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## JOHANNESBURG DEVELOPMENT AGENCY (JDA)

### JOBURG LIBRARY: REPAIR OF THE ROOF AND INSTALLATION OF FIRE PROTECTION

CONTRACT No.: JDA \_JCL01\_2020

**ISSUED BY:**

Johannesburg Development Agency  
The Bus Factory  
3 Helen Joseph (formerly President) Street  
Newtown  
2000

Contact Name: Nthangeni Mulovhedzi  
Telephone No: 011 688 7849  
Email Address: [NMulovhedzi@jda.org.za](mailto:NMulovhedzi@jda.org.za)



**PREPARED BY:**

MAP AFRICA CONSULTING ENGINEERS  
(PTY) LTD  
Loft C, 1<sup>st</sup> Floor  
Aptus House  
Riverworld Park  
53 Autumn Road  
Rivonia  
2128

Contact Name: Sidesh Sirputh  
Telephone No: 011 234 3819  
Email Address: [sidesh@mapafrica.co.za](mailto:sidesh@mapafrica.co.za)



**NAME OF TENDERER:** .....

**CIDB REGISTRATION NUMBER:** .....

**CSD SUPPLIER NUMBER** .....

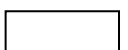
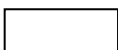
**COMPANY REGISTRATION NUMBER**.....

**TAX VERIFICATION PIN** .....

This tender closes at 12h00 on Monday, 30<sup>th</sup> November 2020 at the offices of the Johannesburg Development Agency “The Bus Factory”, 3 Helen Joseph (formerly President) Street, Newtown, Johannesburg.

**NO LATE SUBMISSIONS WILL BE CONSIDERED**

*The Johannesburg Development Agency reserves the right to cancel/ not award this tender.*



**PROCUREMENT DOCUMENT FOR CONTRACTORS FOR  
THE REPAIRS OF THE ROOF AND INSTALLATION OF  
FIRE PROTECTION**

**JBCC SERIES 2000 Edition 6.2 (MAY 2018)**

**J JOBURG LIBRARY: REPAIR OF THE ROOF AND INSTALLATION OF FIRE  
PROTECTION**

**CONTRACT No.: JDA\_JCL01\_2020**

**PLEASE NOTE: TENDERS MUST BE SUBMITTED ON THE TENDER DOCUMENTATION ISSUED.  
TENDER DOCUMENTATION MUST NOT BE REPRODUCED OR REARRANGED. ANY  
ADDITIONAL INFORMATION MUST BE SUBMITTED AS A SEPARATE ATTACHMENT TO THE  
TENDER DOCUMENT.**

**ALL PAGES OF THE SUBMISSION INCLUDING ATTACHMENTS MUST BE INITIALED AND  
NUMBERED.**

**RE: The Channels of Reporting Fraudulent and Corrupt Activities**

The City of Johannesburg has a **zero-tolerance approach to Fraud, Theft, Corruption, Maladministration, and Collusion** by suppliers with employees. To reinforce this commitment, more channels have been added to report any Fraudulent and Corrupt activities.

Instances of corporate fraud and misconduct remain a constant threat to service delivery. The City of Johannesburg took a resolution to adopt strategic interventions aimed at combatting fraud and corruption. The City took a decision to centralize the reporting of fraudulent and corrupt activities through the establishment of an independent fraud hotline which is managed by independent service providers

All people doing business with the Johannesburg Development Agency are encouraged to report any corrupt or illegal practice.

Employees are encouraged to report fraud, waste or other concerns suggestive of dishonest or illegal activities.

**Anyone can report fraudulent and corrupt activities through one of the following channels.**

- Toll free number.....0800 002 587
- Toll free Fax.....0800 007 788
- SMS (charged @ R1.50).....32840
- E-Mail address:.....anticorruption@tip-offs.com
- Website:.....www.tip-off.com
- Free post:.....Free Post, KNZ 138, Umhlanga, 4320



**LET'S JOIN HANDS TO TAKE UP THE FIGHT AGAINST FRAUD AND CORRUPTION IN OUR SOCIETY.**

**SUPPLIERS DATABASE REGISTRATION**

National Treasury launched the National Central Supplier Database (NCSD) with effect from 1 September 2015.

This will enable prospective suppliers to register their companies on the following website [www.csd.gov.za](http://www.csd.gov.za)

**Transitional Period (1 September 2015 to 30 June 2016)**

1. During the transitional period suppliers are requested to register on the website where all their essential information such as Tax Clearance Certificates, VAT, Company Registration Numbers and CIPC business status will be verified.
2. When conducting business with the JDA, you will be requested to provide us with the following:
  - Supplier Number and;
  - Supplier Registration Security Code so we can print your real time information;
  - Banking details with bank Stamp and;
  - Certified BBBEE Certificate.

Once a supplier has registered on NCSD, it will no longer be a requirement to provide the JDA with an Original Tax Clearance Certificate or any other registration documents.

**After Transitional Period 1 July 2016**

Effective 1 July 2016, the JDA will only award business to suppliers who are registered on NCSD and suppliers will no longer be required to provide information as stipulated above.

**For more information on registration, please:**

Ms.Kgadi Mphela on 011 688 7813

1. The Bid Document issued is electronically and contains the following:
  - The Full Document
  - The returnable schedules
  - Appendices
  
2. SUBMISSION OF TENDER – The following needs to be submitted in a neatly bound file (each and every page of the submission, including attachments, must be initialled and numbered by the tenderer) and in the following order:
  - Cover page
  - All returnable schedules

The above will form part of the Contract document.

**The tenderer is to submit an original plus one (1) hard copies of the entire tender submission as detailed.**

# JOHANNESBURG DEVELOPMENT AGENCY

CONTRACT NO. : JDA\_JCL01\_2020

FOR THE REPAIRS OF THE ROOF AND INSTALLATION OF FIRE PROTECTION

## CONTENTS

**Number      Heading**

### THE TENDER

**Part T1:      Tendering Procedures**

T1.1          Tender Notice and Invitation to Tender  
T1.2          Tender Data

**Part T2:      Returnable Documents**

T2.1          List of Returnable Schedules and Documents

### THE CONTRACT

**Part C1:      Agreement and Contract Data**

C1.1          Form of Offer and Acceptance  
C1.2          Contract Data  
C1.3          Construction Guarantee  
C1.4          Occupational Health and Safety Agreement  
C1.5          Agreement in terms of Section 37 (2) of the Occupational  
Health and Safety Act No 85 of 1993

**Part C2:      Pricing Data**

C2.1          Pricing Instructions  
C2.2          Bills of Quantities

**Part C3:      Scope of Work**

C3              Scope of Work

**Part C4:      Site Information**

C4              Site Information

**TENDER DOCUMENT CHECKLIST**

Tenderers must complete this document checklist to ensure that all information is completed in the Tender Document.

ITEMS	CHECKED	
	Contractor	Project Manager
1. Correct Tender offer carried forward to the Cover Page and also the Form of Offer and Acceptance in <b>Part C1.1</b>	<input type="checkbox"/>	<input type="checkbox"/>
2. Tenderer's signature on the offer	<input type="checkbox"/>	<input type="checkbox"/>
3. Bill of Quantities	<input type="checkbox"/>	<input type="checkbox"/>
i Bills of Quantities completed in full and in pen	<input type="checkbox"/>	<input type="checkbox"/>
ii Corrections crossed out and initialled	<input type="checkbox"/>	<input type="checkbox"/>
iii Each page initialled	<input type="checkbox"/>	<input type="checkbox"/>
4. Returnable Documents and Schedules	<input type="checkbox"/>	<input type="checkbox"/>
i Authority to Sign Tender	<input type="checkbox"/>	<input type="checkbox"/>
ii Declaration of Interest	<input type="checkbox"/>	<input type="checkbox"/>
iii Record of Addenda to Tender Documents	<input type="checkbox"/>	<input type="checkbox"/>
iv Banking Details	<input type="checkbox"/>	<input type="checkbox"/>
v Proposed Amendments and Qualifications (if any)	<input type="checkbox"/>	<input type="checkbox"/>
vi Certificate of Authority for Joint Venture and Joint Venture Agreement (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>
vii MBD 5: Declaration for Procurement above R10 million	<input type="checkbox"/>	<input type="checkbox"/>
viii MBD 8: Declaration of Bidder's Past Supply Chain Management Practices	<input type="checkbox"/>	<input type="checkbox"/>
ix MBD 9: Certificate of Independent Bid Determination	<input type="checkbox"/>	<input type="checkbox"/>
x Particulars of all Contracts awarded by an Organ of State during the last 5 years	<input type="checkbox"/>	<input type="checkbox"/>
xi Fulfilment of the Construction Regulations	<input type="checkbox"/>	<input type="checkbox"/>
Questionnaire on Tenderer's Procedures with respect to OHSA and	<input type="checkbox"/>	<input type="checkbox"/>
xii Construction Regulations	<input type="checkbox"/>	<input type="checkbox"/>
xiii Business Declaration	<input type="checkbox"/>	<input type="checkbox"/>
xiv A copy of a valid Tax Clearance Certificate Tax Pin Number.	<input type="checkbox"/>	<input type="checkbox"/>
xv Copy of current Municipal Account in the name of the Tenderer or alternatively, in the names of the Directors/Partners of the tendering entity	<input type="checkbox"/>	<input type="checkbox"/>
xvi Letter of Intent from a Financial Institution to provide a Construction Guarantee in accordance with the JBCC form (Refer C1.3)	<input type="checkbox"/>	<input type="checkbox"/>
xvii Proof of CIDB Grading required. In the event of a JV a certificate indicating the combined CIDB grading is required.	<input type="checkbox"/>	<input type="checkbox"/>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

