee shall not, save to the extent of any costs reasonably and properly incurred (including legal fees) by the Employer in connection with the pursuit, enforcement or preservation of any of its rights under this Guarantee and without prejudice to clause 4.12 exceed that of the Contractor under the Principal Building Agreement determined on the basis that the Principal Building Agreement is valid, enforceable and has full force and effect.

4.2

This Guarantee is to be a continuing security which shall remain in full force and effect notwithstanding any intermediate payment or settlement of account, giving of notice of determination by the Guarantor or other matter or thing whatsoever and in particular the intermediate performance by the Contractor or any other person of the whole or any part of the Guaranteed Obligations.

4.3

This Guarantee is to be in addition and without prejudice to and shall not merge with any other right, remedy, guarantee, indemnity or security which the Employer may now or hereafter hold in respect of the Guaranteed Obligations (or any part thereof) and this Guarantee may be enforced against the Guarantor without the Employer first having recourse to any other right, remedy, guarantee, indemnity or security held or available to it.

4.4

The liability of the Guarantor under this Guarantee shall not be discharged, diminished or in any way affected as a result of -

4.4.1

any time or indulgence or waiver given to, or composition made with the Contractor or any other person (including any company forming the Contractor);

4.4.2

any amendment, change or modification to the Principal Building Agreement or referred to in the Principal Building Agreement (including without limitation any Variation (as defined therein) so that any such amendment, change or modification shall be binding upon the Guarantor in all circumstances notwithstanding that it may increase or otherwise affect the liability or obligations of the Guarantor under this Guarantee;

4.4.3

the taking, variation, compromise, renewal or release or refusal or neglect to perfect or enforce any right, remedies or securities against the Contractor or any other person (including any company forming the Contractor);

4.4.4

any other guarantee, indemnity, charge or other security or right or remedy held by or available to the Employer being or becoming wholly or in part void, voidable or unenforceable on any ground whatsoever or by the Employer from time to time dealing with, exchanging, varying, realising, releasing or failing to perfect or enforce any of the same:

4.4.5	the Guarantor, the Contractor becoming insolvent, going into judicial management or liquidation or having an administrator appointed or the occurrence of any analogous events;
4.4.6	the giving by the Employer or the Contractor of any consent to any cession, assignment or the making of any cession assignment or transfer of the Principal Building Agreement or any part thereof;
4.4.7	the cession, assignment or transfer of the Principal Building Agreement to any other person or body corporate in accordance with the terms thereof;
4.4.8	the release of any co-surety other than as a result of a written agreement between the Employer and the co-surety in accordance with clause 4.11 hereof; and
4.4.9	any other act, omission, circumstance, matter or thing which but for this provision might operate to release or otherwise exonerate the Guarantor from its obligations under this Guarantee whether in whole or in part.
4.5	This Guarantee shall continue in full force and effect notwithstanding -
4.5.1	the fact that any purported obligation of the Contractor to the Employer (or any security therefor) becomes wholly or partly void, invalid or unenforceable for any reason whether or not known to the Employer or the Guarantor;
4.5.2	any incapacity or any change in the status, control, ownership or constitution of, or any amalgamation or reconstruction of, the Guarantor, the Contractor or any other matter whatsoever.
4.6	If, notwithstanding clause 4.2, this Guarantee is determined for any reason, the Guarantor will remain liable in respect of all Guaranteed Obligations which remain to be fulfilled or performed as at the date of determination

4.7 This Guarantee shall constitute the primary obligations of the Guarantor and the Employer shall not be obliged to make any demand on the Contractor before enforcing its rights against the Guarantor under this Guarantee. 4.8 Subject to clause 4.9, until all the Guaranteed Obligations have been fulfilled and performed in full, the Guarantor will not -4.8.1 have any right of recourse to or otherwise be entitled to share in any right, security or monies held, received or receivable by the Employer or be entitled to any right of contribution in respect of any payment made by the Guarantor hereunder; 4.8.2 exercise or enforce any of its rights of recourse and indemnity against the Contractor or any co-surety; 4.8.3 following a claim being made on the Guarantor hereunder, demand or accept repayment of any monies due from the Contractor to the Guarantor or claim any set-off or counterclaim against the Contractor; 4.8.4 claim or prove in a liquidation or other insolvency or analogous proceedings of the Contractor or any co-surety in competition with the Employer. 4.9 Following the making of a demand under this Guarantee, the Guarantor will

Obligations.

whether or not the Contractor is then in default in relation to such Guaranteed

(at its own cost) promptly take such of the steps or action as are referred to in clause 4.8 above as the Employer may from time to time stipulate which shall, without limitation, include the actions of proving a claim in the insolvency, liquidation or analogous proceedings of the Contractor provided that any payment or dividend to which the Guarantor may become entitled is hereby ceded to the Employer as additional security to and without affecting the Guarantor's liability under this Guarantee.

4.10

The Guarantor shall promptly pay to the Employer an amount equal to any set-off proof or counterclaim in fact exercised by it against the Contractor or any co-surety and shall hold in trust for and promptly pay or transfer to the Employer any payment or distribution or benefit of security in fact received by it whether arising as a result of a breach of clause 4.8 or compliance with directions given under clause 4.9.

4.11

The Guarantor and the Employer agree that -

4.11.1

any release or waiver by the Employer of the Guarantor's liabilities hereunder shall not be valid unless in writing and such release also expressly releases each co-surety (if any) from its respective guarantee; and

4.11.2

any release or waiver by the Employer of any co-surety's liabilities under its guarantee shall not be valid unless in writing and such release also expressly releases the Guarantor from this Guarantee.

4.12

All payments made by the Guarantor under this Guarantee shall be made in full without set-off or counterclaim and not subject to any condition and free and clear of and without deduction or withholding for or on account of any taxes, duties, charges, fees, deductions, or restrictions whatsoever. If any such deduction or withholding from any such payment is required by law, then the Guarantor will promptly pay to the Employer an additional amount being the amount required to procure that the aggregate net amount received by the Employer will equal the full amount which would have been received by it had no such deduction or withholding been made.

4.13

The Guarantor represents and warrants to the Employer that it is duly incorporated with power to execute and to perform its obligations under this Guarantee, that each of its obligations hereunder are valid, binding and enforceable at law, that it has taken all necessary corporate or other action to authorise such execution and performance, and that such execution and performance will not contravene any law or regulation to which it is subject or cause it to breach any provision of its constitutional documents or any other agreement binding on it.

4.14

The powers which this Guarantee confers on the Employer are cumulative, without prejudice to its powers under the general law, and may be exercised as often as the Employer thinks appropriate. The Employer may, in connection with the exercise of its powers, join or concur with any person in any transaction, scheme or arrangement whatsoever.

4.15

If the Employer reasonably considers that any amount paid by the Guarantor in respect of the Guaranteed Obligations is capable of being avoided or set aside or reduced on the liquidation or administration of the Guarantor or otherwise under any applicable law, then for the purposes of this Guarantee such amount shall not be considered to have been paid.

4.16

Any settlement or discharge between the Employer and the Contractor and/or the Guarantor shall be conditional upon no security or payment to the Employer by the Contractor or the Guarantor or any other person being avoided or set aside or ordered to be refunded or reduced by virtue of any provision or enactment relating to bankruptcy, insolvency, liquidation or any analogous event for the time being in force and accordingly (but without limiting the Employer's other rights hereunder) the Employer shall be entitled to recover from the Guarantor the value which the Employer has placed upon such security or the amount of any such payment as if such settlement or discharge had not occurred.

4.17

No failure or delay by the Employer in exercising any right, power or privilege under this Guarantee shall operate as a waiver thereof nor shall any single or partial exercise of any right, power or privilege preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

4.18

A waiver given or consent granted by the Employer under this Guarantee will be effective only if given in writing and then only in the instance and for the purpose for which it is given.

4.19

If any provision of this Guarantee is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions shall not be affected or impaired in any way.

4.20

The Employer may cede, assign or otherwise transfer this Guarantee or any right, interest, benefit arising hereunder to any other person or body corporate on such terms as it sees fit without the consent of the Guarantor and without affecting or changing, or releasing the Guarantor from its obligations under this Guarantee.

4.21

The Guarantor shall not assign or transfer any of its obligations under this Guarantee without the consent of the Employer.

4.22

Any notice, demand or other communication to be served under this Guarantee may be served upon a party hereto by registered or certified post or by delivering the same by hand to the party to be served at its address shown above or at such other address as it may from time to time notify in writing to the other party for the purpose of this clause 4.22.

4.23

A notice or demand served by registered or certified post or sent by hand shall be deemed to have been served at the time of delivery unless served after 4.00 pm at the place of intended receipt in which case it shall be deemed served at 8.00 am on the following business day. For the purposes of this clause 4.23 "business day" means a day on which commercial banks are open for business in Botswana.

4.24

This Guarantee and the undertakings herein contained shall be binding upon the successors and assigns of the Guarantor and are provided for and shall enure to the benefit of the Employer, its successors or any person to whom its rights or interests hereunder are ceded, assigned or otherwise transferred.

4.25

Upon receipt by the Guarantor of any written notice from the Employer stating that the Contractor is in default of any of the Guaranteed Obligations and that the Guarantor is consequently obliged to perform any Guaranteed Obligation or make any payment to the Employer in terms of this Guarantee, the Guarantor shall, notwithstanding that the Guarantor may dispute its liability to perform such Guaranteed Obligation or make such payment, immediately

perform such Guaranteed Obligation or pay such amount, in cash, without set-off or deduction of any nature whatever, into the bank account stipulated by the Employer in writing for this purpose. The Guarantor shall not be entitled to withhold such payment or performance even if the Guarantor contends that the Guarantor is not obliged to make such payment or performance on the basis of any fact or allegation which may constitute a legal or equitable defence to or discharge of any claim by the Employer under this Guarantee and/or the Construction Contract. Notwithstanding the aforegoing provisions of this clause 4.25, this clause 4.25 shall not be construed as preventing the Guarantor from subsequently reclaiming in any action or proceedings brought by it against the Employer any amount paid or any other performance rendered by it under protest pursuant to a claim by the Employer in terms of this clause 4.25 if the Guarantor contends that it was not obliged to pay such amount or render such performance.

4.26

The Guarantor shall use its best endeavours to procure the fulfilment by the Contractor of the Guaranteed Obligations and shall refrain from taking or permitting to be taken any action which may prevent, hamper or detrimentally affect the fulfilment by the Contractor of its obligations under the Principal Building Agreement.

4.27

This Guarantee shall be governed by and construed in accordance with the laws of Botswana and the parties hereto hereby submit to the exclusive jurisdiction of the Botswana Courts.

4.28

Solely for the sake of clarity and without prejudice to or limitation of the aforegoing provisions of this Guarantee, it is recorded that the Guarantor renounces the benefits of all otherwise applicable legal immunities, defences and exceptions to the extent that they would be applicable in the absence of this renunciation, including the defences and exceptions of "cession of actions", "excussion", "division", "du duobus vel pluribus reis debendi", "non cause debiti", "errore calculi", "no value received" and "revision of accounts", with the meaning and effect of all of which the Guarantor declares itself to be fully acquainted.

4.29

The costs of negotiation, preparation, execution, modification, release and/or enforcement or attempted enforcement of this Guarantee or preservation of the Employer's rights under this Guarantee together with any present or future stamp duty or other taxes or duties that are payable with respect thereto which may be imposed by any competent jurisdiction in connection with the execution or enforcement of this Guarantee shall be borne by the Guarantor.

IN WITNESS whereof this Guarantee has been executed on the date first above written.

SIGNATORIES TO THE GUARANTEE		
Executed by (Note 7)		
acting by its duly authorised signatory	)	
(Note 8)		

Director

Director/Secretary

#### **Completion Notes**

Note 1	-	Insert the name and registration number of the parent company issuing this Guarantee as Guarantor.
Note 2	-	Insert the full physical (not post box) address of the Guarantor.
Note 3	-	Insert the full physical (not post box) address of the Employer.
Note 4	-	Insert the name and registration number of the company(ies) undertaking the construction work under the Principal Building Agreement.
Note 5	-	Insert a comprehensive description of the works to be completed in terms of the Principal Building Agreement referred to in Note 4.
Note 6	-	Insert the percentage of shares held by the Guarantor in the issued share capital of the Contractor.
Note 7	-	Insert the full name of the Guarantor.
Note 8	-	Insert the name of the signatory on behalf of the Guarantor.

# **ANNEXURE "D"**

**CONSTRUCTION GUARANTEE** 

#### **ANNEXURE "D"**



#### **CONSTRUCTION GUARANTEE**

for use with the JBCC Principal Building Agreement

GUARANTOR DETAILS AN	ND DEFINITIONS	
Guarantor means _		
Physical address		
Representative _		_Capacity
Representative _		_Capacity
Employer means _		
Contractor means _		
Principal Agent means _		
Works means _		
Site means _		
Agreement means the JBCC S	Series 2000 Principal Building Agreer	nent
Contract Sum means		
Amount in words		
Guaranteed Sum means the m	naximum aggregate amount of	
Amount in words		
Construction Guarantee form	(Insert Variable or Fixed)	
Guarantee expiry date means		

#### 1.0 VARIABLE CONSTRUCTION GUARANTEE

1.1 Where a variable Construction Guarantee in terms of the Agreement has been selected this 1.0 with 3.0 to 13.0 shall apply The Guarantor's liability shall be limited to the diminishing amounts of the Guaranteed Sum as follows:

	GUARANTOR'S LIABILITY	PERIOD OF LIABILITY
1.1.1	Maximum Guaranteed Sum (not exceeding 10.0% of the contract sum) in the amount of :	From and including the date of issue of this Construction Guarantee and up to and including the date of the interim payment certificate certifying in excess of 50% of the contract sum
	Amount in words:	
1.1.2	Reducing to the Guaranteed Sum (not exceeding 6.0% of the contract sum) in the amount of:	From and including the day after the date of the aforesaid interim payment certificate and up to and including the date of the certificate of practical completion or last practical completion certificate where there are sections
	Amount in words:	
1.1.3	Reducing to the Guaranteed Sum (not exceeding 4.0% of the contract sum) in the amount of:	From and including the day after the date of the last certificate of practical completion and up to and including the date of the certificate of final completion or last final completion certificate where there are sections
	Amount in words:	
1.1.4	Reducing to the Guaranteed Sum (not exceeding 2.0% of the contract sum) in the amount of:	From and including the day after the date of the certificate of final completion and up to and including the date of the final payment certificate where payment is due to the Contractor, whereupon this Construction Guarantee shall expire. Where the final payment certificate reflects payment due to the Employer, this Construction Guarantee shall expire upon payment of the full amount certified
	Amount in words:	

1.2

respect of any claim received by the Guarantor during the period in question

For avoidance of doubt the Guarantor's liability limits set out in 1.1.1 to 1.1.4 shall apply in

## 2.0 FIXED CONSTRUCTION GUARANTEE

2.1 Where a fixed Construction Guarantee in terms of the Agreement has been selected this 2.0 with 3.0 to 13.0 shall apply. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum as follows:

GUARANTOR'S LIABILITY	PERIOD OF LIABILITY
Maximum Guaranteed Sum (not exceeding 5.0% of the contract sum) in the amount of :	From and including the date of issue of this Construction Guarantee and up to and including the date of the only practical completion certificate or the last practical completion certificate where there are sections upon which this Construction Guarantee shall expire
Amount in words:	

- 3.0 The Guarantor hereby acknowledges that:
- 3.1 Any reference in this Guarantee to the Agreement is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship
- 3.2 Its obligation under this Guarantee is restricted to the payment of money
- 4.0 Subject to the Guarantor's maximum liability referred to in 1.0 or 2.0, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
- 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Principal Agent has not been made in terms of the Agreement and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2
- A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) calendar days has elapsed since the first written demand in terms of 4.1 and that the sum certified has still not been paid therefore the Employer calls up this Construction Guarantee and demands payment of the sum certified from the Guarantor
- 4.3 A copy of the payment certificate which entitles the Employer to receive payment in terms of the Agreement of the sum certified in 4.0

- 5.0 Subject to the Guarantor's maximum liability referred to in 1.0 or 2.0, the Guarantor undertakes to pay the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Construction Guarantee stating that:
- 5.1 The Agreement has been cancelled due to the Contractor's default and that the Construction Guarantee is called up in terms of 5.0. The demand shall enclose a copy of the notice of cancellation; or
- 5.2 A provisional sequestration or liquidation court order has been granted against the Contractor and that the Construction Guarantee is called up in terms of 5.0. The demand shall enclose a copy of the court order
- 6.0 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4.0 and 5.0 shall not exceed the Guarantor's maximum liability in terms of 1.0 or 2.0
- 7.0 Where the Guarantor is a registered insurer and has made payment in terms of 5.0, the Employer shall upon the date of issue of the final payment certificate submit an expense account to the Guarantor showing how all monies received in terms of the Construction Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Construction Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund
- 8.0 Payment by the Guarantor in terms of 4.0 or 5.0 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor
- 9.0 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer deems fit and the Guarantor shall not have the right to claim his release from this Construction Guarantee on account of any conduct alleged to be prejudicial to the Guarantor
- 10.0 The Guarantor chooses the physical address as stated above for all purposes in connection herewith
- 11.0 This Construction Guarantee is neither negotiable nor transferable and shall expire in terms of either 1.1.4 or 2.1, or payment in full of the Guaranteed Sum or on the Guarantee expiry date, whichever is the earlier, where after no claims will be considered by the Guarantor. The original of this Construction Guarantee shall be returned to the Guarantor after it has expired
- 12.0 This Construction Guarantee, with the required demand notices in terms of 4.0 or 5.0, shall be regarded as a liquid document for the purpose of obtaining a court order

Signed at	 Date	
Guarantor's Signatory 1	 Guarantor's Signatory 2	
Witness	Witness	
•		

Guarantor's seal Or stamp

## **ANNEXURE "E"**

**DECLARATION OF INSURANCE** 

## **ANNEXURE "E"**

## **DECLARATION OF INSURANCE**

I/We, hereby declare that the Insurance Policies enumerated below have been effected by me/us in accordance with Special Conditions of Contract applicable to Contract Order No.:

Cover Effected	Clause No	Insurer No.	Policy Date	Expiry	
Contract Works Insurance	3.1				
2. Supplementary Insurance	3.2				
3. Public Liability Insurance	3.3				
4. Support Insurance	3.4				
Confirmation from the Insurers of current cover is attached.					
SIGNATURE:					
FOR AND ON BEHALF OF:					
OFFICIAL CAPACITY:					
DATE					

# **ANNEXURE "F"**

**ADVANCE PAYMENT GUARANTEE** 



## Advance Payment Guarantee for use with the JBCC Principal Building Agreement or **N/S Subcontract Agreement**

GUA	RANTOR DET	TAILS AND DEFINITIONS
Guara	ntor means	
Physic	al address	
Guara	ntor's signatory	1 Capacity
Guara	ntor's signatory 2	2 Capacity
Emplo	yer means	
	ent means actor or N/S Sub	ocontractor)
Princip	al Agent means	
Works	means	
Site m	eans	
Agreer	ment means 1 2	JBCC Principal Building Agreement  JBCC Nominated / Selected Subcontract Agreement (insert 1 or 2)
Guarai	nteed Advance F	Payment Sum means (amount)
Amour	nt in words	
Guara	ntee expiry date	means (date)
	EMENT DETAIL pal Agent issues:	
1.0	ADVANCE	PAYMENT GUARANTEE
1.1	The particulars	s of the recoupment of the Guaranteed Advance Payment Sum are set out in the following schedule:
		Recoupment period (no. of months)
		Recoupment period commencement (start month)
		Monthly recoupment (amount)
		Note: Where the recoupment amounts and/or periods are irregular a schedule of recoupment amounts and dates is to be attached
1.2	The Guaranto Payment Sum	or's liability shall be limited to the outstanding diminishing amounts of the Guaranteed Advance as follows:
1.2.1	The 0	Guaranteed Advance Payment Sum on receipt thereof by the Recipient
1.2.2	The f	full outstanding balance after the deduction of each recoupment made in terms of the monthly