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xviii	A valid original or certified copy of the B-BBEE status level verification certificate substantiating the B-BBEE rating or an EME must submit a sworn affidavit	<input type="checkbox"/>	<input type="checkbox"/>
xix	Schedule of Recently Completed Contracts	<input type="checkbox"/>	<input type="checkbox"/>
xx	Project Verification Form	<input type="checkbox"/>	<input type="checkbox"/>
xxi	Schedule of Current Contracts	<input type="checkbox"/>	<input type="checkbox"/>
xxii	Schedule of Construction Plant, Equipment and labour	<input type="checkbox"/>	<input type="checkbox"/>
xxiii	Schedule of Proposed Subcontractors	<input type="checkbox"/>	<input type="checkbox"/>
xxiv	Schedule of Proposed Key Personnel and detailed Curricula Vitae of all Key Personnel	<input type="checkbox"/>	<input type="checkbox"/>
xxv	Estimated Monthly Expenditure	<input type="checkbox"/>	<input type="checkbox"/>
<del>xxvi</del>	<del>Methodology Statement</del>	<input type="checkbox" value="-"/>	<input type="checkbox" value="-"/>
xxvii	Preliminary Construction Programme	<input type="checkbox"/>	<input type="checkbox"/>
xxviii	Labour, Plant and Equipment Histograms	<input type="checkbox"/>	<input type="checkbox"/>
xxix	Audited Financial Statements for past 3 years	<input type="checkbox"/>	<input type="checkbox"/>
xxx	Bank Rating	<input type="checkbox"/>	<input type="checkbox"/>
xxxi	Proof of current registration with the National Central Supplier Database	<input type="checkbox"/>	<input type="checkbox"/>
<del>xxxii</del>	<del>SMME Plan</del>	<input type="checkbox" value="-"/>	<input type="checkbox" value="-"/>
xxxiii	Local Content	<input type="checkbox"/>	<input type="checkbox"/>



**PART T1: TENDERING PROCEDURES**

**T1.1 TENDER NOTICE AND INVITATION TO TENDER**

**CONTRACT No.: JDA\_JCL01\_2020**  
**JOBURG LIBRARY: FOR THE REPAIR OF THE ROOF AND INSTALLATION OF FIRE PROTECTION**

The Johannesburg Development Agency invites tenders for the repairs of the roof and installation of fire protection at Joburg Library. The works comprises the following

- a. Refurbishment of the existing roof structure including waterproofing
- b. Fire installation and fire protection

It is a condition of this tender that the successful contractor shall be required to sub contract a minimum value of work to **SMME's** equal to **30%** of the building works.

It is estimated that the tenderers should have a CIDB contractor grading designation of a minimum 6GB or higher. Joint ventures are eligible to submit tenders provided that they satisfy the criteria stated in the Tender Data.

Documents may be downloaded from the following websites:

[www.jda.org.za](http://www.jda.org.za)  
[www.etenders.gov.za](http://www.etenders.gov.za)

Queries relating to the issue of these documents or the project may be addressed to :

Mr Nthangeni Mulovhedzi on e-mail to: [NMulovhedzi@jda.org.za](mailto:NMulovhedzi@jda.org.za) and any procurement related issues may be addressed to Ms Kgadi Mphela on e-mail to: [kmphela@jda.org.za](mailto:kmphela@jda.org.za).

**Due to the current COVID-19 pandemic, a site clarification meeting will not take place. Bidders are advised to download the tender documents , and submit written queries to [NMulovhedzi@jda.org.za](mailto:NMulovhedzi@jda.org.za) or [kmphela@jda.org.za](mailto:kmphela@jda.org.za). Questions and answers will also be uploaded on the JDA website. The last day for receipt of queries is 20 November 2020.**

**The closing time for receipt of tenders is 12h00 on Monday the 30<sup>th</sup> November 2020.** Telegraphic, telephonic, telex, facsimile, e-mail and late tenders will not be accepted.

**Tenders must only be submitted on the tender documentation that is issued. The retyping of the tender document is not permitted.** Requirements for sealing, addressing, delivery, opening and assessment of tenders are stated in the Tender Data.

The JDA's selection of qualifying tenders will be at the JDA's sole discretion and will be final. The JDA does not bind itself to accept any particular tender. Correspondence will be entered into with the successful tenderer.

"WE ENCOURAGE ALL PEOPLE DOING BUSINESS WITH US TO REPORT ANY CORRUPT OR ILLEGAL PRACTICE, USING THE ANTI-FRAUD HOTLINE NUMBER: 0800 002 587"

**PART T1: TENDERING PROCEDURES**

**T1.2 TENDER DATA**

The Conditions of Tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement, (May 2010) as published in Government Gazette No 33239, Board Notice 86 of 2010 of 28 May 2010. (See [www.cidb.org.za](http://www.cidb.org.za)).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it applies.

Clause Number	Clause Heading	Data / Wording
F.1.1	The Employer	Johannesburg Development Agency P. O. BOX 61877 MARSHALLTOWN, 2107
F.1.2	The Tender	<b>PART T1: TENDERING PROCEDURES</b> <b>T1.1</b> Tender Notice and Invitation to Tender <b>T1.2</b> Tender Data  <b>PART T2: RETURNABLE DOCUMENTS</b> <b>T2.1</b> List of Returnable Documents <b>T2.2</b> Returnable Schedules
	The Contract	<b>PART C1: AGREEMENTS AND CONTRACT DATA</b> <b>C1.1</b> Form of Offer and Acceptance <b>C1.2</b> Contract Data <b>C1.3</b> Construction Guarantee <b>C1.4</b> Occupational Health and Safety Agreement  <b>PART C2: PRICING DATA</b> <b>C2.1</b> Pricing Instructions <b>C2.2</b> Bill of Quantities  <b>PART C3: SCOPE OF WORK</b>  <b>PART C4: SITE INFORMATION</b>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

Clause Number	Clause Heading	Data / Wording
F.1.4	<b>Project Manager/ Civil and Structural / Electrical Engineer and Mechanical Engineer</b>	Name: MAP AFRICA Consulting Engineers Address: 1 <sup>st</sup> Floor Aptus House, Riverworld Park, 53 Autumn Road, Rivonia, 2128 Tel: 011 234 3819 / 083 963 1543 Fax: - E-mail: sidesh@mapafrica.co.za
F.2.1	<b>Eligibility</b>	<p>Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, are eligible to have their tenders evaluated.</p> <p>In addition, only those tenderers who have in their employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for supervisory and management staff are eligible to submit tenders.</p> <p>Joint ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> <li>1. every member of the joint venture is registered with the CIDB;</li> <li>2. the lead partner has a contractor grading designation in the 6GB General Building class of construction work; and</li> <li>3. the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for an 6GB or higher class of construction work determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations.</li> </ol>
F.2.7	<b>Clarification Meeting</b>	<p><b>Due to the current COVID-19 pandemic, a site clarification meeting will not take place.</b> Bidders are advised to download the documents and drawings online, and submit written queries to <a href="mailto:NMulovhezi@jda.org.za">NMulovhezi@jda.org.za</a> or <a href="mailto:kmphela@jda.org.za">kmphela@jda.org.za</a>. Questions and answers will also be uploaded on the JDA website.</p> <p><b>The last day for receipt of queries is 20<sup>th</sup> November 2020.</b></p>
F.2.12	<b>Alternative tender offers</b>	No alternative tender offers will be considered.
F.2.13.2		All returnable documents to the employer as defined in F.1.2 of the Tender Data shall be returned in legible writing in non-erasable ink.
F.2.13.3	<b>Number of copies of tender offers to be submitted to the Employer</b>	<b>Parts of each tender offer communicated on paper shall be submitted as an original, plus one (1) copy.</b>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

Clause Number	Clause Heading	Data / Wording
F.2.13.5 F.2.15.1	<b>Sealing and Delivery of tender offers</b>	<p>The Employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are:</p> <p>Location of tender box: Reception Desk of the Johannesburg Development Agency</p> <p>Physical address: The Bus Factory 3 Helen Joseph St (formerly President St) NEWTOWN JOHANNESBURG</p> <p>Identification details: <b>JDA_JCL01_2020</b> <b>REPAIR OF THE ROOF AND INSTALLATION OF FIRE PROTECTION</b></p> <p><b>Closing Date: 30 November 2020</b></p> <p><b>Time: 12h00</b></p>
F.2.13.9	<b>Telephonic</b>	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will <b>not</b> be accepted.
F.2.15	<b>Closing time of tender offers</b>	The closing time for submission of tender offers is: <b>12h00 on Monday the 30 November 2020.</b>
F.2.16.1	<b>Tender offer validity</b>	Not Applicable
F.2.16.3		<p><b>Add the following:</b></p> <p>“Should a tenderer amend or withdraw his or her tender after the closing date and time, but prior to him or her being notified of the acceptance thereof, or should a tenderer after having been notified that his or her tender has been accepted –</p> <ol style="list-style-type: none"> <li>1. give notice of his or her inability to execute the Contract in accordance with his or her tender; or</li> <li>2. fail to sign a contract within the period stipulated in the tender requirements or any extended period determined by the employer; or</li> <li>3. fail to execute the Contract.</li> </ol> <p>he or she shall pay all additional expenses which the employer has to incur in inviting new tenders and pay the difference between his or her tender and any less favourable tender accepted, as well as any consequential loss which may arise as a result of his/her non-fulfilment of his/her obligations: Provided that the employer may exempt a tenderer from the provisions of this sub-regulation if he is of the opinion that such non-performance is justifiable.</p> <p>When during the above-mentioned circumstances it is not deemed expedient to invite new tenders, the employer may entertain a recommendation for acceptance of a tender from those already received.”</p>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

Clause Number	Clause Heading	Data / Wording																		
F.2.17	Clarification of tender after submission	<p><b>Add the following:</b></p> <p>“The tenderer is to provide clarification with regards to a request for clarification from the employer, within 48 hours of the employer making the request, failing which, the tender offer will be considered non-responsive.”</p>																		
F.2.18		The tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.																		
F.2.20	Letter of Intent	The tenderer is required to submit with his tender a letter of intent from an approved financial institution undertaking to provide the Construction Guarantee in the format included in Part C1.3 of this procurement document.																		
F.2.23	Certificates	<p>The tenderer is required to submit with his tender:</p> <p>a) A copy of a Tax Compliance Status Letter. No award will be made to a bidder whose tax matters are not in order with the South African Revenue Services</p> <p>b) Documents and Schedules listed in Part T2.</p>																		
F.3.4	Opening of tender submissions	Tenders will not be opened in public.																		
F.3.11.3	Evaluation of Tender Offers	<p>The procedure for the evaluation of responsiveness is purely based on a technical evaluation. .</p> <p><b>The functionality assessment is based on the following criteria;</b></p> <table border="1"> <thead> <tr> <th>A</th> <th>Total Points</th> <th>Criteria</th> <th>Description of criteria</th> <th>Points</th> </tr> </thead> <tbody> <tr> <td rowspan="5">Company Experience and Track record on Repair and Refurbishment or Upgrade projects with a high standard or finish and management of</td> <td rowspan="5">50</td> <td>Five projects completed</td> <td rowspan="5">Points will only be allocated for references for repair and refurbishment or upgrade projects</td> <td>50</td> </tr> <tr> <td>Four projects completed</td> <td>40</td> </tr> <tr> <td>Three project completed</td> <td>30</td> </tr> <tr> <td>Two project completed</td> <td>20</td> </tr> <tr> <td>One project completed</td> <td>10</td> </tr> </tbody> </table>	A	Total Points	Criteria	Description of criteria	Points	Company Experience and Track record on Repair and Refurbishment or Upgrade projects with a high standard or finish and management of	50	Five projects completed	Points will only be allocated for references for repair and refurbishment or upgrade projects	50	Four projects completed	40	Three project completed	30	Two project completed	20	One project completed	10
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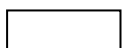
**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

Clause Number	Clause Heading	Data / Wording																						
		<p>construction works involving roof repairs, fire protection etc.</p> <p>Project Value R10 million or above</p>			<p><i>Note: appointment and completion letter for each project is required. Failure to comply with this requirement will result in no points be awarded.</i></p>																			
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**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

Clause Number	Clause Heading	Data / Wording				
		SMME Supervisor)		of experience as a Site Agent (on repair and refurbishment or upgrade projects to the value of R10mill or above) & should have a minimum Qualification of B-Tech in Built Environment qualification	the project values and completion dates.	
				<b>Site QS</b> Minimum 5 years of experience as a Site QS (on repair and refurbishment or upgrade projects to the value of R10mill or above) & National Diploma in Quantity Surveying (min).		10
				<b>OHS Officer</b> Minimum 5 years of experience as an OHS Officer & SAMTRAC or ND Safety Management		15
				<b>Foreman</b> Minimum 10 years of experience as a Foreman in on repair and refurbishment or upgrade projects		10
				<b>SMME Supervisor</b> Minimum 10 years of experience as a construction supervisor		10

Clause Number	Clause Heading	Data / Wording																					
		<p><b>The tenderers will be required to achieve a minimum score of 140 points in the technical evaluation out of a possible 200 points in order to be considered further in the evaluation process.</b></p> <p>Shortlisted bidders may be requested to attend interviews should there be any need for clarity.                      Unsuccessful bidders will have the opportunity to query the award or decision within 14 days from the day of notification.</p> <p><b>FORMULA FOR SCORING TENDER PRICE</b></p> <p>The following formula will be used to calculate the points for price.  <math display="block">P_s = X \left[ 1 - \frac{(P_t - P_{min})}{P_{min}} \right]</math></p> <p>Where  <math>P_s</math> = Points scored for comparative price of tender under consideration  <math>P_t</math> = Comparative price of tender under consideration  <math>P_{min}</math> = Comparative price of lowest acceptable tender</p> <p><math>X</math> = Points assigned to price</p> <p><b>POINTS AWARDED FOR B-BBEE STATUS LEVEL</b></p> <p>The points allocated to a tenderer will be in accordance with the <b>Preferential Procurement Regulations, 2017</b> published in Government Gazette No. 40553 dated 20 January 2017.</p> <p>The following table is applicable.</p> <table border="1" data-bbox="608 1144 1238 1581"> <thead> <tr> <th rowspan="2">B-BBEE Status Level Of Contributor</th> <th>Number of Points</th> </tr> <tr> <th>Tenders below R50 million</th> </tr> </thead> <tbody> <tr><td>1</td><td>20</td></tr> <tr><td>2</td><td>18</td></tr> <tr><td>3</td><td>14</td></tr> <tr><td>4</td><td>12</td></tr> <tr><td>5</td><td>8</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>7</td><td>4</td></tr> <tr><td>8</td><td>2</td></tr> <tr><td><b>Non-Compliant contributor</b></td><td><b>0</b></td></tr> </tbody> </table> <p>Notes :</p> <ol style="list-style-type: none"> <li>1. "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 (Act No.53 of 2003).</li> <li>2. Tenderers must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating. Certificates issued by either verification agencies accredited by the South African Accreditation System (SANAS) or by registered auditors approved by the Independent Regulatory Board for Auditors (IRBA) are acceptable. <b>THE COPY MUST BEAR A</b></li> </ol>	B-BBEE Status Level Of Contributor	Number of Points	Tenders below R50 million	1	20	2	18	3	14	4	12	5	8	6	6	7	4	8	2	<b>Non-Compliant contributor</b>	<b>0</b>
B-BBEE Status Level Of Contributor	Number of Points																						
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6	6																						
7	4																						
8	2																						
<b>Non-Compliant contributor</b>	<b>0</b>																						





Clause Number	Clause Heading	Data / Wording
		<p><b>CERTIFICATION. FAILURE TO SUBMIT AS REQUIRED WILL RESULT IN THE BIDDER SCORING ZERO (0) POINTS FOR BBEE.</b></p> <ol style="list-style-type: none"> <li>3. An EME must submit a sworn affidavit confirming the following: <ul style="list-style-type: none"> <li>• Annual Turnover Revenue of R10 million or less; and</li> <li>• Level of Black ownership</li> <li>• Any misrepresentation in terms of the above constitutes a criminal offence as set out in the B-BBEE Act as amended.</li> </ul> </li> <li>4. The submission of such certificates must comply with the requirements of instructions and guidelines issued by the National Treasury and be in accordance with notices published by the Department of Trade and Industry in the Government Gazette.</li> <li>5. 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.</li> <li>6. 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 tender.</li> <li>7. A person will not be awarded points for B-BBEE status level if it is indicated in the tender documents that such a tenderer intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a tenderer qualifies for.</li> <li>8. A person awarded a contract will not be permitted to 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.</li> </ol> <p><b>TOTAL PREFERENCE POINTS</b></p> <p>The total preference points for a tender are calculated with the formula</p> <p><b>PP = P<sub>s</sub> + P<sub>bee</sub></b> where  <b>PP</b> is the total number of preference points scored by the tenderer  <b>P<sub>s</sub></b> is the points scored for the comparative price of the tenderer, and  <b>P<sub>bee</sub></b> is the number of points awarded to the tenderer based on his certified B-BBEE status level</p> <p><b>RISK TOLERANCE FRAMEWORK</b></p> <p>The JDA has adopted a Risk Tolerance Framework (RTF) which enjoins the JDA to consider its risk exposure to contractors/Service Providers in terms of the number of contracts awarded to a single Contractor/service provider or the total value of contracts awarded to a single contractor/service provider in a particular year.</p>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

Clause Number	Clause Heading	Data / Wording
		<p>In terms of the Risk Tolerance Framework, the JDA determine the risk exposure as excessive in instances where the value of the contracts are:</p> <ol style="list-style-type: none"> <li>1) The greater of R80 million or four contracts/ projects in the current financial year or</li> <li>2) The greater of R 120 million or six contracts/projects over two financial years (current year and previous financial year).</li> </ol> <p>A risk analysis shall be undertaken on the bidder with the highest number of points obtained, to determine whether the tenderer does not exceed the JDA's risk framework criteria as stated above, in other words whether it falls within the ambit of the Risk Tolerance Framework as acceptable.</p> <p>JDA reserves the right to award a contract to a bidder who has exceeded the threshold as stated above.</p> <p>Shortlisted bidders may be requested to attend interviews should there be any need for clarity.</p> <p>Unsuccessful bidders will have the opportunity to query the award or decision within 14 days from the day of notification.</p> <p>Bidders are to note that JDA does not bind itself to accept the lowest priced bid.</p>
	<p><b>Disqualification Criteria</b></p>	<p><b>BIDDERS WILL BE DISQUALIFIED FOR:</b></p> <ul style="list-style-type: none"> <li>• Failure to complete and sign the Offer page;</li> <li>• Failure to complete and submit a Priced Bill of Quantities in full;</li> <li>• Failure to take into account any addendums issued during tender stage;</li> <li>• Failure to be registered and active with CIDB in the relevant grading;</li> <li>• Termination during the last five (5) years on previous contracts with the JDA or any other organ of state after written notice was given to that bidder;</li> <li>• Completing the tender document in pencil.</li> </ul>
<p><b>F.3.13</b></p>	<p><b>Acceptance of Tender Offers</b></p>	<p>Tender offers will only be accepted if:</p> <ol style="list-style-type: none"> <li>a) The tenderer submits a letter of intent from an approved financial institution undertaking to provide the Construction Guarantee in the format included in Part C1.3 of this procurement document;</li> <li>b) The tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation;</li> <li>c) The tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector;</li> <li>d) The tenderer has not:             <ol style="list-style-type: none"> <li>i) abused the Employer's Supply Chain Management System; or</li> <li>ii) failed to perform on any previous contract and has been given a written notice to this effect;</li> </ol> </li> <li>e) The tenderer has completed the Declaration of Interest and there are</li> </ol>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

<b>Clause Number</b>	<b>Clause Heading</b>	<b>Data / Wording</b>
		<p>no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.</p> <p>f) The tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;</p> <p>g) The employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.</p> <p>h) The tendering entity or the directors/partners of the tendering entity are in good standing with the local authority / municipality.</p>
<b>F.3.18</b>	<b>Number of Paper Copies</b>	The number of paper copies of the signed contract to be provided by the employer is 1 (one).