After the deduction of the last scheduled recoupment payment or on settlement of the full outstanding

payment certificate as stated in 1.1

balance this Advance Payment Guarantee shall expire

1.2.3

2.0	The Guarantor hereby acknowledges that:		
2.1	Any reference in this Guarantee to the Agreement is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship		
2.2	Its obligation under this Guarantee is restricted to the payment of money		
3.0	Subject to the Guarantor's maximum liability referred to in 1.0 the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 3.1 to 3.3:		
3.1	A copy of a first written demand issued by the Employer to the Recipient stating that payment of a sum certified by the Principal Agent has not been made in terms of the Agreement and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 3.2		
3.2	A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Recipient stating that a period of seven (7) calendar days has elapsed since the first written demand in terms of 3.1 and that the sum certified has still not been paid therefore the Employer calls up this Advance Payment Guarantee and demands payment of the sum certified from the Guarantor		
3.3	A copy of the recovery statement and payment certificate which entitles the Employer to receive payment in terms of the Agreement of the sum certified in 3.0		
4.0	Subject to the Guarantor's maximum liability referred to in 1.0 the Guarantor undertakes to pay the Employer the Guaranteed Advance Payment Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Advance Payment Guarantee stating that:		
4.1	The Agreement has been cancelled due to the Recipient's default and that the Advance Payment Guarantee is called up in terms of 4.0. The demand shall enclose a copy of the notice of cancellation; or		
4.2	A provisional sequestration or liquidation court order has been granted against the Recipient and that the Advance Payment Guarantee is called up in terms of 4.0. The demand shall enclose a copy of the court order		
5.0	It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 3.0 and 4.0 shall not exceed the Guarantor's maximum liability in terms of 1.0		
6.0	Payment by the Guarantor in terms of 3.0 or 4.0 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor		
7.0	The Employer shall have the absolute right to arrange his affairs with the Recipient in any manner which the Employer deems fit and the Guarantor shall not have the right to claim his release from this Advance Payment Guarantee on account of any conduct alleged to be prejudicial to the Guarantor		
8.0	The Guarantor chooses the physical address as stated above for all purposes in connection herewith		
9.0	This Advance Payment Guarantee is neither negotiable nor transferable and shall expire in terms of payment of the full outstanding balance, or payment in full of the Guaranteed Advance Payment Sum or on the Guarantee expiry date, whichever is the earlier, whereafter no claims will be considered by the Guarantor. The original of this Advance Payment Guarantee shall be returned to the Guarantor after it has expired		
10.0	This Advance Payment Guarantee, with the required demand notices in terms of 3.0 or 4.0, shall be regarded as a liquid document for the purpose of obtaining a court order		
Signed a	at Date		
Guarant Signator			
Witness	Witness		
Guarant	tor's seal or stamp		

## **ANNEXURE "G"**

PROJECT DRAWINGS LIST

## **ANNEXURE "G"**

## **DRAWING LIST**

### **ARCHITECTUAL DRAWINGS BY**

### <u>MWKE</u>

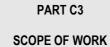
- 1. SAT 00- 06-CON REVISION 01: GROUND FLOOR CONSTRUCTION & FINISHES LAYOUT
- 2. SAT 01 -06-CON REVISION 02: FIRST FLOOR CONSTRUCTION & FINISHES LAYOUT
- 3. SAT 01 07 DT REVISION 01: DETAILED DRAWINGS GLAZING & PAUSE AREA
- 4. SAT 00- 03 DM REVISION 0: GROUND FLOOR DEMOLITION LAYOUT
- 5. SAT -01 03 DM REVISION 0: FIRST FLOOR DEMOLITION LAYOUT

## **ANNEXURE "J"**

CONTRACTORS HEALTH, SAFETY AND ENVIRONMENT SPECIFICATION

# **ANNEXURE "K"**

**MECHANICAL SCOPE OF WORKS** 



#### 1 GENERAL DESCRIPTION OF PROJECT

### 1. THE BUILDING

The building is an existing 2 storey Office Block in Sandton, Johannesburg. Refurbishment work will take place on the whole of the 1st Floor and some areas on the Ground Floor. The work will consist of HVAC installation to these 2 floors in the areas that are being refurbished.

### 2. THE AIR CONDITIONING SYSTEM

#### 2.1 Cooling System

The cooling for the building will be provided by a Split Units. Currently there are various Cassette and Midwall Split Units in the office areas which will be retained where possible.

All newly created areas without air conditioning, will have new Split units in stalled. The First Floor condensers will go onto the roof, and the Ground Floor condensers to the basement.

## 2.2 Fresh Air

There is currently no ducted ventilation to this office block and tenants have relied on openable windows as a means of ventilation. The scope of the HVAC installation on both floors will also include ducted fresh air supply with the reticulation in the ceiling void.

A Fan Filter Unit will be installed on the roof, which will provide fresh air to the refurbished spaces. The unit will not provide conditioned fresh air, however it will provide tempered fresh air by means of electrical heating for the winter months.

### 2.3 BMS

The will be no BMS for this installation. The Fresh Air system is to be controlled via a 7 day timer. The Split units on both floors will have either remote or wall mounted controllers.

## 3. <u>VENTILATION SYSTEMS</u>

2 off new Axial fans on the roof will provide extract to toilets on Ground and 1st Floor levels.

## 4. <u>DESIGN CONDITIONS</u>

### 4.1 Weather Data

Altitude above sea level : 1700 m

Summer design conditions : 28.9°C DB / 15.6°C WB

Winter design conditions : 1.1°C DB / -2.2°C WB

## 4.2 <u>Internal Comfort Design Conditions</u>

Max summer temperature : 24 °C

Min winter temperature : 20 °C

Relative Humidity : Typically 40% - 60% (not controlled)

Minimum fresh air supply

(Office areas)

2 AC/H or 7.5 L/s/person whichever is the highest

Minimum fresh air supply

(Boardroom areas)

10AC/H or 10 L/s/person whichever is the highest

Internal noise level : NC40

Occupancy density : 10 m²/person

# **ANNEXURE "L"**

**ELECTRICAL SCOPE OF WORKS** 

PROJECT:	SA Tourism - Electrical Installation
PROJECT NUMBER:	181055
DISCIPLINE:	Electrical Scope of Works
COMPILED BY:	E.Kahwenga
DATE:	13 November 2018



## 1. GENERAL DESCRIPTION OF PROJECT

This contract generally comprises of the electrical installation for alterations to SA Tourism's offices in line with the proposed space optimization layouts.

The areas of the buildings that will form part of the electrical installation contract are as follows:

#### Table 1 - Project Areas

FLOOR	AREA
Ground	South Wing Only – as per areas indicated on architect's drawing # SAT-00-01-BL
First	North & South Wing – as per areas indicated on architect's drawing # SAT-01-01-BL

### 2. SCOPE OF WORKS

The installation includes the following:

### 2.1 Lighting

- Removal and safe disposal of existing 1200 x 600 recessed LBR fluorescent fittings.
- Supply & Installation of new interior lighting including emergency lighting. Each fitting will be plugged into 6A socket outlet providing individual maintenance of fittings.
- Supply & Installation of occupancy sensors, where required. In most areas, existing occupancy sensors will be reused and re-located as per the new space planning layout.

### 2.2 Small Power

- Supply and installation of small power, including switched socket outlets, isolators, etc.
- Supply and installation of power skirting, power poles & power set units to desks.
- Supply and installation of power supply and power points to new HVAC equipment.
- Supply and installation of wireways for voice/data, access control and security.

## 2.3 <u>Distribution Boards</u>

- Supply, delivery and installation of new distribution boards as well as alterations to existing DBs.
- Issuing of a certificate of compliance for all altered and new DBs.
- Provision of a general earthing and bonding system in accordance with the SABS standards.

## **ANNEXURE "M"**

FIRE SCOPE OF WORKS

PROJECT:	SA Tourism – Fire Protection Installation
PROJECT NUMBER:	181055
DISCIPLINE:	Fire Protection Scope of Works
COMPILED BY:	J Machaba
DATE:	15 November 2018



## 1. GENERAL DESCRIPTION OF PROJECT

This contract generally comprises of the fire protection installation regarding alterations to SA Tourism's offices in line with the proposed internal layout changes.

The areas of the buildings that will form part of the fire protection installations contract are as follows:-

#### Table 1 - Project Areas

FLOOR	AREA
Ground	South Wing Only – as per areas indicated on architect's drawing # SAT-00-01-BL
First	North & South Wing – as per areas indicated on architect's drawing # SAT-01-01-BL

## 2. SCOPE OF WORKS

Fire protection installation includes the following:

## 2.1 Fire Detection & Alarm System

- Supply & Installation of new smoke detectors, sounders/strobes, cabling, loop isolators and interface units.
- Linking new installations to the existing control panel.

## 2.2 Statutory Emergency Signage

• Supply and installation of all required photoluminescent 190mm modules statutory emergency signage such as F5/F6 and E1/E2.

# **ANNEXURE "N"**

LIST OF PROPOSED SUBCONTRACTORS

# **ANNEXURE "O"**

**MODEL PREAMBLES TO TRADES** 

## EXPLANATORY NOTES AND INSTRUCTIONS ON THE USE OF THESE MODEL PREAMBLES

#### 1. Introduction

- 1.1 This preambles document is not an end in itself, but should be seen as a means to an end, having been compiled in the interests of standardisation of documentation in the building industry. It should therefore be used in a similar manner to that in which the Preliminaries document is at present being used.
- 1.2 The implementation of the use of standard documentation of this type is designed to produce consequent economic advantages to all parties connected with the building industry and particularly to the professions and contractors. It is expected that it will lessen disputes or confusion over preambles and simplify tendering for and the administration of building contracts.

#### 2. The document

- 2.1 This document is printed by and is available from the Association of South African Quantity Surveyors, P.O. Box 3527, Halfway House, 1685. Telephone (011) 315 4140.
- 2.2 The contents of this document are intended to cover workmanship and materials encountered in a significant majority of projects. In other words if a material is not encountered in a significant majority of projects, it's preamble will in all likelihood not be included in this document.
- 2.3 By its very nature, this document is a "Model" document and one that is designed to act as a basis upon which to build. It is therefore anticipated that in it's use, it will be supplemented by a "Supplementary Preambles" document included in the text of the bills of guantities that, *inter alia*, will include the following:
  - 2.3.1 supplementary clauses of a general nature that practitioners may deem necessary to cover their own individual requirements,
  - 2.3.2 additional clauses pertaining to specific materials incorporated in a project and not covered by the Model Preambles.
  - amendments to anything contained in the Model Preambles. A clause has been incorporated in the "General" section of the document preceding the preambles stipulating that anything contained in the "Supplementary Preambles" which is at variance to that which is contained in the Model Preambles, will take precedence over the Model Preambles and apply to the works in the project in hand.
- 2.4 There may well be practitioners who choose not to merely refer to the Model Preambles, but rather to reproduce them in the text of the bills of quantities. In such cases it is recommended that the Model Preambles be reproduced **verbatim** and that any clause arising from 2.3.1, or .2 or .3 above be incorporated in the separate "Supplementary Preambles" section within the bills of quantities.

#### 3. The basic philosophy

- 3.1 Wherever possible, reference has been made throughout the preambles to SABS Specifications and Codes of Practice to describe materials and methods respectively. It is therefore incumbent on the users of these preambles to acquire or have ready access to the relevant Specifications and Codes. Where such Specifications or Codes do not exist, suitable alternative preambles have been compiled.
- 3.2 These preambles have been designed to assist in abbreviating descriptions in text of the bills of quantities and practitioners are encouraged to make use of this facility. e.g. The description of a stormwater catchpit would read:
  - "Brick stormwater catchpit size internally 600 x 400 x 1 200 mm deep to invert fitted with and including a 450 x 300 mm x 59 kg cast iron grating and frame".
- 3.3 Wherever alternatives exist in respect of materials or workmanship, specific choices have been made in these preambles. Should users require different choices to specific items, these should be referred to in the Supplementary Preambles as outlined in clause 2.3 hereof.

#### 4. Additional notes and tips in the use of these Model Preambles

#### 4.1 Concrete, Formwork and Reinforcement

The Project Specification embodied in these preambles was compiled in collaboration with the Authors of SABS 1200G, which forms the basis for the Concrete, Formwork and Reinforcement model preambles.

Users of these preambles are advised to submit a copy of the Model Preambles to the Engineers involved in a project for their scrutiny. Any amplifications, amendments, etc. required by individual Engineers would then be incorporated in the Supplementary Preambles referred to in Item 2.3 of these Explanatory Notes.

#### 4.2 Masonry

These preambles lay down that all brickwork is to be built in English bond although it is well known that in certain coastal areas this is never done and stretcher bond is used exclusively. As this has a direct bearing on the method of measurement of the brickwork, the appropriate amendment should be inserted in the Supplementary Preambles if necessary.

#### 4.3 Roof Coverings

The roof coverings included in these Model Preambles are limited in their content and it therefore follows that any roofing material not included in these Preambles will need to have it's full preamble included in the Supplementary Preambles.

#### 4.4 Structural Steelwork

The comments made under item 4.1 apply equally to Structural Steelwork.

Note that the protective treatment of the structural steel covers only the treatment up to and including the primer (and patching after erection). The finishing coats of paint must be fully described and included either in the "Structural Steelwork" or in the "Paintwork" trade, as the practitioner wishes.

## MODEL PREAMBLES FOR TRADES

#### INTRODUCTION

These Model Preambles for Trades have been compiled on the assumption that the following documents are applicable to the Contract:

- (a) The "Standard System of Measuring Building Work Sixth Edition" as published by the Association of South African Quantity Surveyors
- (b) The "Agreement and Schedule of Conditions of Building Contract incorporating Bills of Quantities 1981/1988 Edition"

or

the "Principal Building Agreement—June 1991 Edition", together with all subsequent addenda as at the date of tender, for use with bills of quantities, as recommended by the Joint Building Contracts Committee and

(c) The "Model Preliminaries – 1988 Edition"

or

the "Preliminaries – June 1991 Edition", together with all susequent addenda as at the date of tender, as recommended by the Joint Building Contracts Committee.

It is intended that these Model Preambles for Trades will be used by reference only in the text of the bills of quantities and will NOT be bound or reproduced therein. However, being part of the Contract documentation, this document should be initialled by the parties concerned when the Contract is signed.

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### A. GENERAL

#### A.1 APPLICATION OF CLAUSES

These Model Preambles for Trades, and any supplementary preambles, shall be read in conjunction with and shall apply to all items in the bills of quantities and shall form part of the descriptions of items in the bills of quantities.

Where descriptions or supplementary preambles in the bills of quantities differ from clauses contained in these Model Preambles for Trades, the descriptions or supplementary preambles in the bills of quantities shall take precedence. Where supplementary preambles differ from descriptions in the bills of quantities, the descriptions shall take precedence.

#### A.2 ABBREVIATIONS

For the purposes of these Model Preambles for Trades the following abbreviations shall apply:

AASHTO - American Association of State Highway and Transportation Officials.

AISI - American Institute of Steel Industries.

BS - British Standard.

CKS - Co-ordinating Specifications issued by the Central Co-ordinating Committee under the auspices of

the South African Bureau of Standards.

CSIR - Council for Scientific and Industrial Research.

SABS - South African Bureau of Standards and the number following shall refer to the relevant specification

or code of practice as the case may be.

#### A.3 MATERIALS AND WORKMANSHIP

Materials and workmanship shall be the best of their respective kinds. Only new and undamaged materials shall be used in the Works. Materials to be permanently installed into the works shall not be used for any temporary purposes on site. Work shall be to the approval of the Architect and shall be executed in accordance with the relevant manufacturer's written recommendations and instructions.

#### A.4 PROPRIETARY PRODUCTS

For the purpose of submission of tenders, rates for items described in the bills of quantities by trade names, catalogue references, etc. shall be for the particular type and manufacture specified.

Once the Contract has been signed, the approval of the Architect shall be obtained prior to any substitution and where products or materials, etc. other than those specified are used, adjustments in the rates will be made, if deemed necessary.

#### A.5 ASSEMBLING

Descriptions of manufactured items shall be deemed to include assembling complete and handing over in proper working order.

#### A.6 REFERENCES

The references given in brackets at the end of certain descriptions refer to the relevant references on the drawings or schedules.

### A.7 TESTS

Should the Contractor be instructed by the Architect to carry out tests on materials or workmanship to ascertain compliance with the specification, the Contractor will only be entitled to payment for those tests which meet the specified requirements.

#### A.8 WATER

Water shall be clean and free from injurious amounts of acids, alkalis, organic matter and other substances and shall be suitable for its intended use.

### A.9 APPLICATION OF THE NATIONAL BUILDING REGULATIONS

All work shall be executed in accordance with the requirements of SABS 0400.

#### A.10 ACCURACY IN BUILDINGS

The dimensional and positional accuracy of the buildings and their component parts shall comply with Grade II requirements of SABS 0155 unless otherwise stated.

### **B. ALTERATIONS**

#### B.1 DESCRIPTIONS AND PREAMBLES

Reference shall be made to other trades and preambles for preambles and full descriptions of items not fully described in this trade which shall apply equally to the work in this trade, unless otherwise described.

#### B.2 GENERAL

In taking down and removing existing work the utmost care shall be observed to prevent any structural or other damage to remaining portions of the building, and the Contractor shall provide all shoring, needling, strutting, etc. to ensure the stability of all structures during alteration work.

Special care shall be exercised during the progress of the work to ensure that any electrical installations, water supply pipes, telephone and other services which may be encountered are not interfered with and notice shall be given to the Architect if any disconnection or alterations become necessary.

The Contractor shall take all precautions necessary to prevent any nuisance from dust whilst carrying out the work.

#### B.3 MATERIALS FROM THE ALTERATIONS, CREDIT, ETC.

Materials recovered from the alterations (except where described as to be re-used or to be handed over to the Employer) will become the property of the Contractor, who may allow credit in respect thereof where provided for in the bills of quantities. Such materials shall not be re-used in new work without written permission from the Architect.

Materials described as "removed" shall be removed from the site immediately.

Materials described as "handed over to the Employer" shall be carefully dismantled where necessary, neatly stored under cover on site where directed and protected from damage, until required.

Materials described as "set aside for re-use" shall be carefully dismantled where necessary, cleaned, neatly stored under cover and protected from damage until required for re-use. Any damage caused to such materials during removal, storage or refixing shall be made good at the Contractor's expense.

#### B.4 DISPOSAL OF DEBRIS, ETC.

The Contractor shall be responsible for the removal from the site of all materials, debris and rubbish resulting from the alterations.

#### B.5 MAKING GOOD DAMAGED WORK

The Contractor shall make good in all trades to existing work where damaged or disturbed through the alterations with all necessary new materials to match the existing.

#### B.6 FORMING NEW OPENINGS OR ALTERING OPENINGS IN EXISTING WALLS

Where new openings are formed or openings altered in existing walls, the wall above the opening shall be broken out and a new brick, in-situ concrete or prestressed concrete lintel inserted, complete with all necessary reinforcement, formwork, turning piece, etc., the jambs and portions of openings as described shall be built up with new brickwork or blockwork properly toothed and bonded to existing, cavities of hollow walls shall be built solid where necessary and finishes shall be made good all round and into reveals as described.

#### B.7 BUILDING UP OPENINGS

Where existing openings are given in number as built up, the existing surfaces all round shall be prepared as necessary, brickwork or blockwork properly toothed and bonded to existing, wedged up to underside of existing lintel and finishes shall be made good on both sides as described.

### C. EARTHWORKS

#### C.1 DEMOLITIONS

#### C.1.1 Nature and extent

Descriptions of demolitions give a rough guide only as to the scope of the work. Tenderers are therefore advised to visit the site before submitting a tender and to acquaint themselves with the nature and extent of the work to be done and the value of recoverable materials which are not to be re-used or handed over to the Employer. Unless otherwise stated, loose furniture, kitchen and other equipment, apparatus, machinery, etc. shall remain the property of the Employer and the removal thereof does not fall within the scope of this Contract.

The Contractor shall completely demolish the buildings, etc. in a careful, skilful, practical and safe manner down to 150 mm below ground level.

Demolitions shall include breaking up and removing:

all floors and surface beds;

all external screen walls, steps, ramps, aprons, surface water channels, rainwater sumps, gulleys, etc. attached to the building to be demolished;

all services, manholes, etc. in ground to a point not less than 1 m beyond the perimeter of the building, including plugging off ends of all remaining pipes, drains, etc., filling in holes where necessary and ramming and levelling to ground level.

Where only a portion of a building is to be demolished, it shall be done without damage to the remaining portion of the building. Any such damage shall be made good by the Contractor at his own expense.

#### C.1.2 Notices, etc.

The Contractor shall, before commencing work, obtain all necessary authorisation for carrying out the work, by whatever means including the use of pneumatic equipment or blasting, give all necessary notices and pay all charges and fees in connection therewith. He shall also comply with all regulations pertaining to rodent extermination and he shall obtain the requisite Rodent Extermination Clearance Certificate and pay all necessary fees. All receipts and certificates shall be left in the safekeeping of the Architect. Demolitions shall include all the abovementioned charges and fees.

The Contractor shall give ample notice to the Architect and Local Authorities regarding any disconnections necessary prior to the removal or interruption of electrical or telephone cables, water and sanitary services, etc.

#### C.1.3 Loss

After the handing over of the site to the Contractor, the full risk of any loss or damage to buildings to be demolished shall be the responsibility of the Contractor and he shall take such precautions as he deems necessary against such loss or damage.

#### C.1.4 Materials from the demolitions, credit, etc.

Materials recovered from the demolitions will become the property of the Contractor, who may allow credit in respect thereof where provided for in the bills of quantities. Such materials shall not be re-used in any new work without written permission from the Architect.

#### C.1.5 **Disposal of debris, etc.**

The Contractor shall be responsible for the removal from the site of all materials, rubble, debris and rubbish resulting from the demolitions.