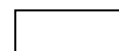
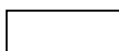
## PART T2: RETURNABLE DOCUMENTS

### T2.1 LIST OF RETURNABLE DOCUMENTS

#### T2.1.1 Returnable Documents and Schedules required for tender evaluation purposes

The tenderer must complete the following returnable schedules

- Form A1:** Authority to sign Tender
- Form A2:** Declaration of Interest
- Form A3:** Record of Addenda to Tender Documents
- Form A4:** Banking Details
- Form A5:** Proposed Amendments and Qualifications (if any)
- Form A6:** Certificate of Authority for Targeted Enterprise Partners/Subcontractors
- Form A7:** MBD9 Certificate of Independent Bid Determination
- Form A8:** Particulars of any contracts awarded by an organ of state during the last 5 years
- Form A9:** Fulfilment of the Construction Regulations
- Form A10:** Questionnaire on tenderer's procedures with respect to OHS and Construction Regulations
- Form A11:** Business Declaration
- Form A12:** A copy of a valid Tax Pin Number
- Form A13:** Copy of current Municipal Account in the name of the Tenderer or alternatively in the names of the Directors/Partners of the tendering entity
- Form A14:** Letter of Intent from a Financial Institution to provide a Construction Guarantee in accordance with the JBCC pro-forma (refer C1.3)
- Form A15:** MBD5 Declaration for Procurement above R10 million (Vat Included)
- Form A16:** MBD8 Declaration of Bidders Past Supply Chain Management Practices
- Form A17:** Declaration of State of Municipal Accounts
- Form B1:** Proof of CIDB Grading
- Form B2:** A valid originally or certified copy of the B-BBEE status level verification certificate, substantiating the B-BBEE rating or an EME must submit a sworn affidavit
- Form B3:** Schedule of Recently Completed Contracts
- Form B4:** Schedule of Current Contracts
- Form B5:** Schedule of Construction Plant, Equipment and Labour
- Form B6:** Schedule of Proposed Subcontractors
- Form B7:** Schedule of Proposed Key Personnel and detailed CV's of all key personnel
- Form B8:** Estimated Monthly Expenditure
- Form B9:** Methodology Statement
- Form B10:** Preliminary Construction Programme
- Form B11:** Labour, Plant and Equipment Histograms
- Form B12:** Audited Financial Statements for past three (3) years
- Form B13:** Bank Rating
- Form B14:** SMME Plan
- Form B15:** Bills of Quantities
- Form B16:** Local Content



T2.1.2 Other Documents that will be incorporated into the contract

- Form of Offer and Acceptance
- Contract Data
- Priced Bill of Quantities
- Occupational Health and Safety Agreement (C1.4)
- Agreement in terms of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993 (C1.5)
- Approved Construction Programme

**FORM A1: Authority to Sign Tender**

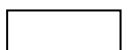
Notes to tenderer:

1. The signatory for the tenderer shall confirm his/her authority thereto by attaching on the tendering company's letterhead a duly signed and dated copy of the relevant resolution of the board of directors/partners.
2. In the event that the tenderer is a joint venture, a certificate is required from each member of the joint venture clearly setting out:
  - authority for signatory,
  - undertaking to formally enter into a joint venture contract should an award be made to the joint venture,
  - name of designated lead member of the intended joint venture, as required by tender condition F.2.13.4.

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**



**FORM A2: Declaration of Interest**

1. No bid will be accepted from persons in the service of the state<sup>1</sup>.
  
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
  
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
  - 3.1 Full Name of bidder or his or her representative: .....
  - 3.2 Identity Number: .....
  - 3.3 Position occupied in the Company (director, trustee, shareholder):  
.....
  - 3.4 Company Registration Number: .....
  - 3.5 Tax Reference Number:.....
  - 3.6 VAT Registration Number: .....
  - 3.7 The names of all directors / trustees / shareholders / members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
  - 3.8 Are you presently in the service of the state? **YES / NO**  
If yes, furnish particulars.....  
.....
  - 3.9 Have you been in the service of the state for the past twelve months? **YES / NO**  
If yes, furnish particulars.....  
.....
  - 3.10 Do you have any relationship (family, friend, other) with persons in the service of the state and who may be involved with the evaluation and or adjudication of this bid? **YES / NO**  
If yes, furnish particulars.....  
.....
  - 3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid? **YES / NO**  
If yes, furnish particulars.....  
.....

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

3.12 Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

If yes, furnish particulars.....  
 .....

3.13 Are any spouse, child or parent of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state? **YES / NO**

If yes, furnish particulars.....  
 .....

3.14 Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract. **YES / NO**

If yes, furnish particulars.....  
 .....

4. Full details of directors / trustees / members / shareholders.

FULL NAME	IDENTITY NUMBER	STATE EMPLOYEE NUMBER

**CERTIFICATION**

I, THE UNDERSIGNED (FULL NAME) .....

**CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS TRUE AND CORRECT. I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.**

.....  
 Signature

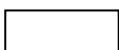
.....  
 Position

.....  
 Name of Bidder

.....  
 Date

\* MSCM Regulations: "in the service of the state" means to be –  
 (a) a member of –  
     (i) any municipal council;  
     (ii) any provincial legislature; or  
     (iii) the national Assembly or the national Council of provinces;  
 (b) a member of the board of directors of any municipal entity;  
 (c) an official of any municipality or municipal entity;  
 (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);  
 (e) a member of the accounting authority of any national or provincial public entity; or  
 (f) an employee of Parliament or a provincial legislature.

\*\* "Stakeholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.





**FORM A3: Record of Addenda to Tender Documents**

We confirm that the following communications received from the Employer's Representative before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	<b>DATE</b>	<b>TITLE OR DETAILS</b>
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

.....  
**Signature**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**Date**

# JOHANNESBURG DEVELOPMENT AGENCY (JDA)

---

## FORM A4: Banking Details

I/We hereby authorise the Employer to approach the following bank for the purposes of obtaining a financial reference:

DESCRIPTION OF BANK DETAIL	BANK DETAILS APPLICABLE TO TENDERER'S HEAD OFFICE
Name of Bank	
Branch Name	
Branch Code	
Street Address	
Postal Address	
Name of Manager	
Telephone Number	
Fax Number	
Account Number	

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**



**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

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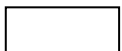
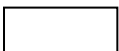
**FORM A6: Certificate of Authority for Targeted Enterprise Partners/Subcontractors**

We, the undersigned, are submitting this tender offer jointly with the following Targeted Enterprise Partners/Subcontractors and hereby authorise Mr/Ms ..... , authorised signatory of the company ..... , acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

NAME OF FIRM	PERCENTAGE PARTICIPATION	ADDRESS	DULY AUTHORISED SIGNATORY
Lead Partner			Signature:
			Name:
CIDB registration no: .....			Designation:
Partner			Signature:
			Name:
CIDB registration no: .....			Designation:
Partner			Signature:
			Name:
CIDB registration no: .....			Designation:

.....  
**SIGNATURE**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**



**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

---

**FORM A7: Certificate of Independent Bid Determination**

I, the undersigned, in submitting the accompanying bid:

---

(Bid Number and Description)

in response to the invitation for the bid made by:

**JOHANNESBURG DEVELOPMENT AGENCY**

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;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. 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;
5. 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
6. 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.
7. 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.
- 8. 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.
- 10. 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



FORM A8 (Continued)

EMPLOYER	CONSULTING ENGINEER	NATURE OF WORK	VALUE OF WORK	YEAR OF COMPLETION

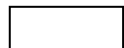
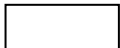
.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**Organ of State means-**

- a) a national or provincial department;
- b) a municipality;
- c) a constitutional institution defined in the Public Finance Management Act, 1999 (Act No. 1 of 1999);
- d) Parliament;
- e) a provincial legislature;
- f) any other institution or category of institutions included in the definition of "organ of state" in section 239 of the Constitution and recognised by the [Minister](#) by notice in the *Government Gazette* as an institution or category of institutions to which [this Act](#) applies;





**FORM A9: Fulfilment of the Construction Regulations, 2014**

In terms of regulation 4(3) of the Construction Regulations, 2014 (hereinafter referred to as the Regulations), promulgated on 7 February 2014 in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) the Employer shall not appoint a contractor to perform construction work unless the Contractor can satisfy the Employer that his/her firm has the necessary competencies and resources to carry out the work safely and has allowed adequately in his/her tender for the due fulfilment of all the applicable requirements of the Act and the Regulations.

- I confirm that I am fully conversant with the Regulations and that my company has (or will acquire/procure) the necessary competencies and resources to timeously, safely and successfully comply with all of the requirements of the Regulations.

(Tick)

<b>YES</b>	<input type="checkbox"/>
<b>NO</b>	<input type="checkbox"/>

- Proposed approach to achieve compliance with the Regulations

(Tick)

Own resources, competent in terms of the Regulations (refer to 3 below)	<input type="checkbox"/>
Own resources, still to be hired and/or trained (until competency is achieved)	<input type="checkbox"/>
Specialist subcontract resources (competent) - specify: ..... ..... ..... .....	<input type="checkbox"/>

- Provide details of proposed key persons, competent in terms of the Regulations, who will form part of the Contract team as specified in the Regulations (CVs to be attached):

.....  
.....  
.....

- Provide details of proposed training (if any) that will be undergone:

.....  
.....  
.....

- Potential key risks identified and measures for addressing risks:

.....  
.....  
.....

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

---

6. I have fully included in my tendered rates and prices (in the appropriate payment items provided in the Schedule of Quantities) for all resources, actions, training and any other costs required for the due fulfilment of the Regulations for the duration of the construction and defects repair period.