## C.2 EXCAVATIONS, FILLING, ETC.

## C.2.1 Generally

The Contractor shall notify the Architect as soon as the excavations are ready to receive foundations and no building work may be started until the Architect has approved the excavations.

Any excavation taken out below the levels shown or required to obtain a solid foundation shall be filled in by the Contractor, at his own expense, with 10 MPa concrete.

#### C.2.2 Classification of materials

"Hard rock" shall mean granite, quartzitic sandstone or other rock of similar hardness, the removal of which, in the Architect's opinion, requires drilling, wedging and splitting or the use of explosives.

"Soft rock" shall mean hard material the removal of which, in the Architect's opinion, warrants the use of pneumatic tools and includes hard shale, ferricite, compact ouklip and material of similar hardness.

"Earth" shall mean all ground other than that classified as "hard rock" or "soft rock" and shall include made-up ground and any loose stones or pieces of concrete not exceeding 0,03 m³ in volume.

Should the Contractor consider that any of the excavations are more difficult in nature than excavations in "earth" he shall immediately notify the Quantity Surveyor in writing. Failing such notification the excavations shall be deemed to be in "earth" and shall be measured and valued accordingly.

The Contractor may use any method he chooses to excavate any class of material, but his chosen method of excavation shall not determine the classification of the material excavated.

#### C.2.3 Blasting

No blasting will be allowed without the written permission of the Architect.

Should blasting be necessary, the Contractor shall take every precaution to protect the Works and persons, animals and property in the vicinity of the Works. The Contractor will be held responsible for any injury or damage caused by any blasting operations and shall make good such damage at his own expense.

#### C.2.4 Risk of collapse

The Contractor shall carry the risk of collapse of all excavated faces.

Where excavations do not exceed 1,5 m deep, the nature of the precautions to be taken shall be entirely at the Contractor's discretion. He shall either provide temporary support to the excavated faces or carry the risk of collapse of the faces with all its implications. Where excavations exceed 1,5 m deep, the Contractor shall maintain all excavated faces in accordance with Government Regulations.

#### C.2.5 Working space

Excavations for working space shall include any additional risk of collapse so incurred and backfilling and compacting of the excavated material as described.

#### C.2.6 Keeping excavations free of water

The excavations shall be protected from flooding and any water which occurs in the excavations whether as a result of seepage, rain or other causes, shall immediately be removed by baling, pumping or other approved method.

## C.2.7 Filling, etc.

Filling under floors and backfilling to excavations shall be of suitable earth free from clay, vegetable matter, large stones, etc., spread, levelled, watered and consolidated in layers not exceeding 300 mm thick.

Filling over site shall be spread, levelled, watered and consolidated in layers not exceeding 300 mm thick.

Where filling is described as compacted, it shall be of inert material having a maximum plasticity index of 10 and compacted to a density of 90 % Mod. AASHTO.

Garden soil filling shall be selected and sifted top soil, spread, levelled and lightly consolidated.

Hardcore shall be of broken stone or other approved hard material graded from 25 mm to 75 mm with the finer material on top and shall be spread, levelled and consolidated.

#### C.3 SOIL POISONING

Where prescribed, ground shall be treated in accordance with SABS 0124. Soil insecticides shall comply with SABS 1165.

## D. PILING

#### D.1 SPECIFICATION FOR PILING GENERALLY

All piling shall comply with SABS 1200F supplemented by the following Project Specification. Where SABS 1200F and the Project Specification are in conflict the Project Specification shall take precedence.

Wherever reference is made in SABS 1200F to SABS 1200G and 1200GA, this shall be taken to mean the preambles E. CONCRETE, FORMWORK AND REINFORCEMENT as contained in these "Model Preambles for Trades" where applicable.

Wherever the term "Engineer" appears in SABS 1200F or in the following Project Specification this shall be deemed to mean the Architect's representative responsible for this section of the Works.

Wherever the term "priced schedule" appears in SABS 1200F this shall be deemed to mean the priced bills of quantities.

### PROJECT SPECIFICATION

The following amplifications, additions and amendments to SABS 1200F shall constitute the Project Specification.

Clause numbers refer to either the existing clauses in SABS 1200F or to new clauses which are related to the existing clauses.

#### 1. SCOPE

This clause is amended to include:

1.1 This specification does not cover the methods by which the piling is to be measured for the purpose of payment and the "Standard System of Measuring Building Work" shall apply.

#### 2. INTERPRETATIONS

2.1 SUPPORTING SPECIFICATIONS

Clause 2.1 (b) shall not apply.

2.2 APPLICATION

This clause shall not apply.

#### 5. CONSTRUCTION

- 5.1 GENERAL
  - 5.1.3 Alternative Designs, Types and Layouts
    - 5.1.3.2 **Details of alternative proposals**

Clause 5.1.3.2 (d) shall be deemed to be replaced by the following:

A comprehensive bill of quantities prepared in accordance with the "Standard System of Measuring Building Work" setting out all items duly priced for which payment is required and which is comparable in all respects to the bill of quantities issued for which the alternative is proposed including all provisional items included in the original bill of quantities.

## 5.1.6 Working level for piling

The words "for the purposes of 8.2.4, 8.2.6 and 8.2.8" in the third line shall be deemed to be deleted.

### 5.2 AUGERING AND BORING

#### 5.2.1 **General**

5.2.1.2 This clause shall not apply.

## 5.7 DRIVING

## 5.7.6 **Heaved piling**

5.7.6.3 Where integrity testing in terms of 5.7.6.3 has been carried out and a pile fails the test, the Contractor shall pay the costs of the testing, except that, if the type of pile has been specified in the contract and the Contractor has constructed the pile in the manner specified, the Employer shall pay the costs of the testing.

### 5.8 OBSTRUCTIONS

The words "under 8.2.5" in the last line of this clause shall be deemed to be deleted.

## 8. MEASUREMENT AND PAYMENT

This clause shall not apply.

## E. CONCRETE, FORMWORK AND REINFORCEMENT

#### E.1 SPECIFICATION FOR CONCRETE WORK GENERALLY

All in situ concrete work (plain and reinforced) shall comply with SABS 1200G supplemented by the following Project Specification. Where SABS 1200G and the Project Specification are in conflict the Project Specification shall take precedence.

Wherever the term "Engineer" appears in SABS 1200G or in the following Project Specification this shall be deemed to mean the Architect's representative responsible for this section of the Works.

#### PROJECT SPECIFICATION

The following amplifications, additions and amendments to SABS 1200G shall constitute the Project Specification. Clause numbers refer to either the existing clauses in SABS 1200G or to new clauses which are related to the existing clauses.

#### SCOPE

This clause is amended to include:

1.1 This specification does not cover the methods by which the finished structure is to be measured for the purpose of payment and the "Standard System of Measuring Building Work" shall apply.

#### 2. INTERPRETATIONS

#### 2.1 SUPPORTING SPECIFICATIONS

Clause 2.1 (b) shall not apply

#### 2.2 **APPLICATION**

This clause shall not apply.

#### 4. PLANT

#### 4.5 FORMWORK

4.5.2 Finish

Unless otherwise stated the quality of all formwork shall be such that the finished surface of the concrete is "Rough" in terms of clause 5.2.1 (a).

#### 5. **CONSTRUCTION**

#### 5.2 FORMWORK

#### 5.2.1 Classification of Finishes

- (a) Rough. No treatment of the surface of the concrete will be required after the striking of the formwork. The finish of the concrete need not be more accurate than Degree of Accuracy III.
- (b) **Smooth**. Imperfections such as small fins, bulges, irregularities, surface honeycombing and surface discolourations shall be made good and repaired by approved methods. The finish of the concrete shall be accurate to Degree of Accuracy II.

## (c) Special

### (i) Smooth and fair

This class of finish requires the highest standard of concrete work, formwork, accuracy and technique.

Concrete placed in any one structure to give this finish shall be made from cement and aggregates from the same source. The grading of the aggregate shall be kept constant.

Formwork shall be metal, wrot timber or other approved material in a new condition designed and constructed to suit the particular job in hand and with shutter bolts and joints between panels in a regular pattern approved by the Architect. Joints between panels shall be watertight, but the use of sealing tape which will mark the concrete shall not be permitted.

Designated joints shall be in the position and of the details shown upon the working drawings. Should the Contractor wish to incorporate further construction joints or amend the position of those shown to suit his own requirements or technique, this may be allowed provided that all design considerations are met, that the prior approval of the Engineer is obtained and that any extra costs are borne by the Contractor.

In the case of horizontal construction joints, the top edge of the concrete on the smooth and fair finished side shall be struck true and level with a trowel.

Special care shall be taken to ensure that forms are clean and free of all pieces of tying wire, nails and other debris at the time of concreting.

The standard of finish shall be such that upon removal of the formwork, no further treatment, other than treatment of bolt holes if required, shall be found necessary to provide a straight, smooth and uniform finish of good quality and consistent colour and texture, free of all honeycombing, etc. Any defect shall be made good by either removing and replacing the defective concrete or, in certain instances only, by patching.

#### 5.5 CONCRETE

### 5.5.1.6 Prescribed mix concrete

Where prescribed mix concrete is specified the proportions of constituents, the maximum size of coarse aggregate and the estimated minimum compressive strength shall be as specified in the following table:

	Estimated		Prop	portions of Cons	stituents
Class of Concrete	minimum compressive strength in MPa at 28 days	Maximum nominal size of coarse aggregate in mm	Cement (Parts)	Fine aggregate (Parts)	Coarse aggregate (Parts)
А	7	37,5	1	4	8
В	15	19	1	3	5
С	20	19	1	2,5	3,5

Cement shall be ordinary Portland cement and the water/cement ratio shall be as Table 5 of clause 5.5.1.5 for moderate exposure conditions.

Should cement and aggregates be mixed by volume, the contents of a 50 kg sack of cement shall be taken to be 0,033 m<sup>3</sup>.

Notwithstanding the requirements contained in SABS 1200G the Architect may permit certain items of nonstructural concrete to be mixed by hand.

If the concrete is mixed by hand, it shall first be mixed in a dry state on a clean nonabsorbent surface until it is of uniform colour and consistency. Just enough water shall then be added to permit mixing and working, at which stage the concrete shall continue to be mixed until it is of uniform colour and consistency.

#### 5.5.1.7 Strength concrete

Where strength concrete is specified it shall be designated by its specified strength followed by the size of stone used in its manufacture, e.g. 30 MPa/19 mm.

The water/cement ratio shall be as Table 5 of clause 5.5.1.5 for moderate exposure conditions.

## 5.5.1.8 "No-Fines" concrete

"No-fines" concrete shall consist of one part cement to ten parts aggregate graded from minimum 6 mm to maximum 13 mm size.

The quantity of water used shall be just sufficient to form a smooth grout which shall completely coat every particle of aggregate and also to ensure that the grout is just wet enough to form a small fillet at each point of contact between the stones. "No-fines" concrete mixed with excessive water, which results in a thin grout which drops off the aggregate, will be rejected.

"No-fines" concrete shall be placed in its final position within 20 minutes of mixing and shall be placed in continuous horizontal layers. Concrete shall be spade worked sufficiently to ensure that it fills the forms but vibrating, tamping or ramming will not be permitted.

#### 5.5.3.2 Ready-mixed concrete

The use of ready-mixed concrete and the acceptability of test results from a central concrete production facility shall be subject to the written approval of the Engineer.

#### 6. TOLERANCES

Degree of Accuracy II shall apply for all work unless otherwise stated.

#### 7. TESTS

#### 7.1 FACILITIES AND FREQUENCY OF SAMPLING

### 7.1.2 Frequency of sampling

7.1.2.5 The frequency of sampling shall be as directed by the Engineer.

#### 8. MEASUREMENT AND PAYMENT

This clause shall not apply.

#### E.2 AGGREGATES OF LOW DENSITY

Aggregates of low density shall comply with SABS 794.

#### E.3 HOLLOW BLOCKS, PREFABRICATED BLOCK BEAMS AND PLANKS, ETC.

Blocks, block beams, planks, etc. shall be fixed and supported in such a manner that no movement can take place before or during the casting of concrete. No broken components shall be used.

#### E.4 SUPERVISION

A competent and experienced foreman shall superintend personally the whole of the concrete construction and pay special attention to:

- (a) The quality, testing and mixing of materials,
- (b) The placing and compaction of concrete,
- (c) The construction and removal of formwork and
- (d) The sizes and position of reinforcement.

The Contractor shall obtain the permission of the Architect before commencing concreting of foundations or reinforced structure.

No inspection, approval, authorisation to proceed, comment or instructions following from such an inspection, or failure of the Architect to comment on any particular aspect of the work, shall be deemed to relieve the Contractor in any way from his obligation to ensure through his own supervision that the work is constructed in every way in accordance with the Drawings, Specifications and Conditions of Contract, nor relieve him from his obligations to make good any fault or defect, nor shall it be deemed that there is any obligation on the Architect to inspect all or any part of the Works or that such inspection is necessarily complete in every respect.

### E.5 GENERAL

#### Concrete

Rates for concrete work shall include all "construction joints" other than "designated joints" as defined in SABS 1200G clause 2.4.3 which are measured separately, for the design of strength concrete mixes and all testing of concrete and materials other than compressive strength testing of concrete samples taken from concrete being placed in the Works. The Contractor shall only be entitled to payment for those samples and compressive strength tests called for by the Engineer and which pass the test requirements.

Surface beds cast in panels shall be cast in panels approximately 9 m<sup>2</sup>.

#### **Formwork**

Formwork to slabs and beams shall be cambered where required.

Formwork to soffits shall include propping not exceeding 3,5 m high unless otherwise described. Formwork to walls and columns shall be not exceeding 3,5 m high above bearing level unless otherwise described.

#### Reinforcement

Standard fabric reinforcement as included in Table 1 of SABS 1024 shall have 300 mm wide laps.

The mass of binding wire is not included in the mass of the reinforcement and the cost thereof shall be included in the rates for the reinforcement.

## F. PRECAST CONCRETE

#### F.1 MATERIALS

Cement, water, aggregates and reinforcement shall be as described under E. CONCRETE, FORMWORK AND REINFORCEMENT.

#### F.2 CONCRETE

Concrete shall be as described under E. CONCRETE, FORMWORK AND REINFORCEMENT and unless otherwise stated shall be prescribed mix concrete Class C but with coarse aggregate of an appropriate size.

#### F.3 MOULDS

Before each casting, moulds shall be coated with a suitable preparation which will prevent the blocks adhering to the moulds and which will not in any way discolour the surface of the blocks or impair their strength. Where blocks are described as "finished smooth from the mould" or as "precast terrazzo", moulds or relevant portions thereof shall be made to a high degree of accuracy and shall be of such material and nature as to leave even and smooth surfaces.

#### F.4 FINISHES TO BLOCKS

Where described as "finished smooth from the mould", such surfaces shall have a layer of fine stuff composed of one part cement and four parts clean fine sand by volume packed against the faces of the mould before placing the concrete backing. The concrete backing shall be deposited into the moulds in a wet state (not dry pressed) whilst the facing is still wet.

Where described as "precast terrazzo", such surfaces shall have facing to blocks not less than 12 mm thick as described for the finishing coat for terrazzo under P. PLASTERING. The facing shall be poured into the moulds in a wet state (not dry pressed) and thoroughly worked up against finished faces to ensure that it finishes smooth from the mould.

Projections shall be rubbed off and faces shall be of even colour and free from blemishes, cracks and other imperfections. Salient angles shall be arris rounded.

#### F.5 SIZES

Sizes of blocks given are approximate. The Contractor shall be responsible for ascertaining the exact sizes of all blocks.

#### F.6 CASTING, ETC.

No blocks shall be built in within 21 days of casting. Blocks shall be kept wet for at least 10 days after being cast by frequently sprinkling with clean water, during which time they shall be screened from the sun and protected from dust and inclement weather.

### F.7 REINFORCEMENT

Unspecified reinforcement required for manufacturing, handling and erection purposes and for reinforcing projecting and other unwieldly portions of blocks shall be provided by the Contractor at his discretion.

#### F.8 BEDDING, JOINTING AND POINTING

Blocks shall be bedded and jointed solidly in Class I mortar as described under G. MASONRY and shall be pointed with slightly keyed joints.

Blocks finished with "precast terrazzo" shall have joints raked out and pointed with slightly keyed joints in tinted water-proofed mortar composed of one part cement and three parts sand to match terrazzo facing.

#### F.9 PAVING SLABS

Precast concrete paving slabs shall comply with SABS 541.

#### F.10 GENERAL

Precast concrete work shall include reinforcement required for manufacturing, handling and erection purposes, steel rod or wire loop hooks and/or mortices for lewis bolts required for handling and transporting, any necessary temporary propping and strutting and bedding, jointing and pointing.

### G. MASONRY

#### G.1 CEMENT

Cement shall be ordinary Portland Cement complying with SABS 471.

#### G.2 LIME

Lime shall be hydrated bedding mortar lime complying with SABS 523.

#### G.3 SAND

Sand shall comply with SABS 1090, washed where necessary and screened through a 2,4 mm mesh sieve.

#### G.4 BURNT CLAY BRICKS

Burnt clay bricks shall comply with SABS 227 and shall be of nominal size 222 x 106 x 73 mm unless otherwise stated.

Common bricks shall be General Purpose bricks.

Extra hard burnt bricks shall be General Purpose (Special) bricks.

Facing bricks shall exhibit a liability to efflorescence not in excess of "Slight" and water absorption when tested in conformity with the requirements of SABS 227 shall not exceed 14 %.

Particular care shall be taken to preserve arrisses and faces of facing and paving bricks during transit and handling.

#### G.5 CONCRETE BRICKS

Concrete bricks shall comply with SABS 1215 and shall have a minimum compressive strength of 7 MPa.

#### G.6 CALCIUM SILICATE BRICKS

Calcium silicate bricks shall comply with SABS 285.

## G.7 CONCRETE BUILDING BLOCKS

Precast solid or hollow concrete building blocks shall comply with SABS 1215 and shall be of the strength stated.

#### G.8 BURNT CLAY PAVING UNITS

Burnt clay paving units shall comply with SABS 1575.

#### G.9 PRESTRESSED CONCRETE LINTELS

Prestressed concrete lintels shall comply with SABS 1504.

#### G.10 CONCRETE FLOORING TILES

Concrete flooring tiles shall comply with CKS 208.

### G.11 QUARRY TILES, ETC.

Quarry, cement and similar tiles shall be of approved manufacture, even in shape and size, free from cracks, twists or blemishes and uniform in colour.

### G.12 STONE FOR RUBBLE WALLING

Stone shall be without defects and selected from a prescribed site or quarry. The stone shall vary in size from approximately 150 mm to 600 mm in section.

#### G.13 STONE FOR STONEWORK

Stone shall be without defects and selected from a prescribed site or quarry.

#### G.14 WIRE TIES

Wire ties shall be the single wire type for solid walls and either the "Butterfly" or Modified PWD type for hollow walls, of galvanized steel and shall comply with SABS 28. Ties shall be of sufficient length to allow not less than 75 mm of each end to be built into brickwork or embedded in concrete.

#### G.15 BRICKWORK REINFORCEMENT

Brickwork reinforcement shall be manufactured from hard drawn steel wire conforming to BS 785 and shall consist of two 2,8 mm diameter main wires with 2,5 mm diameter cross wires at 300 mm centres welded at intersections.

Brickwork reinforcement shall be lapped not less than 300 mm at end joints and for a length equal to the width of the widest reinforcement at intersections.

#### G.16 MORTAR

Mortar shall comply with the following table:

1	2	3	4
Mortar Class	Portland Cement kg	Lime 	Sand (measured loose and damp)   max.
III II	50 50 50	0-10 0-40 0-80	130 200 300

Mortar shall be Class II unless otherwise specified.

Mortar plasticizers may only be used with the approval of the Architect.

The materials shall be mixed dry until of uniform colour, water added and the mixture turned over until the ingredients are thoroughly incorporated.

Mortar shall be produced in such quantities as can be used before commencement of set and no mortar that has set shall be used.

#### G.17 COMPO MORTAR

Compo mortar shall be Class III mortar in accordance with clause G.16 but with a lime content of 80 l.

The lime and sand shall be mixed dry until of uniform colour, water added and the mixture turned over until the ingredients are thoroughly incorporated.

Immediately before use, the cement shall be mixed in and the requisite amount of water added.

Compo mortar shall be produced in such quantities as can be used before commencement of set and no compo mortar that has set shall be used.

#### G.18 BRICKWORK

Wherever practicable, brickwork shall be built in English bond and, unless legitimately required to form bond, no false headers shall be used. Stretcher bond shall only be used where specifically so indicated or where English bond is not practicable.

Brickwork, unless otherwise described, shall be built in Class II mortar.

Bricks shall be laid on a solid bed of mortar and all joints shall be grouted up solid.

The brickwork shall be carried up in a uniform manner, no part being raised more than 1,2 m above adjoining work.

Where necessary, bricks shall be soaked with water before being laid and the course of bricks last laid shall be well wetted before laying a fresh course upon it.

Walls in thicknesses of more than one skin shall have at least five wire ties per square metre. Linings to concrete, unless otherwise specified, shall be tied to the concrete with at least five wire ties per square metre.

Hollow walls, unless otherwise specified, shall be built of two half brick skins with cavity between, tied together with at least five wire ties per square metre.

The cavities shall be kept free of all rubbish, mortar droppings and projecting mortar.

Mortar joints to brickwork shall be not less than 5 mm or more than 10 mm thick.

#### G.19 BLOCKWORK

Unless otherwise described, all blockwork shall be built in stretcher bond. Whole blocks shall be used except where bats or closers are required to form bond.

Blockwork, unless otherwise described, shall be built in Class II mortar.

Solid blocks shall be laid on a solid bed of mortar and all joints shall be grouted up solid.

Hollow blocks shall be laid in shell bedding, i.e. only the inner and outer shells of the blocks shall be covered with mortar. Vertical joints shall be similarly formed.

The blockwork shall be carried up in a uniform manner, no part being raised more than 1,2 m above adjoining work.

Where necessary, clay blocks shall be soaked with water before being laid and the course of blocks last laid shall be well wetted before laying a fresh course upon it.

#### G.20 MASONRY WALLING

Masonry walling shall be constructed in accordance with SABS 0249.

#### **G.21 CONCRETE MASONRY CONSTRUCTION**

Concrete masonry construction shall be constructed in accordance with SABS 0145.

#### G.22 RUBBLE WALLING

Rubble walling shall be built to an uncoursed yet homogeneous pattern. Stones shall be carefully selected and fitted into position in the strongest manner so as to avoid interstices and where these are unavoidable they shall be packed with flat spalls bedded in mortar. Stones shall be bedded and jointed solidly in Class II mortar and shall be so spaced and fitted that all joints are exceeding 25 mm and not exceeding 50 mm wide. Tops of walls shall, where necessary, be levelled up with selected long flat stones.

Faces shall be kept as even as possible, never projecting more than 50 mm beyond the joints and never recessed behind the joints. Walling shall be pointed with 25 mm deep square recessed joints.

Wherever wire ties are included with walling items, at least five ties per square metre shall be used.

#### **G.23 STONEWORK**

Stones shall be bedded and jointed solidly in Class II mortar and shall be pointed with square recessed joints.

## **G.24 CENTRES AND TURNING PIECES**

Centres and turning pieces to soffits of arches and lintels shall be left in position for not less than 14 days.

#### G.25 FACE BRICKWORK

Face brickwork shall be built in stretcher bond, unless otherwise specified, to a true and fair face. Perpends shall be accurately kept.

Facing bricks shall be sorted to ensure that proper mixing of the bricks within the colour range of each facing brick being used is obtained.

## G.26 PAVINGS, SILLS, COPINGS, ETC.

Bricks and tiles shall be soaked with water before fixing and shall be solidly bedded and jointed in Class I mortar and pointed with slightly keyed joints.

#### **G.27 PROTECTION**

Faced brickwork, quarry tiles, etc. shall be carefully protected from damage and mortar splashes and shall be thoroughly cleaned down as the work proceeds.

# H. WATERPROOFING

## H.1 MATERIALS

Damp-proofing and waterproofing materials shall comply with the following specifications and requirements:

Material	SABS Specification	Type and/or Additional Requirements
Bituminous damp-proof courses to walls, sills, etc.	248	Type FV
Polyethylene sheet in damp-proof courses to walls, sills,	etc. 952	Туре В
Ditto, to floors and basements	952	Type C
Mastic asphalt for roofing	297	-
Mastic asphalt for damp-proof courses and tanking	298	-
Bituminous roofing felt	92	Type 60
Polyethylene sheet for the waterproofing of flat roofs	952	Type A
Chloroprene rubber sheet (for waterproofing)  Sealing compounds with two-component	580	At least 2,5 mm thick and 1 200 mm wide
polysulphide base	110	Type 2 Gun Grade
Sealing compounds with two-component polyurethane base	1077	-

# H.2 APPLICATION

Waterproofing materials shall be applied in accordance with SABS 021.

# H.3 WATERPROOFING TO ROOFS, BASEMENTS, ETC.

Waterproofing to roofs, basements, etc. shall be carried out by skilled workmen who are experienced in this type of work.

## H.4 DAMP-PROOF COURSE TO WALLS

All joints in damp-proof course to walls shall be lapped a minimum of 150 mm except at junctions and corners where the lap shall equal the full thickness of the wall.

# I. ROOF COVERINGS, ETC.

## I.1 MATERIALS

Materials shall comply with the following specifications and requirements:

Material	Specification
Clay roofing tiles	SABS 632
Concrete roofing tiles	SABS 542
Softwood brandering and battens	SABS 653
Fibre-cement sheets: profiled and flat	SABS 685
Aluminium roofing sheets	SABS 903
Polyethylene sheeting for roof underlay	SABS 952
Metal roofing tiles	SABS 1022
Glass reinforced polyester laminated sheets	SABS 1150
Fasteners for sheet roof and wall coverings	SABS 1273
Materials for thermal insulation of buildings	SABS 1381
Sheet zinc	BS 849
Sheet lead	BS 1178
Sheet aluminium	BS 1470
Sheet copper	BS 2870

## 1.2 LAYING AND FIXING OF CONCRETE ROOFING TILES

Concrete roofing tiles shall be laid and fixed in accordance with SABS 062.

#### 1.3 GALVANIZED STEEL PROFILED SHEETS, ETC.

Galvanized steel profiled sheets, ridge and hip coverings, etc. shall be coated with a minimum of either 275 g or 600 g of zinc per m² as specified and shall be free of white rust.

## I.4 CORRUGATED GALVANIZED STEEL ROOFING

Corrugated galvanized steel roofing sheets shall be fixed to purlins through every alternate corrugation at ends and through every fourth corrugation to intermediate purlins.

The corrugated roofing sheets shall be secured to wood purlins with approved galvanized iron roofing screws of appropriate length and to steel purlins with 8 mm galvanized iron hook bolts of appropriate length. Each fixing screw or bolt shall be fitted with one conical lead washer and one bituminous felt washer or with approved patent washer.

Ridge and hip coverings shall be lapped 250 mm at ends and with edges fixed with the screws at ends of roofing sheets and closely beaten into corrugations.

#### 1.5 PROFILED SHEET ROOF AND SIDE CLADDING

Profiled sheet roof and side cladding shall be installed in accordance with SABS 0237.

## I.6 GALVANIZED SHEET IRON

Galvanized sheet iron shall be rolled steel sheet coated on both sides with Class C zinc coating complying with SABS 934. Sheets shall be free from white rust.

## 1.7 NAILING AND SCREWING

Where nailing and screwing is required, galvanized iron nails and screws shall be used for galvanized sheet iron and sheet zinc, copper or copper alloy nails and screws for sheet copper and sheet lead and aluminium alloy or stainless steel nails and screws for sheet aluminium.

#### I.8 LAPS

Sheet metal flashings shall have 100 mm laps and linings to valleys, secret gutters, etc. 225 mm laps.

# I.9 GENERAL

Profiled sheet roofing and rolled edges, ridge and hip coverings, flashing pieces, etc. of metal, fibre-cement, plastic, etc. shall include fixing accessories.

Sheet metal work shall include laps, seams, welts, clips, tacks, soldered dots, riveting, soldering, brazing, burning and nailing.

# J. CARPENTRY AND JOINERY

## J.1 MATERIALS

Materials shall comply with the following specifications and requirements:

	SABS	Grade or
Material	Specification	Class
Softwood structural timber	563	Stress grade 4
Softwood engineering timber	1245	As specified
Softwood studs for timber frames in buildings	1146	-
Softwood brandering and battens	653	_
Softwood flooring boards	629	Flooring grade Heavy flooring boards
Softwood joinery timber	1359	-
Hardwood joinery timber	1099	Knotty grade
Hardwood strip flooring	281	As specified
Wooden ceiling and panelling boards	1039	As specified
Laminated timber (glulam)	1460	As specified
Gypsum plasterboard	266	-
Wood fibreboard	540	As specified
Wood wool panels (cement bonded)	637	-
Fibre-cement sheets: profiled and flat	685	As specified
Fibre-cement boards	803	As specified
Plywood and composite board	929	As specified
Particle board: highly moisture resistant exterior		
and flooring type	1300	-
Particle board: interior type	1301	_
Decorative laminates	1405	High pressure
Wooden doors (flush)	545	-
Materials for thermal insulation of buildings	1381	-
Mild steel nails	820	-
Metal screws for wood	1171	-
Creosote	538	As specified
C (I		

Softwood shall bear the relevant SABS mark and shall be ordered in the sizes in which it will be used as no scantlings of marked timber will be allowed. Should SABS marked timber be unavailable, the Architect's prior permission shall be obtained before using unmarked timber.

## J.2 NOMENCLATURE OF IMPORTED TIMBERS

The names used for imported timbers are those given in Supplement No. 1 to SABS 02 namely "Nomenclature of Standard Trade Names of Imported Commercial Timbers used in South Africa".

#### J.3 HARDWOODS

All hardwoods shall be specially selected, well seasoned, free from sapwood and well kiln dried. Meranti shall be Dark Red Meranti, even in grain and colour, selected from "Standard and Better" quality from Malaysia and with a minimum density of 550 kg/m³ at a moisture content of 12 %.

## J.4 INFECTION AND PRETREATMENT OF TIMBER

All timber, including scaffolding, formwork, etc. used on the site shall be free of borer or other beetle and termite infection. If the work under this contract falls within an area designated under Government Notice R2577 of 1978-12-29, permanent softwood fixed in the building shall be treated against borer, etc. in accordance with Government Notice R451 of 1969-03-28 using Class B or C preservative. The type of preservative used shall be appropriate to the use of the timber. Any prescribed treatment shall comply with SABS 05.

When treated timbers are cut, the cut surfaces shall be effectively brushed with at least two coats of preservative solution

#### J.5 CONSTRUCTION IN GENERAL

Where applicable, construction methods shall comply with SABS 082. Boarded floors shall be laid in accordance with SABS 043. Roof trusses shall be manufactured, erected and braced in accordance with SABS 0243.

#### J.6 STRUCTURAL TIMBER

Timbers generally shall be in single lengths and jointing of timbers will only be permitted when the required length is unobtainable. Only the absolute minimum of joints to obtain a particular length will be permitted and such joints are to be evenly spaced along the length of the timber.

Finger-jointing of structural timber will be permitted, in which case it shall be manufactured in accordance with SABS 096.

#### J.7 PLATE NAILED TIMBER ROOF TRUSSES

Plate nailed timber roof trusses shall be of approved design and manufacture and constructed with softwood structural timber by a truss Fabricator holding a current Certificate of Competence awarded by the Institute of Timber Construction.

Each roof truss shall have all its members accurately cut and closely butted together and rigidly fixed by CSIR approved patented galvanized metal spiked connectors, precision pressed on both sides of each intersection by an approved method, all in accordance with the manufacturer's instructions.

The design, manufacture and transportation of the roof trusses, bracing, etc. shall be under the control of a registered Structural Engineer in accordance with SABS 0160 and SABS 0163, who shall, after erection, provide a certificate confirming that the design, manufacture, transportation, erection and bracing has been carried out in accordance with this specification.

The design shall include for all live loads, wind loads and for dead loads imposed by roof covering, purlins, ceilings, etc.

Fully detailed shop drawings of all trusses, etc., indicating sizes, bracing, loading, etc., are to be submitted to the Architect for approval prior to fabrication.

Unless specific erection instructions are given, erection shall be carried out in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber Roof Trusses" published by the Institute for Timber Construction and the Council for Scientific and Industrial Research or as detailed by the designer.

Roof trusses and bracing shall include design and preparation of shop drawings.

## J.8 TONGUED AND GROOVED BOARDING

Tongued and grooved boards for floors, panelling, etc. shall be in long varying lengths with joints tightly cramped up and secret nailed. Flooring boarding shall be flush jointed with staggered heading joints and machine sanded after fixing.

# J.9 JOINERY

No joinery shall be primed until it has been inspected and approved by the Architect. Skirtings, cornices, rails, etc. shall be in single lengths wherever practicable and shall have splayed heading joints where necessary. Skirtings shall be trenched at back.

Counter tops, etc. shall be constructed of wide boards with glued butt joints. Boards shall be in single lengths but where this is not possible the heading joints shall be staggered. Tops shall be secured with metal or hardwood buttons.

All horns of door frames shall be checked and splayed back where frames are fixed projecting or flush with surface and built in.

All joinery shall be manufactured under similar climatic conditions to those prevailing in the locality of the Works.

Heads of screws in exposed faces of hardwood joinery shall be sunk and match pelleted.

Joinery shall include arris rounded angles, blocking and planting on.

#### J.10 VENEERS

All face veneers shall be of kiln dried timber, free from knots, cracks, patchwork, sapwood and other defects, selected and correctly jointed and glued, dried and machine-sanded to a smooth finish. All veneers shall be applied under hydraulic pressure.

## J.11 DOORS

Flush doors shall have solid timber edge strips with veneer covering the edges of the edge strips, with the outer face only of the strip visible. The veneer and the edge strips shall be timber of the same species and as far as possible of matching colour. Unless otherwise described all flush doors shall be of interior quality, but where exterior quality doors are specified the glue used shall be of the WBP type.

Framed and ledged batten doors described as filled in with V-jointed boarding shall be filled in flush on one side with tongued and grooved vertical boarding, V-jointed on one or both sides and of the thickness stated. The boarding shall be in narrow widths, closely cramped up, rebated on outer edges and housed to grooves in stiles and rails and twice countersunk brass screwed at each intersection with ledges and braces and the inner edges of the abutting stiles and rails shall be chamfered to form a V-joint at junction with the board.

Unless otherwise described double doors shall have rebated meeting stiles.

#### J.12 FIXING

All nails and screws shall be of the size, length and type appropriate to their respective uses. All screws for hardwood joinery work shall be brass.

Items described as "plugged" shall be screwed to fibre, plastic or metal plugs at not exceeding 600 mm centres. Where items are described as "bolted", the bolts have been given separately.

#### J.13 ADHESIVES

Adhesives shall comply with BS 1204 and 4071 where applicable. Adhesives used in the manufacture of external joinery or joinery exposed to excessive moisture (e.g. kitchen and laboratory worktops) shall be of the WBP type.

# K. CEILINGS, PARTITIONS AND ACCESS FLOORING

#### K.1 DESCRIPTIONS AND PREAMBLES

Reference shall be made to other trades and preambles for preambles and full descriptions of items not fully described in this trade which shall apply equally to the work in this trade, unless otherwise described.

#### **K.2 MATERIALS**

Materials shall comply with the following specifications and requirements:

Material	SABS Specification	Grade or Class
Gypsum plasterboard	266	_
Wood fibre building board	540	As specified
Gypsum cove cornice	622	_
Wood wool panels (cement bonded)	637	_
Softwood brandering and battens	653	_
Fibre-cement boards	803	As specified
Plywood and composite board	929	As specified
Wooden ceiling and panelling boards	1039	As specified
Softwood studs for timber frames in buildings	1146	_
Materials for thermal insulation of buildings	1381	_
Expanded polystyrene thermal insulation boards	1508	_

## K.3 TONGUED AND GROOVED BOARDING

Tongued and grooved boarding for ceilings shall be in long varying lengths, V-jointed one side and with joints tightly cramped up and secret nailed.

## K.4 CEILINGS, ETC.

# K.4.1 Brandering

Brandering for ceilings and eaves soffit coverings shall be symmetrically arranged with necessary smaller panels. Main branders shall be at right angles to roof timbers, with cross branders cut in between and branders shall be fixed with galvanized wire nails driven in on skew alternately in opposite directions.

## K.4.2 Ceiling boards

Ceiling boards shall be in long lengths symmetrically arranged with necessary smaller panels, closely butted and secured at 150 mm centres to brandering with galvanized or cadmium-plated clout-headed nails.

## K.5 GYPSUM SKIM PLASTER

Gypsum skim plaster shall be pure gypsum plaster finished with a steel trowel.

# K.6 EXPOSED TEE-SYSTEM SUSPENDED CEILINGS

The ceiling panels shall be as described in the items and the panels shall be suitably stiffened at back to prevent bowing or sagging.

The exposed surfaces of all ceiling panels and supporting members shall be uniform in colour and free from surface blemishes.

The suspension grid system shall be an approved patent suspension system comprising 38 mm galvanized steel main and cross tee bearers spaced in both directions at centres to suit sizes of ceiling panels used, with the cross bearers fitted between and notched to form flush fit with main bearers. The exposed flange of the tees shall be 25 mm wide, covered with a rolled aluminium cap painted a low sheen satin white. Cornices, etc. shall be as described in the items and shall be finished to match the exposed tees.

The main tee bearers shall have holes for cross tees at 300 mm centres and holes for hangers at 50 mm centres. In addition, main and cross tee bearers shall be holed as necessary for and provided with timber wedges or steel clips to prevent ceiling panels from lifting.

The web of the exposed cross tee bearers shall extend to form a positive interlock with the main tee bearers and the lower flange shall be cut back to provide a joint free appearance.

All hangers shall be galvanized and shall be at centres to meet the requirements of the specification with one end fixed to the suspension grid main bearers and the other end fitted with suitable galvanized fixing cleat securely fixed to the structure. Fixing points shall be agreed to by the Architect before any power shot fixings are made. Hangers shall not be suspended from airconditioning ducts.

Component parts and fixings shall be non-corrosive and able to withstand atmospheric pollution. Surfaces of aluminium which are in contact with other materials when fixed, particularly metals, shall be suitably insulated to prevent electrolytic corrosion.

Ceilings shall include hangers, suspension grid system and ceiling panels, constructing the ceiling in a manner suitable for carrying airconditioning diffusers and light fittings in the positions required, setting out the ceilings to layouts approved by the Architect, all non-standard size panels and modifications to standard suspension systems as necessary to work around any airconditioning ducts or pipes or light fittings.

## K.7 FLUSH PLASTERED SUSPENDED CEILINGS

Gypsum plasterboard panels of the specified thickness generally in 1 200 mm widths and in long lengths shall be fixed grey side down with self-tapping screws to the suspension system with the joints between boards loosely butt jointed and covered with 65 mm wide strips of mesh scrim fixed along both edges.

The plasterboard panels shall be finished with gypsum skim plaster trowelled to a smooth polished surface to the thickness, etc. recommended by the manufacturer.

The suspension system shall be an approved patent concealed suspension system consisting of galvanized mild steel bearers at 300 mm centres in one direction and at 1 200 mm centres in the other direction suspended on approved non-rusting metal hangers spaced generally at 1 200 mm centres or to suit layout of airconditioning ducts and other services, etc. above ceiling with one end bolted to the bearer and the other end fitted with a galvanized fixing cleat securely fixed to the structure as required.

Fixing points shall be agreed to by the Architect before any power shot fixings are made. Hangers shall not be suspended from airconditioning ducting.

Ceilings shall include hangers, suspension system, ceiling panels and plaster finish, also for constructing the ceilings in a manner suitable for carrying airconditioning diffusers and light fittings in the positions required, setting out the ceilings to layouts approved by the Architect and modifications to standard suspension systems as necessary to work around any airconditioning ducts or pipes or light fittings.

## K.8 ACCESS FLOORING

Access flooring shall comply with SABS 1549.

# L. FLOOR COVERINGS, WALL LININGS, ETC.

## L.1 MATERIALS

Floor coverings and wall linings shall comply with the following specifications and requirements:

Material	Specification	Grade
Resin modified vinyl floor tiles (thermoplastic)	SABS 586	-
Semi-flexible vinyl floor tiles	SABS 581	-
Sheet linoleum (calendered types), cork, carpet		
and linoleum tiles	BS 810	-
Solid rubber flooring	BS 1711	_
Felt backed linoleum	BS 1863	_
Flexible vinyl flooring	SABS 786	_
Hardwood block flooring	SABS 281	Clear grade
Wood mosaic flooring	SABS 978	_
Carpet underlays	SABS 1419	-
Textile floor coverings (pile construction)	SABS 1375	-
Textile floor coverings (needle-punched construction)	SABS 1415	_

## L.2 LAYING OF MATERIAL

The laying of vinyl and similar flooring material in tile and sheet form and the fixing of plastic skirtings, nosings, etc. shall be in accordance with SABS 070.

The laying of wood block and wood mosaic flooring shall be in accordance with SABS 043.

The laying of textile floor coverings shall be in accordance with SABS 0186.

Floor tiles shall be laid with continuous joints in both directions.

Patterned floor coverings shall be matched at joints.

# L.3 GENERAL

Floor coverings, wall linings, skirtings, nosings, etc. shall include all preparatory work to screeded or plastered surfaces, etc., priming coats and adhesives.

Floor coverings and wall linings shall include straight cutting, as well as dressing around and into corners.