(Tick)

<b>YES</b>	<input type="checkbox"/>
<b>NO</b>	<input type="checkbox"/>

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM A10: Questionnaire on Tenderer's Procedures with respect to the Occupational Health and Safety Act (OHACT) and Construction Regulations.**

- 1. Name of the employee to be appointed as Construction Manager [Construction Regulation 8 (1)]  
.....
- 2. Name of the employee to be appointed as Construction Supervisor [Construction Regulation 8 (7)]  
.....
- 3. Names of the competent employees to assist the Construction Supervisor [Construction Regulation 8 (8)]  
.....  
.....
- 4. Name of the person to be appointed to conduct base line and ongoing risk assessments [Construction Regulation 9 (1)]  
.....
- 5. Name of competent person to be appointed as occupational health and safety officer [Construction Regulation 8 (6)]  
.....
- 6. Will the employees to be appointed on the project be in possession of proof of health and safety induction training that will address the project specific risks and exposures [Construction Regulation 9 (1) (a)]? ..... **Yes / No.**  
If no, what are the tenderer's proposals for such training? .....
- 7. Are the tenderer's tools, plant and equipment tested and inspected regularly i.e. daily for vehicles and equipment and at least weekly for other tools and hand tools in terms of safety compliance? ..... **Yes/No**  
If no, what are the tenderer's proposals for such testing? .....
- 8. Will a dedicated supervisor be designated to manage the process to test and inspect all tools, plant and equipment?.....**Yes/No**  
If no, what are the tenderer's proposals for such designation?  
.....  
.....

9. What other measures will the tenderer take to comply with the OHSACT and the Construction Regulations? ..... **Yes/No**

If no, what are the tenderer's proposals to comply with this requirement?

.....  
.....

9. Is the tenderer registered and in good standing with the Compensation Commissioner or duly approved compensation insurer? ..... **Yes/No**

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM A11: Business Declaration**

Tender/RFP Number : .....  
Tender/RFP Description : .....  
Name of Company : .....  
Postal Address : .....  
.....  
Physical Address : .....  
.....  
Telephone : .....  
Fax : .....  
Contact Person : .....  
Cell Phone Number : .....  
E-Mail Address : .....  
Company/enterprise Income : .....  
Tax Reference Number \*\* : .....  
(Insert personal income tax number if a one-person business and personal income tax numbers of all partners if a partnership)  
VAT Registration Number : .....  
Company Registration Number: .....

1. Type of Firm
- Partnership
  - One-person business/sole trader
  - Close corporation
  - Public company
  - Private company
- (Tick One Box)

2. Principal Business Activities  
.....  
.....

3. Total number of years the firm has been in business: .....

4. Detail all trade associations/professional bodies in which you have membership.  
.....  
.....

5. Did the firm exist under a previous name?

Yes

No

(Tick one box)

If yes, what was its previous name.....

6. How many permanent staff members are employed by the firm?

Full Time: .....

Part Time: .....

7. What is the enterprise's latest annual turnover (excl. VAT): R.....

8. List the personnel or firms who provide the following services:

SERVICE	NAME	CONTACT PERSON	TELEPHONE
ACCOUNTING			
LEGAL			
AUDITING			
BANKING			
INSURANCE			

**BANK DETAILS**

I/We hereby request and authorize you to pay any amounts which may accrue to me/us to the credit of my/our account with the mentioned bank.

I/We understand that the credit transfers hereby authorized will be processed by computer through a system known as the "ACB Electronic Fund Transfer Service" and

I/We also understand that no additional advice of payment will be provided by my/our bank, but details of each payment will be printed on my/our bank statement or any accompanying voucher.

This authority may be cancelled by me/us giving 30 days' notice in writing.

BANK: .....

BRANCH: .....

BRANCH CODE: .....

ACCOUNT NUMBER: .....

ACCOUNT HOLDER: .....

TYPE OF ACCOUNT: .....

The undersigned, who warrants that he/she is duly authorised to do so on behalf of the company, affirms that the information furnished in response to this request for proposal is true and correct:

**SIGNATURE** : .....

**NAME IN FULL** : .....

**CAPACITY** : .....

**DULY AUTHORIZED TO SIGN ON BEHALF OF:** .....

**DATE** : .....

**FORM A12: A copy of a valid Tax Pin Number.**

The tenderer shall include as an attachment to their submission a copy of a valid Tax Pin Number which shall be obtained by the tenderer from the South African Revenue Service (SARS).

In the event of a joint venture each member shall comply with the above requirement.

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**



**FORM A13: Municipal Accounts**

The tenderer shall include as an attachment to their submission a copy of the current Municipal Account in the name of the Tenderer or alternatively in the names of the Directors/Partners of the tendering entity.

In the event of a joint venture each member shall comply with the above requirement.

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM A14: Letter of Intent**

The tenderer shall include as an attachment to their submission a Letter of Intent from a Financial Institution to provide a Construction Guarantee in accordance with the JBCC pro-forma (refer C1.3).

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM A15: Declaration for Procurement above R10 million (MBD 5)**

**DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (VAT INCLUDED)**

**For all procurement expected to exceed R10 million (VAT included), bidders must complete the following questionnaire:**

1 Are you by law required to prepare annual financial statements for auditing?

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

.....  
.....

**YES / NO**

2 Do you have any outstanding undisputed commitments for municipal services towards a municipality or any other service provider in respect of which payment is overdue for more than 30 days?

**YES / NO**

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If yes, provide particulars.

.....  
.....  
.....  
.....

3. Has any contract been awarded to you by an organ of the state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?

**YES / NO**

3.1 If yes, furnish particulars

.....  
.....

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic?

**YES / NO**

4.1 If yes, furnish particulars

.....  
.....

**CERTIFICATION**

**I, THE UNDERSIGNED (NAME) .....**

**CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.**

**I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.**

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of Bidder

**FORM A16: Declaration of Bidder’s Past Supply Chain Management Practices (MBD 8)**

**DECLARATION OF BIDDER’S PAST SUPPLY CHAIN MANAGEMENT PRACTICES**

- 1 This Municipal Bidding Document must form part of all bids invited.
- 2 It serves as a declaration to be used by municipalities and municipal entities 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.
- 3 The bid of any bidder may be rejected if that bidder, or any of its directors have:
  - a. abused the municipality’s / municipal entity’s supply chain management system or committed any improper conduct in relation to such system;
  - b. been convicted for fraud or corruption during the past five years;
  - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
  - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 **In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.**

Item	Question	Yes	No
4.1	Is the bidder or any of its directors listed on the National Treasury’s database as a company or person prohibited from doing business with the public sector? <b>(Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the <i>audi alteram partem</i> rule was applied).</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	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 12 of 2004)? <b>(To access this Register enter the National Treasury’s website, <a href="http://www.treasury.gov.za">www.treasury.gov.za</a>, click on the icon “Register for Tender Defaulters” or submit your written request for a hard copy of the Register to facsimile number (012) 3265445).</b>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		

<b>Item</b>	<b>Question</b>	<b>Yes</b>	<b>No</b>
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		
4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

**CERTIFICATION**

**I, THE UNDERSIGNED (FULL NAME) .....  
CERTIFY THAT THE INFORMATION FURNISHED ON THIS  
DECLARATION FORM TRUE AND CORRECT.**

**I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN  
AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.**

.....  
**Signature**

.....  
**Date**

.....  
**Position**

.....  
**Name of Bidder**

**FORM A17: DECLARATION ON STATE OF MUNICIPAL ACCOUNTS**

A Any bid will be rejected if:  
Any municipal rates and taxes or municipal service charges owed by the bidder or any of the directors to the municipality or a municipal entity, or to any other municipality or municipal entity, are in arrears for more than three months.

B Bid Information

- i. Name of bidder: .....
- ii. Registration Number: .....
- iii. Municipality where business is situated: .....
- iv. Municipal account number for rates: .....
- v. ....
- vi. Municipal account number for water and electricity: .....
  
- vii. Names of all directors, their ID numbers and municipal account number.
  - 1. ....
  - 2. ....
  - 3. ....
  - 4. ....
  - 5. ....
  - 6. ....
  - 7. ....

C Documents to be attached.

- i. A copy of municipal account mentioned in B (iv) & (v) (Not older than 3 months)
- ii. A copy of municipal accounts of all directors mentioned in B(vi) (Not older than 3 months)
- iii. Proof of directors

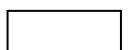
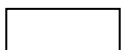
I/We declare that the abovementioned information is true and correct and that the following documents are attached to this form:

---

**Signature**

---

**Date**



**FORM B1: CIDB Grading**

The tenderer shall include as an attachment to their submission the proof of CIDB grading.

In the event of a joint venture each member shall comply with the above requirement.

.....  
**SIGNATURE**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**



**FORM B2: B-BBEE Certificate**

The tenderer shall include as an attachment to their submission a valid originally certified copy of the B-BBEE status level verification certificate, substantiating the B-BBEE rating. An EME must submit a sworn affidavit confirming the following:

- Annual Turnover Revenue of R10 million or less; and
- Level of Black ownership
- Any misrepresentation in terms of the above constitutes a criminal offence as set out in the B-BBEE Act as amended.

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.

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 tender.

.....

**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....

**DATE**

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

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**FORM B3: Schedule of Recently Completed Contracts**

The Tenderer shall list below the last five building construction contracts of a **similar nature** completed by the Tenderer in the past five years. Similar nature refers to repair and refurbishment or upgrade projects with a high standard or finish and management of construction works involving roof repairs, fire protection, etc., to a minimum of R 10m per project.