Wood block and wood mosaic flooring shall include sanding with a sanding machine and sealing with a coat of approved penetrating sealer.

Plastic handrails shall include welded and polished butt joints.

## M. IRONMONGERY

#### M.1. LOCKS, ETC.

Mortice locks, mortice latches, mortice deadlocks, rim locks, cylinder rim latches and deadlocks and mortice lock furniture shall comply with SABS 4.

Locks described as "en suite" shall be in sets as described, each set controlled by its own master key.

Padlocks shall comply with SABS 1533.

#### M.2 KEYS

Locks shall not have interchangeable keys. Each lock shall have two keys and shall be clearly marked with consecutive numbers and each key shall be punched with the corresponding number of the relative lock.

#### M.3 FIXING

Unless otherwise described, ironmongery is to be fixed to wood.

Items described as "plugged" shall be screwed to fibre, plastic or metal plugs.

Screws, bolts, etc. for fixing of ironmongery shall be of matching metal and finish, except for aluminium ironmongery or ironmongery fixed to aluminium in which cases stainless steel screws may be used.

All necessary preparation of pressed steel door frames for the fixing of ironmongery to the frames has been included with the pressed steel door frames.

#### M.4 KITCHEN CUPBOARDS

Kitchen cupboards of steel, composite board and timber shall comply with SABS 1385. Steel cupboards shall be finished with baked enamel complying with SABS 783 Type II. Tops of floor cupboards shall have laminated plastic covering.

Sinks and drainers shall be of Type 304 satin finished stainless steel and shall comply with SABS 242. Bowls shall have integral slot overflows and outlets of bowls shall be provided with 40 mm chromium plated brass waste fitting with a screwed outlet complete with rubber plug attached to the sink with a chromium plated chain.

Cupboards shall be fitted with all necessary hinges, handles, catches, etc. Cupboards shall be securely fixed with all necessary screws and fibre, plastic or metal plugs.

Where cupboards are described as a "series", tops shall be continuous and cupboards shall be bolted or screwed together, including bolts, screws, holes, etc.

## M.5 CHALKBOARDS

Vitreous enamelled chalkboards shall comply with CKS 36.

#### M.6 DOOR CLOSERS

Door closers shall comply with SABS 1510.

# N. STRUCTURAL STEELWORK

#### N.1 SPECIFICATION

All structural steelwork shall comply with SABS 1200H or 1200HA as applicable.

Wherever the term "Engineer" appears in SABS 1200H or 1200HA or in the following Project Specification this shall be deemed to mean the Architect's representative responsible for this section of the Works.

# N.2 PROJECT SPECIFICATION INCORPORATING AMPLIFICATIONS, ADDITIONS AND AMENDMENTS TO SABS 1200H AND 1200HA

The following amplifications, additions and amendments to SABS 1200H and 1200HA shall apply and clause numbers refer to either the existing clauses in these SABS Specifications or to new clauses which are related to clauses in these SABS Specifications.

**SABS 1200H** 

#### 3.1.1 Grades of steel

The grade of mild steel shall be Grade 300 W complying with SABS 1431.

## 5.1.2 Contractor provides shop details

The Contractor shall be responsible for the preparation of all shop detail drawings.

## 5.1.3 Engineer provides shop details

This clause shall not apply.

#### 5.3.9 Protective treatment

Structural steelwork shall be cleaned and prepared by wire brushing in accordance with SABS 064 and all surfaces shall be treated with one coat of red lead based primer complying with SABS 312 Type II Grade I to a minimum dry film thickness of 30 micrometres before leaving the workshop. Upon delivery to the site and again after erection all bared surfaces shall be made good with similar primer.

#### 8. Measurement and payment

This clause shall not apply.

SABS 1200HA

#### 5.2.10 Protective treatment

Structural steelwork shall be cleaned and prepared by wire brushing in accordance with SABS 064 and all surfaces shall be treated with one coat of red lead based primer complying with SABS 312 Type II Grade I to a minimum dry film thickness of 30 micrometres before leaving the workshop. Upon delivery to the site and again after erection all bared surfaces shall be made good with similar primer.

## 5.3.7 Repairs to paint and site painting

This clause shall not apply.

## 8. Measurement and payment

This clause shall not apply.

#### N.3 GENERAL

Structural steelwork shall include preparation of shop detail drawings, fabrication, protective treatment and erection, including all welding, holes, black bolts, nuts, washers, rivets, packings, etc.

## O. METALWORK

#### 0.1 STEEL

Steel shall be mild steel of approved commercial quality. Steelwork shall be cleaned and prepared by wire brushing in accordance with SABS 064 and given one coat of primer complying with SABS 909 before leaving the workshop.

## O.1.1 Galvanizing of steel

Steelwork described as "galvanized" shall be fabricated in accordance with SABS 0214 and galvanized in accordance with SABS 763 by means of the hot dip process after fabrication. Where welding on site is unavoidable, such welded joints shall be cleaned down and cold galvanized to approval.

## O.2 STAINLESS STEEL

Stainless steel shall be AISI Type 304 stainless steel and shall be buffed to an even satin finish. Stainless steel screws shall be used for fixing stainless steel.

## O.3 ALUMINIUM

Aluminium extrusions shall be of 6063-T6 alloy and temper. Aluminium sheet and strips shall be of 1200-H4 alloy and temper. Aluminium bars and sections shall comply with the relevant clauses of BS 1476, extruded tube and hollow sections with the relevant clauses of BS 1474 and sheet and strips with the relevant clauses of BS 1470.

Joints in all aluminium members shall be formed in an approved manner so that the joints are practically invisible. Screw heads, pins, rivets, etc. shall be concealed as far as possible. 300 Series stainless steel screws and bolts shall be used for jointing and fixing aluminium work.

The surfaces of all aluminium which are in contact with other materials when fixed shall be suitably insulated with a non-absorbent insulating material to prevent corrosion. All aluminium work shall be suitably protected against damage, deterioration or discolouration caused by mortar droppings, paint, etc. by taping with removable tape, covering with temporary casings or by covering with motor oil all to approval.

## O.3.1 Anodizing of aluminium

Aluminium described as "anodized" shall be treated in accordance with SABS 999 with Grade 25 coating thickness for exterior use or Grade 15 for interior use as specified, to the required finish. All alloys to be anodized shall be suited to anodizing.

## O.4 BOLTS AND NUTS

Bolts and nuts, other than fitted bolts and bolts and nuts for friction grip joints, shall comply with the requirements of SABS 135, 136 or 1143 as applicable. Nuts shall be of at least the strength grade appropriate to the grade of bolt or other threaded element with which they are used.

## O.5 SCREWING OF METALWORK TO STEEL, WOOD, CONCRETE, ETC.

Metalwork described as "screwed" to steel, wood, etc. or "plugged" to brickwork, concrete, etc. shall be fixed at not exceeding 500 mm centres, with necessary holes, countersinking, threading, screws, set screws, self-tapping screws and fibre, plastic or metal plugs.

## O.6 BOLTING OF METALWORK

Where metalwork is described as "bolted" to steel, wood, brickwork, concrete, etc. the bolts are given elsewhere.

#### 0.7 WELDING OF METALWORK

Welding of metalwork shall be in accordance with SABS 044. All welds shall be cleaned and filed or ground off smooth to approval. All welded joints shall be continuous.

# **0.8 CHROMIUM PLATING OF METALWORK**

Metalwork described as "chromium plated" shall be plated in accordance with SABS 728 after fabrication.

#### 0.9 METALWORK GENERALLY

Metalwork shall include cutting to lengths and filing sharp edges smooth. Tubular and pipe work shall include running joints.

Rails, etc. described as "continuous" shall be in long lengths and shall include welded running joints.

Screwed work shall have full threads.

## O.10 PRESSED STEEL DOORS, FRAMES, ETC.

#### 0.10.1 Door frames

Door frames shall comply with SABS 1129. Frames shall project not less than 20 mm into floor finish. Except where described as galvanized, frames shall be treated with one coat of primer complying with SABS 909 before leaving the factory. Frames are to jambs and heads of openings. Frames for single doors shall be provided with two 100 mm steel butt hinges and an adjustable striking plate for a mortice lock and frames for double doors shall be provided with four 100 mm steel butt hinges. Butt hinges shall be steel butts with loose pins, welded to frames. Where necessary mortar caps shall be welded to frames and back plates shall be welded on behind tappings for screws.

## O.10.2 Cupboard door frames

Cupboard door frames shall be as described in O.10.1, but with thresholds of unequal channel section, two 100 mm steel butt hinges to hanging stiles, two 75 mm steel butt hinges to hanging stiles above transoms, necessary striking plates for mortice locks and keeps for barrel bolts.

#### 0.10.3 Combination doors and frames

Combination doors and frames shall be manufactured of 1,6 mm thick steel plate. Frames shall be as described in 0.10.1. Doors shall be of standard design and required profile, with a 44 mm wide edge all round, vertical reinforcing ribs pressed in and with two reinforcing rails welded on. The door shall be provided with a two lever mortice lock with lock box welded to inside. Doors shall be welded to steel butts.

#### 0.10.4 Transformer room doors and frames

Transformer room doors and frames shall be manufactured of 1,6 mm thick steel plate. Frames shall be as described in 0.10.1. Doors shall be of standard design with a 44 mm wide edge all round, vertical reinforcing ribs pressed in and with three reinforcing rails welded on. Single doors shall be fitted with a padlock cleat and two 100 mm brass pintle hinges and double doors shall be fitted with a padlock cleat, two 150 mm bolts and four 100 mm brass pintle hinges. Each leaf shall be fitted with a louvred ventilation panel of standard design backed with 6 mm mesh galvanized wire vermin proof screen.

## 0.10.5 **Sizes**

The frame widths given refer to unfinished wall thicknesses.

# O.10.6 Glazing beads

Where specified, glazing beads shall be  $12 \times 12 \text{ mm}$  standard metal glazing beads mitred at angles and countersunk screwed on at not exceeding 300 mm centres with self-tapping screws.

#### O.11 STEEL WINDOWS, DOORS, ETC.

## O.11.1 Windows, doors, etc.

Windows, doors, etc. shall comply with SABS 727 and fittings shall be chromium plated. Where necessary all side hung sashes shall be fitted with cleaning hinges.

Fixed lights and opening sashes shall be in single squares. Windows, etc. of single unit construction shall have weather bars at transoms above opening sashes.

Composite windows not of single piece construction shall be coupled with standard coupling mullions and transoms that correspond with the window section used.

Kicking plates and panels shall be 1,6 mm metal plate fixed with standard metal glazing beads mitred at angles and countersunk screwed on at not exceeding 300 mm centres with self-tapping screws.

Except where described as galvanized, windows, doors, burglar bars, etc. shall be treated with one coat of primer complying with SABS 909 before leaving the factory.

#### 0.11.2 Burglar bars and flyscreens

Where windows are described as fitted with burglar bars or flyscreens, these shall be standard type fitted over opening sashes.

#### O.12 ADJUSTABLE LOUVRE UNITS

Adjustable louvre units shall be suitable for hand or longarm operation.

Adjustable glass louvred units shall comply with CKS 413.

Louvre units shall include glass louvres with polished edges and installation, including holes, screws, rivets, preparation of openings, etc.

#### 0.13 ALUMINIUM WINDOWS AND DOORS

The foregoing preambles "O.3 - ALUMINIUM" shall apply to aluminium windows, doors, etc. in all respects in so far as they are applicable. Aluminium windows and doors shall be manufactured from extruded aluminium members of 6063-T6, 6261-T6 or 6082-T6 alloy and temper.

Ancillary members such as sills, flashings, infill panels and the like formed from flat sheet material shall be of an appropriate alloy selected from 1200, 3004 or 5251 complying with BS 1470 of a temper suitable for the method of forming and a composition suitable for anodizing or painting as required.

Windows, doors, etc. shall be manufactured by an approved firm of Specialists and shall be of best quality material and workmanship and of approved design. Windows, doors, etc. shall meet with the minimum recommended performance requirements as set out by the Association of Architectural Aluminium Manufacturers of South Africa (AAAM-SA) in the latest edition of the Selection Guide.

All opening sashes shall fit perfectly on all faces and be so hung as to open and close freely without binding at any point.

The fittings for all opening sashes shall be substantial and, unless otherwise described, shall be of high quality aluminium alloy finished to match the windows, doors, etc. on which they occur. Samples of all fittings shall be supplied to the Architect for approval.

Top, side and bottom hung opening sashes shall be hung on two aluminium hinges with 300 Series stainless steel pins, nylon bushes and stainless steel washers. Side hung sashes shall have fasteners and sliding stays, top hung sashes shall have peg stays and bottom hung sashes shall have spring catches and concealed arms.

Projected out sashes shall have aluminium fasteners and concealed arms of a non-corrosive material compatible with aluminium.

The frames which are to be built into openings in brickwork shall be fitted with the manufacturer's standard type fixing lugs, not less than  $19 \times 3 \times 150$  mm long, screwed to frame and placed one near each corner and intermediately not more than 450 mm apart to sides, top and bottom and where fixed to concrete reveals, wood sub-frames or to pre-formed openings in brickwork shall have countersunk holes for screws, one near each corner and intermediately not more than 450 mm apart to sides, top and bottom.

## O.13.1 Glazing beads

Where so described, openings and sashes of windows and doors shall be fitted with approved channel section aluminium glazing beads sufficient in size and profile to suit the method of glazing employed, finished to match the windows, doors, etc. and neatly mitred. Screws where necessary shall be of aluminium or 300 Series stainless steel and have pan or raised heads finished to match the beads.

## O.13.2 Finishes

Windows, doors, etc. described as "anodized" shall be treated in accordance with SABS 999 with Grade 25 coating thickness. Windows, doors, etc. described as "factory painted" shall have an electrostatically applied oven baked polyester paint coating not less than 25 micrometres thick.

## O.13.3 General

Aluminium windows, doors, etc. shall include glass as described, fixing in position, sealing and protection against damage, deterioration or discolouration by taping with removable tape or covering with temporary casings or motor oil and removing same on completion.

## 0.14 STRONGROOM AND RECORD ROOM DOORS

Strongroom doors shall comply with SABS 949.

Strongroom and record room doors shall not be built in as the work proceeds, but shall be fixed later in the openings provided. The Contractor shall ensure that the lock or other important parts of the door are not tampered with. Should any such tampering occur, the Contractor will be held responsible and at the Architect's discretion shall provide a new door or lock and keys at his own expense. The keys shall not be delivered together with the doors to the building site. The Contractor shall arrange for the manufacturer to send the keys direct to the Architect per registered post. If these instructions are not complied with, a new lock and keys shall be provided by the Contractor at his own expense.

## **0.15 STEEL ROLLER SHUTTERS**

Roller shutters shall be of approved manufacture comprising curtain, vertical channel guides and top mechanism. The curtain shall be constructed of 1 mm thick machine-rolled galvanized interlocking slats with mild steel end locks spot welded to alternate strips. The bottom shall be provided with a galvanized rail riveted on and vertical edges shall slide in galvanized channel guides formed of steel not less than 2,5 mm thick bolted to sides of openings.

The mechanism shall be covered in a galvanized sheet iron box. The ungalvanized sections shall be treated with one coat of primer complying with SABS 909 before leaving the factory.

#### O.16 EXPANDED METAL

Expanded metal shall comply with SABS 190.

## 0.17 IRONMONGERY

The preambles in M. IRONMONGERY shall also apply to ironmongery included with items of metalwork.

## P. PLASTERING

## P.1 CEMENT

Cement shall be ordinary Portland cement complying with SABS 471.

#### P.2 LIME

Lime shall be Type A2P hydrated lime complying with SABS 523.

#### P.3 SAND

Sand shall comply with SABS 1090 for the relevant types of plaster or other in situ finishes.

#### P.4 PREPARATORY WORK

Surfaces shall be clean and free of oil and thoroughly wetted directly before any plastering or other in situ finishes are commenced. Concrete surfaces shall be slushed with a mixture of one part cement and one part coarse sand or otherwise treated to form a proper key. Preparatory coats shall be thoroughly scored and roughened to form a proper key.

#### P.5 FINISH

All final coats of paving and plastering shall be executed in one operation without any blemishes. No touching up of finished work will be permitted.

#### P.6 SCREEDS

Screeds shall be composed of one part cement and four parts sand.

#### P.7 CEMENT RENDER

Cement render shall be composed of one part cement and three parts sand finished with a steel trowel to a smooth polished surface and cured for at least seven days after laying.

Cement render finish shall be divided into panels not exceeding 6 m² with V-joints and deep trowel cuts.

## P.8 GRANOLITHIC

Granolithic shall be composed of one part cement, one part fine sand, two parts coarse sand and one part granite or other approved stone aggregate that will pass through a 5 mm mesh sieve, finished with a steel trowel to a smooth polished surface and cured for at least seven days after laying.

Coloured granolithic shall be carried out in two coats in one operation and shall be tinted to the required colour with approved colouring pigment mixed into the finishing coat. Under no circumstances is the pigment to be sprinkled on and trowelled in after the granolithic is laid.

Granolithic shall be divided into panels not exceeding 6 m² with V-joints and deep trowel cuts.

## P.9 TERRAZZO

Terrazzo shall be applied in two coats. The undercoat shall be composed of one part cement and three parts sand and shall be finished with a wooden float. The finishing coat shall be composed of one part cement and two parts marble or stone aggregate of a colour and size to obtain the required colour and texture and shall be at least 12 mm thick, and applied before the undercoat has dried out. The finishing coat shall be compacted by tamping or rolling until superfluous water has been expelled, finished with a steel trowel and cured for at least seven days after laying. The finished surface shall show at least 80 % of the aggregate.

Surfaces described as "polished" shall be polished by machine using various grades of abrasive and grouting with tinted cement as necessary between polishings.

Surfaces described as "brushed" shall be brushed with a steel wire brush on the day the terrazzo has been laid to expose the aggregate as required.

Where required, brass or other dividing strips shall be embedded in the undercoat to finish flush with the finished surface.

Sample blocks, each size 300 x 300 mm, as separately measured shall be prepared for approval by the Architect and kept in an accessible place on the site until the completion of the contract.

#### P.10 SKIRTINGS

Skirtings shall not exceed 25 mm thick and descriptions shall be deemed to include fair edge with arris or rounded external angle at top edge or V-joint to finish flush with plaster and for coved or square junction with floor finish.

#### P.11 THICKNESS OF PLASTER

All plaster, other than skim plaster, shall be not less than 10 mm and not more than 20 mm thick.

## P.12 CEMENT PLASTER

Cement plaster shall be composed of one part cement and five parts sand.

#### P.13 COMPO PLASTER

Compo plaster shall be composed of one part cement, two parts lime and nine parts sand.

#### P.14 GYPSUM SKIM PLASTER

Gypsum skim plaster shall be pure gypsum plaster finished with a steel trowel.

#### P.15 TWO COAT PLASTER WITH GYPSUM FINISH

Two coat plaster with gypsum finish shall comprise an undercoat composed of one part cement and five parts sand finished with a wooden float and a finishing coat of gypsum skim plaster.

## P.16 ROUGH-CAST PLASTER

Rough-cast plaster shall be applied in two coats. The undercoat shall be composed of one part cement and five parts sand finished with a wooden float. The finishing coat shall be composed of one part cement and three parts stone aggregate that will pass through a 4 mm mesh sieve. The finishing coat shall be flicked on with a machine before the undercoat has set to obtain an even texture.

#### P.17 FINE ROUGH-CAST PLASTER

Fine rough-cast plaster shall be as for rough-cast plaster but the finishing coat shall be composed of one part cement and three parts coarse sand.

#### P.18 GENERAL

Plaster and other in situ finishes shall include the necessary preparatory work, working around pipes, balusters, etc. Plastering described as being on vertical surfaces of brickwork or blockwork shall include concrete columns, beams and lintels flush with the face of the wall.

Mouldings shall include dubbing out where necessary and ends, mitres and intersections when the girth of the moulding does not exceed 300 mm.

# Q. TILING

#### Q.1 CEMENT

Cement shall be ordinary Portland cement complying with SABS 471.

#### Q.2 SAND

Sand shall comply with SABS 1090 for the relevant types of tiling.

## Q.3 TILES, MOSAICS, ETC.

Tiles, mosaics, etc. shall be even in shape and size, free from cracks, twists or blemishes and uniform in colour.

#### Q.4 PREPARATORY WORK

Surfaces shall be clean and free of oil and thoroughly wetted directly before any tiling is commenced. Concrete surfaces shall be slushed with a mixture of one part cement and one part coarse sand or otherwise treated to form a proper key.

## Q.5 GLAZED CERAMIC WALL TILING

Glazed ceramic wall tiles and fittings shall comply with SABS 22.

Tiles shall be fixed in accordance with SABS 0107. Where tiles are fixed to plaster or screeds with an adhesive, the adhesive shall be as recommended by the manufacturer of the tiles. Joints shall be straight, continuous and tightly fitted and pointed with waterproofed white cement.

## Q.6 CERAMIC FLOOR TILING

Glazed and unglazed ceramic floor tiles, fittings and bedding shall comply with SABS 1449. Where tiles are fixed to screeds with an adhesive, the adhesive shall be as recommended by the manufacturer of the tiles. Joints shall be straight, continuous and flush pointed with an approved grouting compound.

## Q.7 GENERAL

Tiling shall include necessary preparatory work, beds and backings (as distinct from plaster or screeds which are measured separately), symmetrical arrangement of tiling with cutting along both sides of panels and for straight cutting.

Tiling described as "on walls" is on brick walls or block walls unless otherwise stated and shall include concrete columns, beams and lintels flush with the face of the wall.

# R. PLUMBING AND DRAINAGE

#### R.1 GENERAL

#### R.1.1 **Descriptions and preambles**

Reference shall be made to other trades and preambles for preambles and full descriptions of items not fully described in this trade which shall apply equally to the work in this trade, unless otherwise described.

#### R.1.2 Excavations

Excavations shall be deemed to be in "earth". Excavations shall include risk of collapse of sides of excavations, keeping excavations free of water, filling in in 300 mm thick layers, watering, compacting and spreading and levelling surplus excavated material over site as directed, except where items are measured in detail. Sumps, catchpits, inspection chambers, fresh drains, septic tanks, stopcock and meter boxes, valve chambers and the like, except where measured in detail, shall include excavations.

#### R.1.3 Concrete

Unreinforced concrete shall be Class B prescribed mix concrete and reinforced and precast concrete shall be Class C prescribed mix concrete. Concrete work shall include formwork except where items are given in detail.

#### R.1.4 Brickwork

Brickwork shall be of extra hard burnt bricks built in Class I mortar.

#### R.1.5 Plaster

Plaster shall be 1: 3 cement plaster finished smooth with a steel trowel and shall have all salient angles rounded.

## R.1.6 **Diameters of pipes, etc.**

Diameters stated for pipes, traps, valves, etc. are internal diameters except PVC, polyethylene, stainless steel and copper pipes and traps for which external diameters are stated.

## R.1.7 Water supply and drainage

Water supply and drainage for buildings shall be executed in accordance with SABS 0252.

## R.2 SHEET METAL WORK

## R.2.1 Materials

Sheet metal shall comply with the following specifications and requirements:

Material	Specification
Sheet zinc	BS 849
Sheet aluminium	BS 1470
Sheet copper	BS 2870

## R.2.2 Galvanized sheet iron

Galvanized sheet iron shall be rolled steel sheet coated on both sides with Class C zinc coating complying with SABS 934. Sheets shall be free from white rust.

## R.2.3 General

Sheet metal work shall include laps, seams, riveting, soldering, brazing and burning.

#### **R.3 EAVES GUTTERS**

## R.3.1 Galvanized sheet iron gutters

Galvanized sheet iron gutters shall have beaded edges and all joints shall be riveted and soldered. Angles shall be strengthened with 50 x 0,6 mm galvanized sheet iron strips soldered on over the internal faces of mitres.

Gutters shall be fixed with falls to outlets on 30 x 3 mm galvanized mild steel brackets, bent to the shape of gutters, with front ends taken up to the underside of beaded edge of gutter and each screwed to roof timbers or bolted to fibre-cement fascias with 6 mm galvanized gutter bolts. Gutters shall be bolted to brackets at front with 6 mm galvanized gutter bolts, one to each bracket.

Brackets shall be positioned at joints of gutters and intermediately at not exceeding 1,25 m centres.

## R.3.2 Fibre-cement gutters

Fibre-cement gutters shall have spigot and socket joints and shall be jointed and fixed in accordance with the manufacturer's instructions.

Gutters shall be fixed with falls to outlets on standard aluminium alloy brackets, screwed to roof timbers or bolted to fibre-cement fascias with 6 mm galvanized gutter bolts.

## R.3.3 Unplasticized polyvinyl chloride (UPVC) gutters

Unplasticized polyvinyl chloride gutters shall comply with SABS 11 and shall be jointed and fixed in accordance with the manufacturer's instructions. Gutters shall be fixed with falls to outlets on brackets as supplied by the manufacturer, screwed to roof timbers or bolted to fibre-cement fascias with 6 mm galvanized gutter bolts.

## R.3.4 Aluminium gutters

Aluminium gutters shall be roll formed on site to required lengths and profiles from 3003H14-3SH4 alloy strip not less than 0,7 mm thick factory coated on both sides with baked enamel and two coats of silicone modified polyester to a total minimum thickness of 20 micrometres. Angles, stopped ends, etc. shall be prefabricated units pop riveted to gutters with joints sealed with mastic. The guttering shall be in continuous lengths between angles, stopped ends, etc.

Gutters shall be fixed on 20 x 3 mm extruded aluminium brackets clipped into the beaded front edge and screwed to roof timbers or bolted to fibre-cement fascias with 6 mm galvanized gutter bolts at not exceeding 600 mm centres.

#### **R.4 RAINWATER PIPES**

## R.4.1 Galvanized sheet iron pipes

Galvanized sheet iron pipes shall have seams at the back and shall be jointed with soldered slip joints.

Pipes shall be fixed to walls, etc. with galvanized mild steel holderbats spaced at not exceeding 2 m centres with tails driven in or cut and pinned in 1 : 3 cement mortar.

#### R.4.2 Fibre-cement pipes

Fibre-cement pipes shall have spigot and socket joints and shall be jointed and fixed in accordance with the manufacturer's instructions.

Pipes shall be fixed to walls, etc. with standard aluminium alloy holderbats with tails driven in or cut and pinned in 1:3 cement mortar.

# R.4.3 Unplasticized polyvinyl chloride (UPVC) pipes

Unplasticized polyvinyl chloride pipes shall comply with SABS 11 and shall be jointed and fixed in accordance with the manufacturer's instructions.

Pipes shall be fixed to walls, etc. with standard aluminium alloy holderbats with tails driven in or cut and pinned in 1:3 cement mortar.

#### R.4.4 Aluminium pipes

Aluminium pipes and fixing straps shall be formed from 3003H14-3SH4 alloy strip not less than 0,7 mm thick factory coated on both sides as described for aluminium gutters.

Pipes shall be in continuous lengths with formed angles, offsets, shoes, etc.

Pipes shall be fixed to walls, etc. with 20 x 0,6 mm straps at not exceeding 1,5 m centres screwed to 25 x 75 x 100 mm hardwood chamfered and oiled blocks plugged to walls.

## **R.5 STORMWATER CHANNELS**

Stormwater channels shall be constructed of unreinforced concrete with segmental channel formed in top, laid to falls on a well rammed earth bottom and plastered on exposed surfaces.

Short isolated lengths of stormwater channel given in number shall include open and closed ends.

# R.6 PIPES AND FITTINGS

Pipes and fittings shall comply with the following specifications and requirements:

Pipes and fittings	Specification	Class or type
Concrete non-pressure pipes	SABS 677	SC Type; Class B
Reinforced concrete pressure pipes	SABS 676	-
Vitrified clay sewer pipes and fittings	SABS 559	-
Fibre-cement pipes and fittings for drains	SABS 819	Class 3
Fibre-cement pressure pipes and couplings (constant internal diameter type)	SABS 1223	-
Pitch-impregnated fibre pipes, couplings and fittings	SABS 921	Fittings shall be polypropylene
Unplasticized polyvinyl chloride (UPVC) sewer and drain pipes and pipe fittings	SABS 791	Normal duty, with socket and rubber ring type joint
Unplasticized polyvinyl chloride (UPVC) pressure pipes and fittings for cold water supply	SABS 966	-
Unplasticized polyvinyl chloride (UPVC) soil, waste and vent pipes and pipe fittings for use above ground in drainage installations	SABS 967	-
Polypropylene pressure pipes	SABS 1315	-
Black polyethylene pressure pipes for cold water supply	SABS 533	-
Cast iron pipes and pipe fittings for use above ground in drainage installations	SABS 746	Type B pipes
Cast iron pressure pipes for use in drainage and gas and water supplies	BS 1211	-
Heavy duty cast iron pipe fittings for drainage and gas and water supplies	BS 78	-
Malleable cast iron pipe fittings	SABS 509	Galvanized
Cast iron fittings for fibre-cement pressure pipes	SABS 546	-
Steel pipes and fittings up to 150 mm nominal bore and suitable for screwing to ISO R7	CADC (0	
pipe threads	SABS 62	Medium class, galvanized
Copper tubes for domestic plumbing services	SABS 460	Class 1 - above ground Class 2 - under ground
Hard-drawn copper tubes	SABS 460	Class 0 - above ground
Lead pipes Stainless steel pipes for use with compression	BS 602	_
Stainless steel pipes for use with compression fittings	BS 4127	AISI Type 304L
Compression and capillary solder fittings for copper tubes	SABS 1067	_
Vent valves for drainage installations	SABS 1532	-

#### **R.7 JOINTS**

Joints of pipes not covered under R.6 shall be as follows:

Pipes Joints

Fibre-cement, concrete, pitch-impregnated fibre and vitrified clay pipes for use under ground in non-pressure

pipe lines

Fibre-cement for use above ground Spigot and socket joints with tarred rope yarn and

caulking compound

instructions

Cast iron for use above ground Spigot and socket joints with tarred rope yarn and

caulking compound

or

Plain ended joints with stainless steel couplings with

Flexible joints in accordance with the manufacturer's

neoprene rubber sleeves

Cast iron for use below ground Spigot and socket joints with tarred rope yarn and

molten lead caulking

Galvanized mild steel Joints of screwed galvanized steel sockets or bolted

galvanized iron flanges

Screwed joints with plastic jointing tape or hemp Flanged joints which shall be bolted and provided

with rubber gaskets and with flanges

screwed to pipes

Polyethylene and unplasticized polyvinyl chloride pipes In accordance with SABS 0112

Joints between pipes of different materials shall be as follows:

Between cast iron and mild steel Spigot and socket joints with tarred rope yarn and

molten lead caulking

Between cast iron and lead Brass ferrule with wiped lead joint to lead pipe and

spigot and socket joint with tarred rope yarn and molten

lead caulking to cast iron pipe

Between cast iron and clay Spigot and socket joint with semi-dry cement

caulking and 1: 2 cement mortar fillet

Between mild steel or copper and clay

Spigot and socket joint with either bitumen or semi-dry

cement caulking and 1: 2 cement mortar fillet

Between lead and mild steel Brass screw cap and lining and wiped soldered joint

to lead pipe

Rubber jointing rings shall comply with SABS 974.

Jointing of new to existing pipes shall include searching for the existing pipe, exposing if necessary, cutting into, jointing and necessary fittings.

## **R.8 FIXING OF PIPES**

Pipes shall be fixed as follows:

R.8.1 Galvanised mild steel (except those

stated in R.8.3)

To walls with galvanized mild steel brackets for pipes not exceeding 80 mm diameter and with galvanized cast iron hinged holderbats with brass pins or bolts for pipes exceeding 80 mm diameter; both types with tails cut and pinned in 1:3 cement mortar

To woodwork with screw-on type galvanized mild steel

clips

R.8.2	Copper and stainless steel	To walls with brass holderbats or screw-on type two piece spacing clips for pipes not exceeding 75 mm diameter and with purpose made holderbats for pipes exceeding 75 mm diameter; both types with tails cut and pinned in 1:3 cement mortar
		To woodwork with screw-on type brass holderbats
R.8.3	Cast iron and galvanized mild steel for soil, waste and vent pipes	To walls with hinged cast iron holderbats with brass bolts and with tails cut and pinned in 1 : 3 cement mortar
		To woodwork with screw-on type galvanized mild steel clips
R.8.4	Polyethylene, polypropylene and unplasticized polyvinyl chloride	To walls, woodwork, etc. with patented PVC or aluminium clips and holderbats as supplied by the manufacturer of the pipes and fixed in accordance with SABS 0112
R.8.5	Fibre-cement	To walls with patented galvanized two-piece mild steel holderbats with tails cut and pinned in 1 : 3 cement mortar
R.8.6	Pipes fixed to ceilings	Fixed with holderbats and standard or purpose made hangers, with extended hangers for pipes to falls

#### R.9 PIPES LAID IN GROUND

# R.9.1 Water pipes, etc.

Water pipes, gas pipes, etc. laid in ground shall be at least 400 mm deep below the finished surface.

# R.9.2 **Drain pipes**

Polyethylene and unplasticized polyvinyl chloride drain pipes shall be laid in accordance with SABS 0112.

Soft or loose patches in drain trenches as well as excavations taken out too deep shall be filled in with selected soil and compacted.

Backfilling to sides and up to 300 mm above plastic pipes shall be free from stone or hard substances which will not pass a 10 mm mesh.

## R.10 TRAPS

## R.10.1 **Lead traps**

Lead traps shall be hydraulically drawn with the mass stamped on and each trap provided with two brass screw caps and linings with wiped soldered joints.

Wall thickness shall not be less than tabled below:

Diameter of trap	Wall thickness
mm	mm
32	2,24
40	2,24
50	2.50

## R.10.2 **Brass traps**

Brass traps shall be of solid cast brass with even and clean bores.

## R.10.3 Non-metallic traps

Rubber traps shall comply with SABS 1321.

#### **R.11 CLEANING EYE LIDS**

Cleaning eye lids for drain pipe fittings shall be fixed and sealed as follows:

Pipe fittings	Method of sealing and fixing
Fibre-cement	Sealed with synthetic rubber or bituminous mastic packing and fixed with screws
Vitrified clay	Polypropylene lid sealed with synthetic rubber packing and pressed into position
Polypropylene and unplasticized polyvinyl chloride	Sealed with synthetic rubber packing and screwed on or pressed into position
Cast iron	Sealed with tallow or putty and fixed with non-ferrous metal screws
Galvanized malleable cast iron and cast brass	Sealed with synthetic rubber packing and screwed in

#### **R.12 CLEANING EYES**

Cleaning eyes shall consist of cast iron frames and lids with letters "CE" (or "SO") cast in lids. The lids shall be set in tallow and secured with non-ferrous metal screws. Frames shall be jointed with 1: 2 cement mortar to vertical drain pipes. Cleaning eyes shall be encased in unreinforced concrete taken up to ground level and plastered on exposed surfaces.

## **R.13 INSPECTION EYE MARKER SLABS**

Inspection eye marker slabs shall be 350 x 350 x 50 mm thick precast concrete finished smooth from the mould, with letters "IE" (or "IO") formed in top and placed flush in ground or paving.

#### R.14 GULLEYS

Gulleys shall be built up of traps, vertical piping and gulley heads with inlets as described and loose cast iron gratings, all encased in unreinforced concrete to finish flush with gulley head top and taken up to at least 50 mm above surrounding finished surfaces. The outer top edge of the concrete encasing shall be splayed and the exposed surfaces plastered.

#### R.15 DISHED GULLEYS

Dished gulleys shall be built up of traps, vertical piping and gulley heads with loose cast iron gratings, all encased in unreinforced concrete and with dished unreinforced concrete hopper size 450 x 450 mm overall around gulley head with rounded kerb 50 mm wide to front and sides and 25 mm wide at back, 100 mm high above top of dishing and the hopper plastered on exposed surfaces. Top of hopper shall be taken up to at least 50 mm above surrounding finished surfaces.

## R.16 GREASE TRAPS

Grease traps shall be of vitrified clay, with outlet junction jointed to trap, all encased in unreinforced concrete to finish flush with top and taken up to at least 50 mm above surrounding finished surfaces. The outer edge of the concrete encasing shall be splayed and the exposed surfaces plastered. Access openings of trap and junction shall be fitted with polypropylene lids and trap shall be provided with 150 mm deep perforated container of 1,2 mm thick galvanized sheet iron with galvanized mild steel handle stayed and riveted on.

## R.17 SUMPS, CATCHPITS, INSPECTION CHAMBERS, ETC.

## R.17.1 Rainwater sumps

Rainwater sumps shall be built with half-brick sides on 100 mm thick unreinforced concrete bottom, plastered internally on walls and with 80 mm high unreinforced concrete kerb at top rebated for grating or cover and plastered on exposed surfaces.

## R.17.2 Stormwater catchpits and inspection chambers

Brick catchpits and inspection chambers shall be built with one-brick sides on 150 mm thick unreinforced concrete bottom projecting 100 mm beyond walls all round, plastered internally on walls and with 100 mm thick reinforced concrete cover slab with opening rebated for frame of grating or cover and plastered on exposed surfaces.

Precast concrete catchpits and inspection chambers shall be constructed in accordance with the applicable details shown on Drawing LE-1 of SABS 1200LE. Precast concrete manhole sections and slabs shall comply with SABS 1294 and the requirements for pipes of SC type and Class A of SABS 677.

#### R.17.3 Sewer inspection chambers

Brick inspection chambers shall be built as for brick stormwater inspection chambers and with the bottom of the chamber well benched around half round channels, bends, junctions, etc. up to sides of chamber in unreinforced concrete finished smooth.

Precast concrete inspection chambers shall be constructed in accordance with the applicable details shown on Drawing LD-5 of SABS 1200LD. Precast concrete manhole sections and slabs shall comply with SABS 1294 and the requirements for pipes of SC type and Class A of SABS 677.

## R.17.4 Stormwater drain junction boxes

Junction boxes shall be formed of 150 mm thick unreinforced concrete bottom and sides to suit the various sizes of the drain pipes and built after the pipes have been laid, with the sides taken up slightly higher than the highest pipe and finished level on top for and covered with a 75 mm thick loose precast concrete slab.

## R.17.5 Step irons

Step irons shall comply with BS 1247. Where inspection chambers exceed 1,2 m deep, step irons shall be provided, built into the wall at 300 mm centres and staggered regularly in vertical rows spaced at 200 mm centres horizontally.

#### R.17.6 General

Sumps, catchpits, inspection chambers, stormwater drain junction boxes and the like where given in number shall include reinforcement, step irons and channels where applicable.

## R.18 STOPCOCK AND METER BOXES

Stopcock and meter boxes shall be built with half-brick sides with a cast iron box and lid complying with SABS 558 set in 75 mm wide unreinforced concrete kerb for the full depth of the cast iron box and plastered on exposed surfaces.

## **R.19 VALVE CHAMBERS**

Valve chambers shall be built with half-brick sides with 100 mm thick unreinforced concrete kerb to top with rebate for cover and frame to finish flush with adjacent paving or finished ground level and plastered on exposed surfaces.

## R.20 CAST IRON COVERS, GRATINGS, ETC.

Cast iron covers and frames for inspection chambers, septic tanks, etc. and cast iron surface boxes shall comply with SABS 558. Cast iron gratings for gulleys and stormwater drains shall comply with SABS 1115. All cast iron covers, gratings, frames and surface boxes shall be coated with preservative solution. Frames shall be cast in concrete. Covers, except covers to stormwater drainage or electrical cable inspection chambers, shall be set in tallow.

#### **R.21 CONCRETE ENCASING**

Concrete encasing for pipes, bends, traps, gulleys, grease traps, etc. shall be unreinforced concrete not less than 100 mm thick all round and shall include any additional excavation.

#### **R.22 FRENCH DRAINS**

French drains shall have slightly battered sides and sloping bottoms and with inlet chamber size 300 x 300 mm internally under inlet pipe, from bottom of drain to top of pipe, formed of loosely packed, rough, hard stone walls and covered with precast concrete slab size 600 x 600 x 100 mm thick and the rest of the drain filled in to the same height with similar stone graded from 300 mm at bottom to 50 mm at top, covered with galvanized corrugated iron sheets treated on both sides with bituminous paint, backfilled with earth and compacted.

#### R.23 SANITARY FITTINGS

#### R.23.1 General

Glazed ceramic, acrylic and porcelain enamelled sanitary fittings and component parts shall be white. Accessories for sanitary fittings shall be chromium plated brass.

Waste outlets for baths, basins, etc. shall comprise chromium plated brass waste union with grating, rubber washers and locknut, fitted with rubber or vulcanite plug on a chromium plated brass chain and stay.

Joints between fittings and pipe work shall be screwed unless otherwise described hereunder:

Joint	Туре
Between mild steel or cast iron pipes and glazed ceramic fittings	Bitumen
Between waste union and lead trap	Brass screw cap and liner screwed to fitting and with wiped soldered joint to lead trap

#### R.23.2 Stainless steel sanitary fittings

Stainless steel sinks and draining boards, basins, wash troughs and urinals shall be AISI Type 304 satin finished stainless steel and complying with the following specifications and requirements:

Fittings	SABS Specification	Remarks
Sinks and draining boards for domestic use	242	-
Sinks and draining boards for institutional use	907	-
Wash hand basins	906	Each with two soap recesses
Wash troughs	906	For installation against walls
Stall urinals	924	_

All stainless steel fittings shall be treated on the back with a vermin proof sound deadening coating. Sinks, basins and wash troughs shall be provided with 40 mm diameter screwed waste outlets. Bowls to sinks and basins shall be fitted with slot overflows.