This information is material to the award of the Contract.  
**(In the event of insufficient space, attach supplementary documentation)**

<b>EMPLOYER</b> (Name, Tel No and Fax No)	<b>PRINCIPAL AGENT</b> (Name, Tel No and Fax No)	<b>NATURE OF WORK</b>	<b>VALUE OF WORK</b>	<b>YEAR OF COMPLETION</b>

.....  
**Signature**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**Date**

JDA JBCC



**FORM B4: Schedule of Current Contracts**

The Tenderer shall list below the contracts not yet completed. This information is material to the award of the Contract.

**(In the event of insufficient space, attach supplementary documentation)**

<b>EMPLOYER</b> (Name, Tel No and Fax No)	<b>LOCATION</b>	<b>NATURE OF WORK</b>	<b>VALUE OF WORK</b>	<b>EXPECTED DATE OF COMPLETION</b>

.....  
**Signature**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**Date**

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

**FORM B5: Schedule of Construction Plant & Equipment**

The following are lists of Construction Plant and Equipment that I/We presently own or lease and will have available for this contract if my / our tender is accepted.

- (a) **Details of Equipment that is owned by me / us and immediately available for this contract.**

DESCRIPTION	QUANTITY	YEAR ACQUIRED

*Attach additional information in a supplementary document*

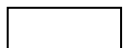
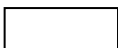
- (b) **Details of Plant & Equipment that will be hired, or acquired for this contract if my / our tender is accepted**

DESCRIPTION <i>(type, size, capacity etc.)</i>	QUANTITY	HOW ACQUIRED	
		HIRE/ BUY	SOURCE

*Attach additional information in a supplementary document*

.....  
**Signature**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**Date**



**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

---

**FORM B6: Schedule of Proposed Sub-Contractors**

I/We hereby notify you that it is my/our intention to employ the following Sub-Contractors for work in this contract. Tenderers are to provide details of their subcontractors for the following trades: Electrical, Mechanical, etc. and include the company profiles which must indicate projects completed with associated values.

NAMES AND ADDRESSES OF PROPOSED SUBCONTRACTORS	NATURE AND EXTENT OF WORK TO BE SUBCONTRACTED	PREVIOUS EXPERIENCE WITH SUBCONTRACTOR OR RECENT WORK EXECUTED BY THE SUB-CONTRACTOR

.....  
**Signature**

*(of person authorised to sign on behalf of the Tenderer)*

JDA JBCC

.....  
**Date**



**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

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**FORM B7: Proposed Key Personnel**

The Tenderer shall list below the key personnel whom he proposes to employ on the contract should his offer be accepted, both at his headquarters and on the site, together with their qualifications, experience and positions held.

LOCATION	DESIGNATION	NAME AND NATIONALITY OF PROPOSED CANDIDATE	SUMMARY OF QUALIFICATIONS & EXPERIENCE
HEAD OFFICE	Contracts manager		
SITE OFFICE	Site Agent		
	General Foreman		
	SMME Supervisor		
	Health and Safety Officer		

**NOTE: Detailed Curriculum Vitae of proposed candidates are to be separately provided. Said CV's MUST indicate qualifications (proof of which is to be attached), number of years' experience, and the nature and value of projects completed including the role performed on said projects.**

.....  
**Signature**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**Date**



**FORM B8: Estimated Monthly Expenditure**

The Tenderer shall state below the estimated value of work to be completed every month based on his preliminary programme and his tendered unit rates.

*\* The amounts for contingencies must not be included.*

MONTH	VALUE *
1	R.....
2	R.....
3	R.....
4	R.....
5	R.....
6	R.....
7	R.....
8	R.....
9	R.....
10	R.....
11	R.....
12	R.....
	COMPLETION OF CONTRACT
TOTAL	R.....

.....  
**SIGNATURE**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM B9: Methodology Statement**

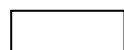
The tenderer shall include as an attachment to their submission the detailed Methodology Statement for the works.

The methodology must demonstrate how the contractor intends to sequence the works. The manner in which the contractor intends to allocate resources must be clearly spelt out. When assessing the methodology, congruency with the project schedule will also be examined.

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**





**FORM B10: Preliminary Construction Programme**

The tenderer shall include as an attachment to their submission the preliminary Construction Programme for the works.

.....  
**SIGNATURE**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM B11: Labour, Plant and Equipment Histograms**

The tenderer shall include as an attachment to their submission the labour, plant and equipment histograms for the works.

.....  
**SIGNATURE**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM B12: Financial Statements**

The tenderer shall include as an attachment to their submission the Audited Financial Statements for the past three years.

.....  
**SIGNATURE**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM B13: Bank Rating**

The tenderer shall include as an attachment to their submission a letter from the bank at which he declares he conducts his account. The contents of the bank's letter must state the credit rating that it accords to the tenderer for the business envisaged by this tender.

In the event of a joint venture each member shall comply with the above requirement.

.....  
**SIGNATURE**  
*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**

**FORM B14: SMME Plan**

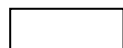
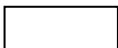
The tenderer shall include as an attachment to their submission a detailed SMME plan indicating how the SMME requirements will be achieved, as detailed in Part C3: Scope of Works. The SMME Plan must clarify the manner in which the bidder intends to manage, support and empower local SMME's contractors.

The SMME plan must detail (i) how quality will be controlled, (ii) how the scope of works will be scheduled (programme), (iii) how will skills be transferred, and (iv) how will reporting to the client be done (content of reports, frequency etc.).

.....  
**SIGNATURE**

*(of person authorised to sign on behalf of the Tenderer)*

.....  
**DATE**



**FORM B15: Bills of Quantities (Refer C2.2)**

The BoQ pages in white (see C2.2), must be completed in full, completed in pen, corrections are to be crossed out and initialled, and each page initialled.

**FORM B16: Declaration Certificate for Local Production and Content for Designated Sectors (MBD 6.2)**

**DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS**

This Municipal Bidding Document (MBD) 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, 2011 and 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, 2011 (Regulation 9) makes provision for the promotion of local production and content.
- 1.2. Regulation 9.(1) prescribes that in the case of designated sectors, where in the award of bids local production and content is of critical importance, such bids must be advertised with the specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for bids 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 the South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as required in paragraph 4.1 below.

**The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial\\_development/ip.jsp](http://www.thedti.gov.za/industrial_development/ip.jsp) at no cost.**

1.6. A bid may be disqualified if –

- (a) this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation; and
- (b) the bidder fails to declare that the Local Content Declaration Templates (Annex C, D and E) have been audited and certified as correct.

**2. Definitions**

- 2.1. **“bid”** includes written price quotations, advertised competitive bids or proposals;
- 2.2. **“bid price”** price offered by the bidder, excluding value added tax (VAT);
- 2.3. **“contract”** means the agreement that results from the acceptance of a bid by an organ of state;
- 2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;
- 2.5. **“duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility(close corporation, partnership or individual).
- 2.6. **“imported content”** means that portion of the bid price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad (this includes labour and intellectual property costs), plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;
- 2.7. **“local content”** means that portion of the bid price which is not included in the imported content, provided that local manufacture does take place;
- 2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and
- 2.9. **“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.

**3. The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:**

Description of services, works or goods	Stipulated minimum threshold
Plaster and painting	100%
Electrical Installation	70%
Waterproofing	100%



4. Does any portion of the services, works or goods offered have any imported content?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

- 4.1 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 the SARB for the specific currency at 12:00 on the date of advertisement of the bid.

The relevant rates of exchange information is accessible on **www.reservebank.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.

5. Were the Local Content Declaration Templates (Annex C, D and E) audited and certified as correct?

(Tick applicable box)

YES	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

- 5.1. If yes, provide the following particulars:

- (a) Full name of auditor: .....
- (b) Practice number: .....
- (c) Telephone and cell number: .....
- (d) Email address: .....

(Documentary proof regarding the declaration will, when required, be submitted to the satisfaction of the Accounting Officer / Accounting Authority)

6. 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 Accounting Officer / Accounting Authority provide directives in this regard.

**LOCAL CONTENT DECLARATION**  
**(REFER TO ANNEX B OF SATS 1286:2011)**

**LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)**

**IN RESPECT OF BID NO.** .....

**ISSUED BY:** (Procurement Authority / Name of Municipality / Municipal Entity):  
.....

NB

1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.

2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on <http://www.thedti.gov.za/industrialdevelopment/ip.jsp>. 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.

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

- (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
  - (ii) the declaration templates have been audited and certified to be correct.

(c)The local content percentages (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 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 4.1 above and the information contained in Declaration D and E.**

(d) I accept that the Procurement Authority / Municipality /Municipal Entity 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 / Municipal / Municipal Entity imposing any or all of the remedies as provided for in Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

**SIGNATURE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**WITNESS No. 1** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**WITNESS No. 2** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**PART C1: AGREEMENT AND CONTRACT DATA**

**C1.1 FORM OF OFFER AND ACCEPTANCE**

**Offer**

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract In respect of the following works:

**JOBURG LIBRARY: REPAIR OF THE ROOF AND INSTALLATION OF FIRE PROTECTION – CONTRACT NO. : JDA\_JCL01\_2020**

The tenderer, identified in the Offer signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this Offer has accepted the Conditions of Tender.

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

**THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VALUE ADDED TAX IS:**

.....  
.....Rand (in words); R.....(in figures)

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document including the Schedule of Deviations (if any) to the Tenderer before the end of the period of validity stated in the Tender Data, or other period as agreed, whereupon the Tenderer becomes the party named as the Contractor in the conditions of contract identified in the Contract Data.

**TENDERER:**

**WITNESS:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Capacity

\_\_\_\_\_  
Capacity

\_\_\_\_\_  
Date

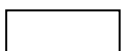
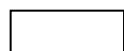
\_\_\_\_\_  
Date

Name and address of organisation:

\_\_\_\_\_

\_\_\_\_\_

JDA JBCC



**Acceptance**

By signing this part of this Form of Offer and Acceptance, the Employer identified below accepts the Tenderer's Offer. In consideration thereof, the Employer shall pay the Contractor the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the Tenderer's Offer shall form an agreement between the Employer and the Tenderer upon the terms and conditions contained in this agreement and in the Contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1	Agreements and Contract Data, (which includes this Agreement)
Part C2	Pricing Data
Part C3	Scope of Work
Part C4	Site Information

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts 1 to 4 above.

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

The Tenderer shall within two weeks of receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

**EMPLOYER:**

**WITNESS:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Capacity

\_\_\_\_\_  
Capacity

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

Name and address of organisation:

JOHANNESBURG DEVELOPMENT AGENCY (PTY) LTD  
NO. 3 PRESIDENT STREET (HELEN JOSEPH STREET)  
NEWTOWN  
JOHANNESBURG

JDA JBCC



**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

---

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

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

**TENDERER:**

**EMPLOYER:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Capacity

\_\_\_\_\_  
Capacity

Name and address of organisation:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name and address of organisation:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**WITNESS:**

**WITNESS:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date

**Confirmation of Receipt**

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the \_\_\_\_\_(day) of \_\_\_\_\_(month) \_\_\_\_\_(year)

at \_\_\_\_\_(place)

**CONTRACTOR:**

**WITNESS:**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Capacity

\_\_\_\_\_  
Capacity

\_\_\_\_\_  
Date

\_\_\_\_\_  
Date



**C1.2 CONTRACT DATA**

**PART 1: Data Provided by the Employer**

The Conditions of Contract are the *JBCC Series 2000 Principal Building Agreement (July 2007, Edition 5.0-reprint 1)*, published by the Joint Building Contracts Committee. Copies of these documents may be obtained from the Association of South African Quantity Surveyors (011-3154140), the Master Builders Association (011-205-9000) the South African Association of Consulting Engineers (011-4632022) or the South African Institute of Architects (011-4860684).

Each item of data given below is cross-referenced to the clause in the Conditions of Contract to which it mainly applies.

<b>Clause</b>	<b>Data</b>
<b>1.1</b> [1.2]	<p>The <b>Employer</b> is : <b>JOHANNESBURG DEVELOPMENT AGENCY</b></p> <p>Address (physical) : The Bus Factory, 3 Helen Joseph Street (formerly President Street) Newtown, Johannesburg</p> <p>Address (postal) : PO Box 61877, Marshalltown, 2107</p> <p>Telephone : 011 688 7800</p> <p>Facsimile: : 011 688 7863</p> <p>VAT registration number : 444019718</p>
<b>1.2</b> [5.1]	<p>The <b>Principal Agent</b> is : <b>MAP AFRICA CONSULTING ENGINEERS</b></p> <p>Address (postal) : 1<sup>st</sup> Floor, Aptus House, Riverworld Park, 53 Autumn Road, Rivonia, 2128</p> <p>Telephone : 011 234 3819</p> <p>Facsimile : 031 309 2929</p> <p>e-mail : sidesh@mapafrica.co.za</p>
<b>1.3</b> [5.2]	<p>The <b>Agent (1)</b> is : <b>Architect</b></p> <p>Name : <b>N/A</b></p> <p>Address (postal) :</p> <p>Telephone :</p> <p>Facsimile :</p> <p>e-mail :</p>
<b>1.4</b> [5.2]	<p>The <b>Agent (2)</b> is : <b>Quantity Surveyor</b></p> <p>Name : <b>MAP AFRICA CONSULTING ENGINEERS</b></p> <p>Address (postal) : 1<sup>st</sup> Floor, Aptus House, Riverworld Park, 53 Autumn Road, Rivonia, 2128</p> <p>Telephone : 078 458 3206</p> <p>Facsimile : 086 415 9566</p> <p>e-mail : mh@haqs.co.za</p>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

<b>Clause</b>	<b>Data</b>
<b>1.5</b> [5.2]	The <b>Agent (3)</b> is : Civil, Structural. Electrical and Mechanical Engineer Name : <b>MAP AFRICA CONSULTING ENGINEERS</b> Address (postal) : 1 <sup>st</sup> Floor, Aptus House, Riverworld Park, 53 Autumn Road, Rivonia, 2128 Telephone : 011 234 3819 Facsimile : 031 309 2929 e-mail : sidesh@mapafrica.co.za
<b>1.6</b> [5.2]	The <b>Agent (4)</b> is : Community Participation Consultant Name : <b>TO BE CONFIRMED</b> Address (postal) : Telephone : Facsimile : e-mail :
<b>1.7</b> [5.2]	The <b>Agent (5)</b> is : Occupational Health and Safety Consultants Name : <b>TO BE CONFIRMED</b> Address (postal) : Telephone : Facsimile : e-mail :
<b>1.10</b>	The <b>Principal Agent</b> named in 1.2 above is responsible for the preparation of the contract data schedule and must be contacted should the <b>tenderer</b> be uncertain of the information provided or to be provided. Failure to complete the <b>contract data</b> schedule in full may result in the tender being disqualified
<b>2.1</b> [1.7]	The <b>law</b> applicable to this <b>agreement</b> : <b>South Africa</b>
<b>2.1</b> [1.1]	The <b>works</b> comprise of :  The refurbishment and upgrading of the existing roof structure including waterproofing and fire installation and all associated electrical & mechanical works, etc.
<b>2.3</b> [1.1]	The <b>site</b> is the Johannesburg Library located on Albertina Sisulu Rd and Pixley Ka Isaka Seme Street.
<b>2.4</b> [15.2.1]	Possession of the <b>site</b> is to be confirmed.
<b>2.5</b> [15.3]	The period for the commencement of the <b>works</b> after the <b>contractor</b> takes possession of the site is 5 working days.
<b>2.6</b> [15.4, 28.0]	Completion of the <b>works</b> in sections is required: <b>NO</b>
<b>2.7</b> [3.3 31.16.2]	Waiver of the <b>contractor's</b> lien or right on continuing possession is required: <b>YES</b>

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

<b>Clause</b>	<b>Data</b>										
<b>2.8</b> [16.1]	Defined restrictions to the <b>site</b> area: The site includes: 1. Nothing to report										
<b>2.9</b> [16.4]	No Geotechnical Investigation of the <b>site</b> has been undertaken.										
<b>2.10</b> [16.6]	Existing premises will be occupied: <b>YES</b>										
<b>2.11</b> [16.7]	Provision of temporary services is required: <b>YES (As described below)</b>										
	<table border="1"> <thead> <tr> <th><b>Service</b></th> <th></th> </tr> </thead> <tbody> <tr> <td>Water</td> <td><b>A</b></td> </tr> <tr> <td>Electricity</td> <td><b>A</b></td> </tr> <tr> <td>Telecom</td> <td><b>A</b></td> </tr> <tr> <td>Ablutions</td> <td><b>A</b></td> </tr> </tbody> </table> <p><b>Note:</b> Option A = Contractor at his cost; Option B = Employer free of charge; Option C = Employer metered (contractor cost)</p>	<b>Service</b>		Water	<b>A</b>	Electricity	<b>A</b>	Telecom	<b>A</b>	Ablutions	<b>A</b>
<b>Service</b>											
Water	<b>A</b>										
Electricity	<b>A</b>										
Telecom	<b>A</b>										
Ablutions	<b>A</b>										
<b>2.12</b> [16.8]	Protection of existing trees and shrubs is required: <b>NO</b>										
<b>3.1</b> [10.1.1 12.6]	Contract works insurance is to be effected by the <b>Contractor</b>										
<b>3.2</b> [10.1.2 11.1-3 12.6]	Supplementary insurance: is to be effected by the <b>Contractor</b>										
<b>3.3</b> [10.1.3 12.6]	Public liability insurance is to be effected by the <b>Contractor</b> for the sum of R5 million.										
<b>3.4</b> [11.1.1]	Support insurance: N/A										
<b>3.5</b> [11.1.2-3, 12.1]	Special insurance is to be effected by: The <b>Contractor</b>										
<b>4.0</b> [24.3.1 30.1-3]	<p><b>For the works</b> as a whole: The date for <b>practical completion</b> is <b>06 months after possession of the site</b></p> <p>The <b>penalty per calendar day</b> is <b>R2000.00</b></p>										
<b>5.1</b> [3.7]	<p>Construction documents copies to be supplied to the <b>contractor</b> free of charge:</p> <p><b>Three copies of the drawings will be issued to the appointed contractor</b></p>										

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

Clause	Data
<b>5.2</b> <i>[3.9]</i>	The <b>priced document</b> may be used as a specification of materials and goods and work methods:  <p style="text-align: right;"><b>No</b></p>
<b>5.3</b> <i>[3.10]</i>	The <b>contractor</b> shall provide a schedule of rates:  <p style="text-align: right;"><b>No</b> (The completed Bills of Quantities must be supplied)</p>
<b>5.4</b> <i>[3.11]</i>	Changes made to <b>JBCC</b> standard document:  <p style="text-align: right;"><b>Yes</b> - refer to the additions, deletions and alterations to the JBCC Principal Building Agreement as listed under Clause <b>6.0</b> below.</p>
<b>5.5</b> <i>[15.1.1]</i>	On acceptance of the tender the <b>priced document</b> is to be submitted within:  <p style="text-align: right;">Not Applicable - Fully priced BOQ to be submitted with tender</p>
<b>5.6</b> <i>[22.2]</i>	Work to be undertaken by <b>direct contractors</b> :  <p style="text-align: right;">None anticipated at present but the Employer has the right to employ direct contractors at a later date.</p>
<b>5.7</b> <i>[24.9]</i>	On achievement of practical completion, the <b>contractor</b> is to hand over:  <p style="text-align: right;">All required manuals etc. related to the works which must include but not limited to: Electrical, Electronic, HVAC, Plumbing &amp; Drainage, Fire Fighting, Waterproofing, etc.</p>
<b>5.8</b> <i>[31.1]</i>	The <b>interim payment</b> certificate:  <p style="text-align: right;"><b>25<sup>th</sup></b> of every month</p>
<i>[31.5.3 32.13]</i>	The <b>contract value</b> shall <b>not</b> be adjusted according to <b>CPAP</b> and shall be a fixed priced contract
<b>6.0</b>	<p><b>CHANGES MADE TO THE STANDARD JBCC DOCUMENT ARE:</b></p>
	<p>The JBCC Principal Building Agreement makes several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the JBCC Principal Building Agreement.</p> <p>Each item of data given below is cross-referenced to the clause in the JBCC Principal Building Agreement to which it mainly applies.</p>