# R.23.3 Precast concrete wash troughs

Reinforced precast concrete wash troughs shall have a sloping front with ribbed rubbing surface and shall be finished smooth on exposed faces with top edges and inner angles rounded. Each compartment shall be fitted with a 40 mm diameter waste outlet. Wash troughs shall each be supported on two reinforced precast concrete pedestals finished smooth on exposed faces.

## R.23.4 Steel baths

Steel baths shall be porcelain enamelled internally and painted externally and fitted with 40 mm diameter waste outlet and chromium plated brass overflow grating with coupling.

## R.23.5 Acrylic resinous baths

Acrylic resinous baths shall comply with SABS 1402 and shall be fitted with 40 mm diameter waste outlet and chromium plated brass overflow grating with coupling.

## R.23.6 Acrylic resinous wash hand basins

Acrylic resinous wash hand basins and vanity units shall have a smooth high gloss finish, with outlet openings, soap recesses, tap-holes and integral overflow and shall be fitted with 32 mm diameter waste outlet and chromium plated brass overflow grating with coupling.

## R.23.7 Glazed ceramic sanitary fittings

Wash hand basins, sinks, washdown closet pans, urinals, cisterns and block channels of fireclay or vitreous china and with vitreous glazed finish shall comply with SABS 497 and the undermentioned requirements:

Sinks shall be provided with integral weir overflows.

Washdown closet pans shall have washdown action and be provided with smooth finished injection moulded polypropylene heavy duty double flap seats fixed with non-ferrous bolts.

Urinal channels shall be provided with chromium plated brass outlet gratings fitted in bitumen.

#### R.23.8 Cisterns

Hand operated flushing cisterns shall comply with SABS 821. Cisterns with automatic operation shall be fitted with flushing mechanism of corrosion free material and adjusted to flush at regular intervals.

Flushing devices for washdown closet flushing cisterns shall comply with SABS 1509.

## R.23.9 Flush and sparge pipes

Flush pipes for high level cisterns shall comply with SABS 821 (Appendix X) and shall be of drawn galvanized steel.

Flushpipes for low level cisterns shall comply with SABS 821 and shall be of plastic.

Flush and sparge pipes for urinals with high level cisterns shall be of chromium plated copper piping and of the sizes recommended by the manufacturer of the urinal.

Flush and sparge pipes shall include matching pipe fittings, holderbats, spreaders and jointing.

#### **R.24 INSTALLATION OF SANITARY FITTINGS**

Sanitary fittings shall be installed as follows:

## R.24.1 Precast concrete wash troughs

Precast concrete wash troughs shall be bedded on top of pedestals which shall be bedded on floors in 1:3 cement mortar.

## R.24.2 Stainless steel wash troughs and wash hand basins

Stainless steel wash troughs and wash hand basins shall be fixed to walls on a pair of 20 mm diameter galvanized mild steel pipe brackets with fanged ends cut and pinned 150 mm deep into walls in 1 : 3 cement mortar.

# R.24.3 Acrylic resinous wash hand basins

Acrylic resinous wash hand basins shall be fixed to walls on a pair of standard painted cast iron brackets screwed to underside of basin and bolted to wall with 6 mm diameter expanding bolts.

#### R.24.4 Ceramic wash hand basins

Ceramic wash hand basins shall be fixed to walls on a pair of standard painted steel or cast iron brackets bolted to wall with 6 mm diameter expanding bolts.

## R.24.5 Acrylic resinous baths

Acrylic resinous baths shall be bedded in 1 : 5 cement mortar on three cross rows of bricks or bedded solid on a layer of dry river sand and fixed to wall with galvanized steel brackets under edges (in the middle of the sides against walls) bolted to wall with 6 mm diameter expanding bolts and sealed along top against wall finishes with patent mildew resistant silicone rubber.

# R.24.6 Washdown closet pans and cisterns

Washdown closet pans shall be bedded on floors in 1 : 3 cement mortar. Cisterns shall be fixed to walls with 6 mm diameter expanding bolts.

#### R.24.7 Ceramic urinals

Ceramic stall and slab urinals shall be bedded on floors and against walls in 1:3 cement mortar. Slabs, channels, treads, etc. shall be jointed in 1:3 cement mortar and pointed in white cement.

Ceramic bowl urinals shall be fixed to walls on standard steel brackets bolted to wall with 6 mm diameter expanding bolts. Cisterns shall be fixed to walls on standard brackets bolted to wall with 6 mm diameter expanding bolts.

#### R.24.8 Stainless steel urinals

Stainless steel urinals shall be bedded on floors in 1 : 3 cement mortar and with backs and sides against walls filled in with fine unreinforced concrete. Cisterns shall be fixed as cisterns for ceramic urinals.

## R.25 ELECTRIC GEYSERS

Electric geysers shall comply with SABS 151. Geysers shall be fixed with necessary fixing bolts.

#### R.26 TAPS, VALVES, ETC.

Taps, valves, etc. shall comply with the following specifications and requirements:

Taps, valves, etc.	SABS Specification	Class
Taps (metallic)	226	Pillar taps, mixer taps and stoptaps shall be Class 2
Plastic water taps	1021	-
Single control mixer taps	1480	-
Float valves	752	-
Plastic ball floats for ball valves	1006	-
Functional control and safety valves	198	-
Automatic shut-off flush valves for water closets and urinals	1240	-
Check valves	1551	-
Cast iron gate valves	664	-

# **R.27 FIRE HOSE REELS**

Fire hose reels shall comply with SABS 543 and shall each be fitted with a 30 m long reinforced red rubber hose of internal diameter not less than 19 mm with a 4,8 mm internal diameter chromium plated brass nozzle.

#### **R.28 FIRE EXTINGUISHERS**

Portable fire extinguishers shall comply with the following requirements:

Туре	SABS Specification
Water	889
Dry powder	810
Halogenated hydrocarbon	1151

All fire extinguishers shall be fully charged.

## R.29 TESTS

Sewerage pipe lines, sanitary plumbing including fittings and hot and cold water supply and fire service shall be tested to the approval of the Architect and Local Authority.

Defective work shall be rectified or removed and replaced at the Contractor's expense and the whole retested.

The Contractor shall provide all testing apparatus, material and labour required for the tests and inspections.

# S. ELECTRICAL WORK

## S.1 DESCRIPTIONS AND PREAMBLES

Reference shall be made to other trades and preambles for preambles and full descriptions of items not fully described in this trade which shall apply equally to the work in this trade, unless otherwise described.

# S.2 MATERIALS, ETC.

Electrical work, materials, etc. shall comply with the following specifications and requirements:

	SABS
Material	<b>Specification</b>
Impregnated paper-insulated electric cables	97
Pressure sensitive adhesive tapes for electrical purposes	122
Fixed electric storage water heaters	151
Low-voltage air-break switches, air-break disconnectors, air-break switch	
disconnectors and fuse-combination units	152
Moulded-case circuit-breakers	156
Low-voltage porcelain insulators	161
Wall and appliance switches	163
Two-pole and earthing-pin plugs and socket-outlets	164
Lampholders	165
Rubber-insulated cables and flexible cords	168
Surge arresters for low voltage distribution systems	171
Cartridge type fuse-links for low voltage electric fuses	172
Fuse-link holders for cartridge type fuse-links	173
Flexible polyvinyl chloride (PVC) compounds for electrical purposes	175
Porcelain cleats, bobbins and leading-in tubes	176
Flameproof enclosures for electrical apparatus	314
Immersion heaters for electric storage water heaters	514
Heat-resisting wiring cables	529
Earth leakage protection units	767
Ballasts for fluorescent lamps and fluorescent lamp reference ballasts	890/891
Unplasticized polyvinyl chloride rigid conduit and fittings for use in electrical installation	950
Enclosure for electrical apparatus (dust-ignition-proof or hose-proof or both)	969
Standard voltages, currents and insulation levels for electricity supply	1019
Standard transformer bushings	1037
Tubular fluorescent lamps for general service	1041
Earth rods, couplers and clamps	1063
Metal conduits and fittings (screwed-end and plain-end) for electrical wiring	1065
Intercommunication systems	1066
Cover plates for wall outlet boxes	1084
Wall outlet boxes for the enclosure of electrical accessories	1085
Luminaire entries and spigots	1088
Contactors	1092
Interior luminaires for fluorescent lamps	1119
Electrical distribution boards	1180
Enamelled copper conductors	1181

Material	SABS Specification
Busbars	1195
Wireways for electrical cables	1197
Plugs, socket-outlets and couplers intended for non-domestic use	1239
Capacitors for use with fluorescent and other discharge lamp ballasts	1250
Ballasts for low pressure sodium vapour and high intensity discharge lamps and reference ballasts for low pressure sodium vapour and high intensity discharge lamps	1266/1267
Polymeric or rubber insulated combined neutral/earth (CNE) cables with solid aluminium phase conductors and a concentric copper waveform combined neutral/earth conductor	1268
Streetlighting luminaires, interior luminaires for low pressure sodium vapour and high intensity discharge lamps, and floodlighting luminaires	1277-1279
Fixed electric instantaneous water heaters	1356
Materials of insulated electric cables and flexible cords	1411
Electric cables with extruded solid dielectric insulation for fixed installations	1507
Switches for household and similar fixed-electrical installations	1537
Electrical cables – flexible cords	1574
Manually operated air-break switches	VC 8003
Flexible cords for power and lighting appliances	VC 8006
Plugs, socket-outlets and socket-outlet adaptors	VC 8008
Lampholders and lampholder adaptors	VC 8011
	SABS Code of Practice
The protection of structures against lightning	03
Installation and maintenance of electrical equipment used in explosive atmosphere	086
	CKS Specification
Bulkhead lighting fittings (surface mounted)	199

## S.3 DISTRIBUTION BOARDS

Main and sub-distribution boards shall be robustly constructed of galvanized sheet steel of not less than 1,6 mm. The boards shall be fully equipped with the requisite number of circuit breakers, earth leakage device/s, insulated neutral bar/s and earthing bar mounted behind a removable cover plate through which switch toggles are to protrude.

Rating of busbars shall not exceed 1,5 A/mm² for copper and busbars shall be designed to withstand the mechanical and thermal stresses under short circuit conditions. Busbars shall be mounted on porcelain or other approved stand-off insulators with the phases correctly colour coded.

Spacing of busbars shall be not less than 50 mm and neutral busbars must be of the same crosssection as the phase bars.

A suitable solid copper earth bar with sufficient ways including 30 % spare ways shall be provided near the cable entry gland tray and shall be easily accessible.

All internal wiring shall be carried out with PVC insulated stranded copper conductors of adequate size and of a colour corresponding to the relevant phase. Conductors shall be neatly led in vertical or horizontal rows and bound with "Helvin" strapping. No joints will be allowed in internal wiring.

All boards shall be completely vermin proof.

The Contractor will be required to balance the loads as evenly as possible across the phases to the entire satisfaction of the Architect before final acceptance.

Where distribution boards are to be built into walls they shall be equipped with an adjustable mild steel shroud to compensate for any irregularities in mounting, plaster thickness or tray position.

The internal surfaces of all distribution boards shall be painted with two coats of best quality "arcfree" paint and the external surfaces shall be properly treated and coated with an approved epoxy/polyester baked powder coating of a colour to be approved by the Architect.

Distribution boards shall be properly protected at all times until final hand over to obviate damage during construction. Any damage shall be made good to the entire satisfaction of the Architect.

All safety warning notices shall be in English and Afrikaans.

Labels as separately provided for shall be in the sequence shown on the drawings; all circuits and functions shall be properly and clearly identified.

All labels used shall be engraved traffolite with black letters on a white background for all normal labels and red letters on a white background for all danger notices.

The main isolating switches shall be clearly labelled in accordance with the regulations and the size and origin of all supply cables and busbars shall be clearly labelled, as must all equipment situated inside the board, indicating function, circuit controlled, fuse rating, etc.

A legend card, covered by removable 2 mm thick transparent acrylic plastic panel, shall be installed on the inside of the door of the distribution boards or cubicles and circuits shall be designated on this card. All other equipment shall be individually labelled, indicating function. All plates shall be fixed to panels by means of screws or channelling.

Doors to distribution boards shall be suitably braced, on heavy duty "lift-off" hinges and shall be fitted with approved spring catches without locks.

Removable front panels shall be secured by means of quick release fasteners and front panels carrying instruments shall be hinged in addition. Where nuts are visible, chromium plated dome head nuts shall be used.

All terminations onto busbars shall be by means of turned copper cable lugs soldered or crimped to the conductors and these shall be bolted onto the busbar with cadmium plated high tensile bolts with nuts, washers and lock washers.

#### S.4 EQUIPMENT

Lightning arrestors shall be provided for each phase in all main boards.

All mounted case circuit breakers shall be of flush panel mounting and with inverse current time delay overload and instantaneous short circuit characteristics. Mechanically coupled single-pole circuit breakers used as double or triple-pole circuit breakers are not acceptable unless overload releases are internally coupled. The fault current rating shall be as specified but not less than 5 kA.

Space shall be provided in each board for at least 30 % but not less than three additional single phase breakers. When spare capacity for future circuit breakers is called for, escutcheon blanks shall be used and not blank-off covers.

Triple, double and single-pole switches shall be capable of breaking the full load and closing on to a full system fault. The fault current rating shall be specified, but not less than 5 kA.

All contactors and relays shall comply with BS 5424 and shall be able to withstand the maximum prospective fault current that can occur at the point where the contactor or relay is installed. All contactors unless otherwise specified shall have two normally open and two normally closed auxilliary contacts spare of 10 A rating.

Earth leakage protection units shall be suitable for operation at the system voltage, shall have test push buttons and unless otherwise specified shall have a sensitivity of 30 mA maximum. Earth leakage protection units shall not incorporate overcurrent protection.

Time switches shall be suitable for operation at the system voltage with silver to silver or other approved contacts rated at not less than 10 A with an electrically wound clockwork reserve of eight hours minimum and shall have the following features:

- daily programmable with minimum 30 minute "on" and "off" control segments;
- weekly programmable with day omission segments of minimum 12 hours, i.e. mornings or afternoons;
- a clock face dial with hour and minute hands.

Ammeters shall be 96 mm<sup>2</sup> flush mounted 5 A instruments complying with BS 89 and shall be combined maximum demand registering and instantaneous indicating type with direct reading scales with a full-scale deflection corresponding to 120 % of the rated circuit current. Full load ratings shall be indicated with an indelible red line.

Current transformers shall be mounted in such a way that they are clearly visible when the front panel is removed with the name plate indicating class, rating ratio and functioning.

Voltmeters shall match ammeters and shall be of 400 V moving iron suppressed zero type scaled up to 500 V.

Voltmeter selector switches shall be suitable for a three phase 50 Hertz system and must be so arranged that voltages between phases, and phases to neutral, can be read. Voltmeter selector switches shall be suitable for the system voltage. Voltmeter selector switches shall be of the break-before-make type.

The voltmeter selector switch shall have one "off" and six "metering" positions and shall be suitable for panel mounting in such a way that the operation knob and indicator plate can be mounted on the front of a panel and the switch itself at the back of the panel.

The operating knob and indicator plate shall be manufactured of insulating material and the switch positions shall be clearly and indelibly marked thereon.

The switches shall be provided with substantial contacts and the terminals shall be clearly marked and arranged for easy wiring.

The voltmeters or ammeter selector switch shall be mounted directly below the associated voltmeter or ammeter.

#### S.5 CABLES

All cables shall be unrolled, handled, laid, supported, etc. in accordance with the manufacturer's recommendations.

All polyvinyl chloride insulated cables (PVC/PVC/SWA/PVC and other) shall be single steel wire armoured and shall be served overall with a final layer of polyvinyl chloride or shall be aluminium strip armoured served overall with a final layer of polyvinyl chloride.

Cables laid in ground shall be laid in trenches to a depth as specified and shall be bedded in and enclosed in clean river sand 75 mm all round before backfilling commences. Ends of all PVC/PVC/SWA/PVC cables shall be made off (terminated) with a suitable gland complete with neoprene shroud, effectively earthed with armouring clamped between substantial tapered bushes and bolted to equipment or switchboards. All mechanical cable glands shall be of the captive cone type. No joints in cable runs will be allowed except under exceptional circumstances and then only as specifically approved by the Architect.

When more than one cable is laid in the same trench, they shall be laid parallel to one another not less than 40 mm apart.

All trenching and excavation shall be reinstated to the original condition by mechanical compaction in 150 mm layers and the Contractor shall be responsible for the making good of any settlement.

Yellow or orange PVC marking tape, 150 mm wide, with the wording "Buried Electric Cable Below —Caution" and "Elektriese Kabel Hieronder—Gevaar" shall be laid at a depth as specified below ground level above each cable. In the case of HT cables, PVC or concrete cable tiles shall be laid at a depth as specified below ground level above the cable/cables.

Approved concrete cable route markers shall be installed at each point where the installed cable changes direction and at intervals along the cable route as specified.

# S.6 TRUNKING

Trunking wiring channels shall be plastic, aluminium or galvanized mild steel rolled lipped channels fixed as specified. All cut ends of metal trunking shall be filed smooth and touched up with an approved zinc-rich cold galvanizing paint. Power skirting shall be two or three compartment trunking fixed as specified.

## S.7 CONDUIT AND ACCESSORIES

Conduit shall either be seamless hot dipped galvanized conduit, heavy gauge black enamelled conduit or UPVC conduit. Where conduit is surface mounted, it shall be fixed with galvanized space bar saddles as specified.

All metal conduit accessories shall be malleable iron or pressed steel and except in the case of brass bushes shall be hot dipped galvanized.

Draw boxes shall be positioned where approved by the Architect and shall have covers.

Where conduits are surface mounted they shall be run parallel to the structure. In roof spaces conduits shall run in parallel paths with a minimum of cross-overs and shall be adequately secured by means of saddles as specified. Where conduit is run across building expansion joints, special precautions shall be taken to ensure that the conduit is free to follow any movement of the building.

Care shall be taken in the bending of conduit to avoid "kinking" and all burred ends of conduit shall be treated to avoid damage to cable insulation.

Conduits cast into concrete shall be securely fixed in position before pouring commences.

Conductors may not be drawn into conduits before the conduiting has been inspected and approved by the Architect.

All conduit for communications services shall have draw wires as specified drawn in and left in.

All conduits shall be bushed and secured by lock-nuts to distribution boards, wall boxes, etc.

Spare conduits (10 % with a minimum of two 20 mm and one 25 mm conduits) shall be run from the distribution boards into the roof space to cater for future circuits.

#### S.8 CONDUCTORS

Conductors shall be either PVC insulated stranded copper conductors or solid copper conductors of the sizes specified.

All earth continuity conductors laid with cables shall be bare stranded copper conductors and all other earth continuity conductors shall be PVC insulated stranded copper conductors.

Extreme care shall be taken not to apply excessive mechanical tension to PVC insulated conductors when drawing in and care shall also be taken not to draw PVC insulated conductors around sharp corners or protruding surfaces in conduits.

PVC insulated conductors shall be lubricated with high quality French chalk before they are drawn into conduit. The use of lubricating oil for drawing in PVC insulated conductors is not permitted.

Conductors between an isolator and appliance shall be of the same cross-sectional area as the conductors fed to the isolator and shall, where necessary, be in flexible metal conduit. Wiring between isolators and fixed heating appliance terminals shall be in silicone rubber insulated conductors.

Wiring installed in wiring channels shall be installed in the correct compartment to prevent any cross-overs and shall be bound together in groups not exceeding ten conductors by means of approved straps at spacings not exceeding 1 m. No joints will be permitted in wiring.

Circuit wiring shall be of the loop-in system, and not more than four conductor ends will be allowed at any one termination point. Cutting away of wire strands of any cable will not be allowed and no jointing of conductors in draw boxes or the cutting away of insulation is permissible. Where joints are used, they shall be in heavy brass terminals with porcelain insulators.

Circuits for different services, e.g. lighting circuits, power circuits, intercommunication circuits and telephone circuits, shall each be routed in separate conduit runs.

A neutral conductor, equal in size to the phase conductors, shall be run to each three-phase outlet unless otherwise specified.

## S.9 SWITCHES AND SOCKET OUTLETS

All switches and switched socket outlets shall be of approved manufacture.

Watertight switches shall be of quick make and break type with porcelain boxes in robust brass or galvanized cast iron cases with machined joints or in plastic or aluminium cases.

All switches and switched socket outlets of the domestic or industrial type shall be rated for 250 Volt 16 Ampere.

Three phase socket outlets shall be of the CEE-17, 380V, 6 h pattern with five contact tubes incorporating an interlocked switch and shall be rated at 32 A.

#### S.10 LUMINAIRES

All luminaires shall be complete with lamps, ballasts, chokes, control gear and all other accessories required. All luminaires with a metal content shall be equipped with an earth terminal and shall be properly earthed.

Internal wiring of luminaires shall consist of heat-resisting PVC insulated stranded copper conductors of not less than 0,5 mm<sup>2</sup>.

Luminaires shall be designed to prevent excessive temperatures and components and materials shall be selected so that they are not adversely affected by the operating temperature.

The voltage rating and lamp wattage shall be clearly and indelibly marked on control gear.

Ballasts shall be silent in operation. Noise level reports, prepared by an accredited laboratory, shall be submitted for approval to the Architect on request.

The wattage and type of the lamp suitable for use in the luminaire shall be clearly marked on the base of the luminaire close to the lampholder. For incandescent luminaires, the maximum wattage of the lamp shall apply.

#### S.11 FIXING OF LUMINAIRES

Ceiling mounted luminaires shall be secured by at least two screws into the outlet box, using sheradized steel screws. The Contractor shall supply framing formed of brandering in the roof spaces around and shall cut the ceiling boards at outlet boxes.

Fluorescent luminaires other than single or double tube luminaires of 1,2 m long or less shall be supported in at least two positions, each of which shall be not exceeding 450 mm from the ends of the luminaires.

Fixing in concrete slabs shall be to outlet boxes, metal inserts or bolts cast or shot into the concrete.

#### S.12 CONNECTIONS

The Contractor shall allow for making connections to equipment supplied by others as specified and for providing lugs soldered or crimped to conductors as may be necessary.

#### S.13 INSTALLATION

The entire electrical installation shall be executed in accordance with SABS 0142 "The wiring of premises".

# T. GLAZING

## T.1 GLASS

Glass shall comply with BS 952.

Glass for glazing shall comply with CKS 55.

Safety and security glazing materials shall comply with SABS 1263.

## T.2 PUTTY, ETC.

Glazing putty shall comply with SABS 680 and shall be Type I for wooden sashes and Type II for steel sashes. Putty for glazing to unpainted hardwood shall be tinted to match the colour of the wood.

Back putty shall not exceed 3 mm thick. Soft or oily putty shall not be painted and if the putty does not form a surface crust it shall be replaced.

Butyl putty shall be used where glass is to be fixed in aluminium sashes with glazing beads.

Non-setting compounds shall be used where laminated glass is fixed in sashes with glazing beads.

Silicone-rubber-base sealing compounds shall comply with SABS 1305.

#### T.3 GLAZING

Glazing shall be executed in accordance with SABS 0137.

## T.4 MIRRORS

Silvered glass mirrors shall comply with SABS 1236 Class A.

## T.5 GENERAL

Glass shall include all putty, sprigs, pegs or clips and removal and refixing of glazing beads where applicable.

## U. PAINTWORK

#### U.1 MATERIALS

Paints, primers, undercoats, etc. shall comply with the following specifications and requirements:

Material	SABS Specification	Grade or Type
Priming coats on structural steel	312	Type <b>II</b> Grade <b>I</b>
Priming coats on steel	679	Type I
Priming coats on galvanized iron	723	-
Red oxide zinc chromate primer	909	-
Priming coats on wood for external work	678	Type I
Priming coats on wood for internal work	678	Type III
Undercoats for paints (except emulsion paint)	681	Type I
Distemper	322	-
Emulsion paint for internal work	633	Grade I
Emulsion paint for external work	634	Synthetic polymer base
Matt or eggshell paint for internal work	515	-
Oil gloss paint for internal and external work	631	-
High gloss enamel paint for internal and external work	630	Grade I
Roof paint	683	Type B
Structural steel paint	684	Type B
Aluminium paint	682	Grade II
Varnish for interior use	887	Type I

Limewash shall be a patent type or shall be composed of 50 kg fresh unslaked lime (or pure white lime putty), 7 kg salt and 5 kg tallow (or boiled linseed oil) thoroughly mixed and tinted to approval.

Materials for paintwork shall be delivered to the site in unopened containers and applied in accordance with the manufacturer's instructions. If necessary, materials shall be strained before use. Materials shall be suitable for application to the surfaces concerned. Undercoats shall be as recommended by the manufacturer of the finishing coats. Thinners and other agents shall not be used without approval.

#### U.2 PREPARATORY WORK

## U.2.1 Plastered surfaces, etc.

Plastered surfaces shall be thoroughly washed down and brushed in order to remove any traces of efflore-scence and allowed to dry completely before any paint finish is applied. Before any paint is applied, holes, cracks and irregularities in plaster and other surfaces shall be filled with a suitable filler and finished smooth. Unfinished concrete surfaces shall have all projections rubbed off and shall be thoroughly cleaned with a spirits-of-salts solution (1 part concentrated spirits-of-salts to 4 parts water).

#### U.2.2 Metal surfaces

Metal surfaces shall be sanded, where necessary, washed with a suitable cleaning agent and left smooth. Protective coatings applied by manufacturers to galvanized metal surfaces shall be removed with a suitable agent and the surfaces washed down.

Rust, grease and defective factory primers on metal surfaces to be painted, as well as pitch on cast iron pipes, shall be removed.

#### U.2.3 Wood surfaces

Knots in woodwork shall be treated with knotting and cracks, splits and holes caused by nails filled with a suitable filler. Wood surfaces shall be sanded smooth.

#### U.3 APPLICATION OF PAINT

Primers to wood surfaces shall be applied by brush. Primers to other surfaces may be applied by roller with the approval of the Architect. Undercoats and finishing coats may be applied by brush or roller.

Paint shall not be sprayed on except in the case of cellulose and other special paints where spray painting is the accepted method of application.

Before subsequent coats of paint are applied the previous coat shall be properly dry and shall be sanded down where necessary.

Should a perfectly uniform finish and texture, free from any blemishes and with sufficient coverage, not be obtained as a result of defective preparation of surfaces and/or application, the Contractor shall apply an extra coat or coats of paint of the prescribed finish at his own expense to the satisfaction of the Architect.

#### U.4 COLOUR SCHEME

A colour scheme comprising colours and the blending of colours approved by the Architect shall be used for the paintwork. The tints of the undercoats shall closely match the finishing coat but nevertheless differ sufficiently to indicate the number of undercoats. Colour samples of the finishing coats shall be provided in all cases.

## U.5 PROTECTION AND CLEANING

The Contractor shall provide necessary tarpaulins, covers, etc. for the protection of the works. Before the paintwork is commenced all floors shall be swept and walls dusted and no further sweeping or dusting shall be allowed before all painted surfaces are perfectly dry.

#### U.6 GENERAL

Paintwork shall include the preparation of surfaces, including filling, stopping, sanding and priming of nail heads and screws.

Paint on pipes, gutters, etc. shall include painting holderbats, hangers, clips, brackets, etc.

Paint on windows, sashes, etc. shall include priming the rebates of the openings to be glazed.

# V. PAPERHANGING

## V.1 PREPARATORY WORK

Plaster surfaces to be papered shall be dry, thoroughly cleaned down, filled with a suitable filler as necessary to obtain a smooth surface and painted thereafter with a single coat of emulsion paint for interior work.

Wood surfaces to be papered shall be knotted, stopped and sanded.

# V.2 PAPERHANGING

Wallpaper shall be hung in vertical long lengths. Vertical joints shall be close-fitted and plumb and the paper shall be tightly fitted to skirtings, ceilings, door frames, windows, etc. Horizontal joints will not be allowed.

## V.3 GENERAL

Paperhanging shall include preparatory work, size and adhesives, as well as lining papers where required.

## W. EXTERNAL WORK

#### W.1 GENERAL

## W.1.1 Descriptions and preambles

Reference shall be made to other trades and preambles for preambles and full descriptions of items not fully described in this trade which shall apply equally to the work in this trade, unless otherwise described.

#### W.1.2 Excavations

Excavations shall be deemed to be in "earth".

#### W.2 LANDSCAPING

#### W.2.1 Topsoil

Topsoil shall vary between sandy loamy soil and sandy clayey soil with an ideal composition of 15 % to 25 % clay, 10 % silt/sludge and 65 % to 75 % sand, with a minimum ratio of organic material of 2 %. All material shall be free of harmful deposits as well as unwanted seeds.

#### W.2.2 Compost

Compost shall be composed of properly decayed organic material, free from harmful deposits, salts, seeds and other waste material and shall have a pH of more than 4 and less than 7.

#### W.2.3 Mulch

Mulch shall be approved organic material free from small particles of bark residue, fungus, disease, etc.

## W.2.4 Lime

Lime shall be agricultural lime of an approved manufacture.

#### W.2.5 Fertilizer

Fertilizer shall be of the type specified, mixed thoroughly into the soil as prescribed. No fertilizer shall be added more than two weeks prior to planting.

## W.2.6 Backfilling

Backfilling in plant and tree holes shall be composed of two parts topsoil to one part compost mixed thoroughly together and compacted by foot in 100 mm layers. Fertilizer shall only be added if prescribed.

#### W.2.7 **Pebbles**

Pebbles shall be smooth with a uniform colour and form and ranging in size from 50 mm to 75 mm diameter. Removal of pebbles from river beds shall be done selectively to avoid any major disruption to the ecology of the river and environment.

#### W.2.8 Plant material

## W.2.8.1 General

All plant material (plants, shrubs, trees, etc.) shall be obtained from a registered nursery and shall be free from damaged parts, parasites, fungus, other plant diseases or insects. No container-bound plants will be acceptable.

No plants shall be brought on to the site more than eight days prior to planting. All plants stored on site shall be properly watered and protected to avoid damage and drying out.

## W.2.8.2 **Trees**

The height of trees described in the bills of quantities shall be measured from the top of the root ball to the top of the tree. Where trees are pruned, such prune wounds shall not be more than 25 mm in diameter and be sealed with an approved sealing compound.

## W.2.8.3 Shrubs and small plants

Shrubs and small plants shall meet the requirements for height and spread as specified.

Thin or sparsely-branched plants shall not be accepted. Branches shall be well-spread with ample young branches and the plant as a whole shall be growing well.

#### W.2.8.4 Groundcover

Groundcover shall be dense and healthy and shall comply with the minimum requirements for leaf density as specified.

Formal grass shall be planted as runners in 50 mm deep drills at 150 mm centres unless otherwise described.

# W.2.9 Cultivation and preparation of planting areas, etc.

All surface rocks and stones larger than 50 mm shall be removed before commencing cultivation and preparation. The entire area shall be ripped and rotavated using approved machinery by breaking up the earth to a depth of 300 mm at 600 mm centres in both directions, unless otherwise described, and then levelled. Where fertilizer or compost is specified, it shall be worked into the topsoil after ripping and rotavation to a depth of 300 mm and finished to final levels.

All fertilizer to areas to be grassed shall be strewn on the final layer before final finishing is commenced and worked mechanically into the top 150 mm soil.

#### W.2.10 Planting procedure

Holes for shrubs and groundcover shall be as follows:

Shrubs - 500 x 500 x 500 mm deep

Groundcover - 300 x 300 x 300 mm deep (if not planted in drills)

Holes for trees shall be square, of adequate size to accommodate the root system and suitable for the height of the tree.

All plant material shall be watered thoroughly before careful removal from the container and planted in the prescribed planting medium with the top of the soil in the container finishing level with the surrounding area. Water dams size 800 mm diameter x 150 mm deep and 500 mm diameter x 150 mm deep shall be formed around trees and shrubs respectively and all planting material shall be watered immediately after planting. Trees, shrubs, etc. shall be properly staked or stayed, depending on their size, on the prevailing windy side with patent tree ties.

Excavations shall include risk of collapse, keeping free of water, compacting and spreading and levelling of surplus excavated material over site as directed.

## W.2.11 Maintenance

All planted areas shall be maintained for a period of three months after practical completion as defined in the contract with the exception of hydroseeded areas which shall be maintained for 12 months after an acceptable cover has been obtained.

This maintenance shall consist of keeping clear of weeds and litter, loosening soil where necessary every two weeks, replacing damaged, diseased or dead plants, pruning, cutting and mowing as necessary and watering so as to keep the plant material in a healthy growing condition.

## W.3 ROADWORK

#### W.3.1 Filling

Filling under roads, etc. shall be of inert material having a maximum plasticity index of 10, free from large stones, etc., spread, levelled, watered and compacted in layers not exceeding 200 mm thick to a density of 98 % Mod. AASHTO.

## W.3.2 Preparation of sub-grade

The sub-grade shall be prepared by scarifying for a depth of 150 mm and compacting to a density of 98 % Mod. AASHTO, including trimming to the correct levels and grades.

#### W.3.3 Base course

The base course shall consist of crusher run stone compacted to a density of 98 % Mod. AASHTO and finished to the correct levels and grades.

#### W.3.4 Weed killer

The completed sub-grade shall be treated with an approved total weed killer.

## W.3.5 **Bituminous premix road surfacing**

Before spreading the premix material, the base course shall be swept clean and free from all dust, dirt and loose particles, lightly wetted and sprayed with a prime coat complying with SABS 308 at the rate of 1 l/m<sup>2</sup>.

The material shall consist of semi-gap graded crushed stone aggregate having the following grading:

Sieve size (mm)	% By mass passing sieve
13,2	100
4,75	45-60
2,36	42-55
1,18	40-52
0,3	25-45
0,075	5-12

The aggregate shall be mixed with bituminous emulsion binder complying with SABS 748 at the rate of  $1 \text{ m}^3$  of stone to 120 l of emulsion at atmospheric temperature.

The binder shall be added to the stone and mixed until the stone is uniformly coated. Thereafter 5 % of clean, dry quartzitic sand shall be added and mixed until evenly distributed through the mixture.

The premix shall be applied only after the primer has dried out completely and shall be spread immediately after mixing and rolled on the same day.

Spreading shall be done evenly over the prepared base course to a loose depth sufficient to ensure the consolidated thickness specified.

Rolling shall commence as soon as the binder has set sufficiently, followed after three days by a final rolling.

# W.3.6 Precast concrete block road surfacing

Paving blocks shall be precast concrete blocks complying with SABS 1058 Class 25.

Blocks shall be laid to true levels and grades on and including a 25 mm thick layer of river sand with joints exceeding 2 mm and not exceeding 6 mm wide.

After laying, the paving shall be compacted by means of a vibrating plate compactor, with joints between the blocks filled in, after compaction, by sweeping in fine sand.

Infill areas at edges of paving constituting less than 25 % of a full block unit and of 25 mm minimum dimension shall be filled with Class C prescribed mix unreinforced concrete with top surface trowelled smooth to match blocks. Smaller areas shall be filled with 1:4 cement mortar.

## W.3.7 Precast concrete kerbs and channels

Precast concrete kerbs and channels shall comply with SABS 927, generally in 1 m lengths and finished smooth from the mould on exposed surfaces. Kerbs and channels shall be bedded on and jointed in 1:3 cement mortar and pointed with keyed joints. Bases to kerbs shall be Class B prescribed mix unreinforced concrete.

#### W.3.8 Process control tests

The Contractor shall be responsible for carrying out all necessary process control tests on the density and moisture content of the compacted sub-grade, base course, etc. to ensure that the required compaction is being attained.

#### W.3.9 **GENERAL**

Bituminous premix road surfacing shall include protection of kerbs, channels, buildings, etc.

Channels, humps and shoulders formed in road surfacing shall include the formation of channels, humps and shoulders in base course, subgrade, etc. and for angles, ends, etc.

Concrete kerbs, channels, etc. shall include necessary excavation, risk of collapse, keeping excavations free from water, filling back, compacting and spreading and levelling of surplus excavated material over site as directed.

## W.4 FENCING, ETC.

#### W.4.1 Galvanized wire

All galvanized wire shall be zinc coated wire complying with SABS 675 with Class B zinc coating. Straining wire shall be 4 mm diameter galvanized mild steel wire. Tie wire shall be 1,6 mm diameter galvanized mild steel wire

## W.4.2 Plastic coated wire

Plastic coated wire shall comply with SABS 1373.

Plastic coated straining wire shall be 3,15 mm diameter Class C galvanized mild steel wire plastic coated to an overall diameter of 3,95 mm.

Plastic coated tie wire shall be 1,8 mm diameter Class C galvanized mild steel wire plastic coated to an overall diameter of 2,5 mm.

#### W.4.3 Galvanized barbed wire

Galvanized barbed wire shall be 2,5 mm diameter mild steel double strand reverse twist zinc coated barbed wire complying with SABS 675 with Class A zinc coating.

#### W.4.4 Galvanized wire mesh

Galvanized wire mesh shall be 50 mm mesh chain link netting of 2,5 mm diameter Class C galvanized mild steel wire complying with SABS 1373.

## W.4.5 Plastic coated wire mesh

Plastic coated wire mesh shall be 50 mm mesh chain link netting of 2,5 mm diameter Class C galvanized mild steel wire plastic coated to an overall diameter of 3,25 mm, complying with SABS 1373.

## W.4.6 Galvanized welded wire mesh

Galvanized welded wire mesh shall be fabricated from pre-galvanized wires to rectangular pattern welded together at each intersection using a welding method which forms a zinc oxide protective coating at each intersection.

## W.4.7 Razor wire

Razor wire shall be fabricated from 2,5 mm diameter galvanized high tensile steel wire fitted with razor barbs formed of 0,5 mm galvanized steel strip clipped on at 37,5 mm centres.

# W.4.8 Metal droppers and standards

Droppers and standards shall comply with CKS 451.

Droppers shall be of ridged T section mild steel with a mass of not less than 0,55 kg/m. Standards shall be of I section mild steel with a mass of not less than 3 kg/m or of ridged edge Y section mild steel with a mass of not less than 2,5 kg/m and shall be driven 600 mm deep into the ground.

Droppers and standards shall have either galvanized, sprayed metal or painted finish as described in the items and in accordance with CKS 451. In addition, those surfaces of standards embedded in the ground shall be coated with bitumen.

# W.4.9 Metal posts and stays

Posts and stays shall comply with CKS 451 and shall be of black or galvanized mild steel tubing as specified.

Straining posts shall be of 108 mm outside diameter x 3 mm wall thickness tubing, each with a 300 x 300 x 5 mm thick mild steel sole plate and a steel cap welded on.

Intermediate posts shall be of 50 mm outside diameter x 2,5 mm wall thickness tubing, each with a 230 x 230 x 5 mm thick mild steel sole plate and a steel cap welded on.

Stays for straining posts shall be of 50 mm outside diameter x 2,5 mm wall thickness tubing, each with a 230 x 230 x 5 mm thick mild steel sole plate welded on and fixed raking with top end flattened, bent, holed and bolted to straining post with and including a 5 mm diameter galvanized mild steel bolt with nut and washer.

Posts and stays shall have either galvanized or painted finish as described in the items and in accordance with CKS 451. In addition, sole plates and portions of posts and stays embedded in ground shall be coated with bitumen.

#### W.4.10 Timber posts, stays and droppers

Treated timber posts, stays and droppers shall comply with SABS 457. Timber posts shall be 125 mm diameter, timber stays shall be 100 mm diameter and timber droppers shall be 30 mm diameter.

## W.4.11 Prestressed concrete posts and stays

Prestressed concrete posts and stays shall comply with CKS 451, finished smooth from the mould and uniformly stressed by means of high tensile longitudinal prestressing wires with concrete cover to wires of not less than 20 mm.

Corner and straining posts shall be  $100 \times 100 \text{ mm}$  and intermediate posts and stays shall be  $75 \times 75 \text{ mm}$ . Stays shall be fixed raking with top end splayed and glued to the posts with a suitable epoxy compound.

## W.4.12 Bolts, nuts and washers

Straining eye bolts, hinge bolts, bolts and nuts shall comply with SABS 135 and shall be galvanized. Washers shall comply with SABS 1149 and shall be galvanized.

#### W.4.13 Precast concrete fencing

Precast concrete fencing shall comply with SABS 1372.

Precast concrete fencing over sloping terrain shall include stepping as necessary to suit terrain and any resultant increase in the length of the posts, excavation, etc.

#### W.4.14 Concrete bases

Bases in ground for posts, stays, etc. shall be of Class B prescribed mix concrete with tops 100 mm below surface of ground.

Sizes of concrete bases for posts, stays, etc. shall be as follows:

Straining and gate posts - 450 x 450 x 700 mm deep Intermediate posts - 300 x 300 x 600 mm deep Stays - 600 x 300 x 500 mm deep

## W.4.15 **Security overhangs**

Security overhangs shall comply with CKS 451.

Where fencing is described as having a security overhang, the posts and standards shall have angular (single arm) extension arms.

Extension arms shall be attached to the posts and standards by welding in the case of steel and by spiking in the case of timber.

Concrete extension arms shall be cast integrally with the post or standard.

Barbed wire to security overhangs shall be tightly strained and wired at each intersection with extension arms and shall have barbed wire braces at 450 mm centres between standards, posts, etc., wired onto the barbed wire and the top straining wire.

# W.4.16 Erection of wire and wire mesh fencing, etc.

All wire and wire mesh fencing shall be erected in accordance with CKS 451.

## W.4.17 **Gates**

Gates shall be formed of 40 mm outside diameter x 2,5 mm wall thickness mild steel tubular framework with welded joints, strongly braced as necessary and filled in with wire mesh as described above, properly strained and securely bound to framework with tie wire.

# **ANNEXURE "P"**

**CONTRACTOR'S CORRESPONDENCE**