Clause	Data
	<p><b>The additions, deletions and alterations to the JBCC Principal Agreement are:</b></p>
<p>1.0</p>	<p><b>DEFINITIONS AND INTERPRETATION</b></p> <p>Clause 1.1 is deemed to be amended by the addition and amendments of the following:</p> <p>Change the Definition of "<b>AGREEMENT</b>" to read as follows:  <b>AGREEMENT</b> means the agreement arising from the signing of the Form of Offer and Acceptance by the <b>parties</b>.</p> <p>Change the Definition of "<b>CONSTRUCTION PERIOD</b>" to read as follows:  The period commencing on the date of <b>site</b> hand over and ending on the date of <b>practical completion</b>.</p> <p>Change the Definition of "<b>CONTRACT DOCUMENTS</b>" to read as follows:  The <b>agreement</b> and all documents referenced therein. The <b>contract documents</b> shall be taken to be mutually explanatory of one another but in the event of ambiguity, discrepancy, divergence or inconsistency in or between them, the <b>JBCC</b> Principal Building Agreement as amended in the <b>contract data</b> shall prevail over all other <b>contract documents</b>.</p> <p>Change the Definition of "<b>CONTRACT SUM</b>" to read as follows:  The total of prices in the Form of Offer and Acceptance.</p> <p><b>EXCEPTIONALLY INCLEMENT WEATHER</b> means weather which is not only extreme or severe but exceeding that which, on the evidence of the past ten years, could reasonably be expected.</p>
<p>3.0</p>	<p><b>DOCUMENTS</b></p> <p>Clause 3.1 is deleted.</p> <p>Clause 3.2.1 is deleted and replaced with the following:</p> <p>3.2.1 "A <b>construction guarantee</b> in terms of sub-clause 14.3 as elected in the <b>contract data</b>"</p> <p>Clause 3.3 is deleted and replaced with the following:</p> <p>3.3 The <b>contractor</b> hereby, waives his lien or right of continuing possession of the <b>works</b>.</p> <p>Clause 3.5 is amended by deleting the following:</p> <p style="padding-left: 40px;">"Formal signatures are not required to render this <b>agreement</b> binding"</p>
<p>4.0</p>	<p><b>DESIGN RESPONSIBILITY</b></p> <p>Clause 4.0 is amended by the addition of the following clauses to the end thereof:</p> <p>4.4 Notwithstanding the provisions of clause 4.2, the <b>contractor</b> is to ensure that</p>

Clause	Data
	<p><b>nominated, selected or domestic subcontractors</b> shall simultaneously with the signing of the relevant nominated, selected or domestic sub-contract sign and deliver to the <b>employer</b> a design materials and workmanship warranty and undertaking in favour of the <b>employer</b>.</p> <p>4.5 Any subcontractor whose subcontract involves design work will be required to provide to the <b>employer</b> evidence of "professional indemnity" insurance for such design work.</p> <p>If the <b>contractor</b> fails to obtain the necessary design warranties and / or indemnities from the subcontractors, the design responsibility shall be deemed to devolve upon the <b>contractor</b>"</p>
<p>5.0</p>	<p><b>EMPLOYER'S AGENTS</b></p> <p>Clause 5.4 is deleted and replaced with the following:</p> <p>5.4 "Should the <b>principal agent</b> or any <b>agent</b> be unable to act or cease to be an agent, the <b>employer</b> shall inform the <b>contractor</b> of the new <b>principal agent</b> or <b>agent</b> appointed.</p>
<p>6.0</p>	<p><b>CONTRACTOR'S SITE REPRESENTATIVE</b></p> <p>Clause 6.0 is amended by the addition of the following clauses to the end thereof:</p> <p>6.3 The <b>contractor</b> shall submit a full organogram of the site personnel with the names of the management team which will be allocated to the project for the construction of the <b>works</b>.</p> <p>6.4 Where the key personnel are no longer accessible to undertake the necessary work after the award of the tender, the <b>contractor</b> shall within a period of 5 working days replace the key personnel with a person with equivalent competencies and subject to approval by the <b>principal agent</b>.</p> <p>6.5 The <b>contractor's</b> representative shall not be a person against whom the <b>principal agent</b> shall make a reasonable objection.</p>
	<p>6.6 On instruction from the <b>principal agent</b> the <b>contractor's</b> representative shall be replaced by a person approved by the <b>principal agent</b>.</p> <p>6.7 The <b>contractor</b> shall not make any changes to the management and site personnel relative to the project without prior approval of the <b>principal agent</b>.</p>

Clause	Data
7.0	<p><b>COMPLIANCE WITH LAWS AND REGULATIONS</b></p> <p>Clause 7.0 is amended by the addition of the following clause to the end thereof:</p> <p>7.2 The <b>employer</b> reserves the right to pay (i.e. whether direct or through the <b>contractor</b> ) for all or any permanent connections to local or other authority services for which provisional amounts have been included within these <b>bills of quantities</b> or within any <b>selected sub-contract</b> documents. In the event of the <b>employer</b> paying for these charges, the <b>contractor</b> will not be entitled to the applicable and agreed mark-up in terms of clause 32.4. All such provisional amounts included in the contract sum will be omitted.</p>
9.0	<p><b>INDEMNITIES</b></p> <p>Clause 9.1 is amended by the addition of the following clause to the end thereof:</p> <p>9.1.4 The <b>contractor</b> indemnifies and holds harmless the <b>employer</b> against all liability, losses, claims, damages, penalties, actions, proceedings or judgments (collectively referred to as “Losses”) arising from any infringement of letters, patent design, trademark, name, copyright or other protected rights in respect of any machine, plant, work, materials, thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the <b>contractor</b>, but such indemnity shall not cover any use of the equipment of part thereof otherwise than in accordance with the provisions of the specification. All payments and royalties payable in one sum or by instalments or otherwise shall be included by the <b>contractor</b> in the price and shall be paid by him to those to whom they may be payable. The <b>contractor</b> shall reimburse the <b>employer</b> for all legal and other costs and expenses, including without limitation attorney’s fees on attorney-client scale incurred by the <b>employer</b> in connection with investigation, defending or settling any Losses in connection with pending or threatening litigation in which the <b>employer</b> is a party.</p> <p>Clause 9.2.7 is deleted.</p>
12.0	<p><b>EFFECTING INSURANCES</b></p> <p>Delete Clause 12.6</p>
14.0	<p><b>SECURITY</b></p> <p>Clause 14.1 is deleted and replaced with the following clause:</p> <p>14.1 The <b>contractor</b> shall provide the <b>security</b> as stated in the <b>contract data</b>. Such security shall be provided to the <b>employer</b> within twenty-one (21) <b>calendar days</b> of acceptance of the <b>contractor’s</b> tender.</p> <p>Clause 14.3 is deleted.</p>

Clause	Data
	<p>Clause 14.4 is deleted and replaced with the following clauses:</p> <p>14.4 The <b>employer</b> has selected the <b>security</b> in terms of clause 14.0, which is a fixed <b>construction guarantee</b> and payment reduction. This guarantee is to be issued by the <b>contractor</b>:</p> <p>14.4.1 The <b>contractor</b> shall furnish the <b>employer</b> with a fixed <b>construction guarantee</b> equal in value to ten per cent (10%) of the <b>contract sum</b> within fourteen (14) <b>calendar days</b> from the offer of appointment <b>date</b></p> <p>14.4.2 The fixed <b>construction guarantee</b> shall come into force, be administered and expire in terms of the construction guarantee form included under Part C1 Agreement and Contract Data, Clause C1.3 Construction Guarantee.</p> <p>14.4.3 The <b>employer</b> shall return the fixed <b>construction guarantee</b> to the <b>contractor</b> within fourteen (14) <b>calendar days</b> of its expiring.</p> <p>14.4.4 The payment reduction to the value certified in a <b>payment certificate</b> shall be made [31.8, 34.8].</p> <p>14.4.5 Where the <b>employer</b> has a right of recovery against the <b>contractor</b> [33.0], the <b>employer</b> may issue a written demand in terms of the fixed <b>construction guarantee</b> or may recover from the payment reduction [33.4] or both.</p> <p>Clause 14.5 is deleted.</p> <p>Clause 14.6 is deleted and replaced with the following clause:</p> <p>14.6 Payment made by the guarantor to the <b>employer</b> in terms of a <b>construction guarantee</b> shall not prejudice the rights of the <b>employer</b> or <b>contractor</b>.</p>
<p>15.0</p>	<p><b>PREPARATION FOR AND EXECUTION OF THE WORKS</b></p> <p>Clause 15.1 is amended by the addition of the following to the end thereof:</p> <p>15.1.3 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), within fourteen (14) <b>calendar days</b> of date of acceptance of the tender.</p> <p>Clause 15.2 is amended by deleting 15.2.1 and replacing with the following clause:</p> <p>15.2.1 Give the <b>contractor</b> possession of the <b>site</b> within ten (10) <b>working days</b> of the <b>contractor</b> complying with the terms of 15.1.</p> <p>Clause 15.2.2 is deleted.</p> <p>Clause 15.2.3 is deleted.</p>



Clause	Data
	<p>Clause 15.5 is amended by the addition of the following clauses to the end thereof:</p> <p>15.5.1 The <b>contractor</b> shall furnish samples of materials and specimens of finishes as may be called for by the <b>principal agent</b> for his approval.</p> <p>15.5.2 The <b>principal agent</b> may instruct the <b>contractor</b> to furnish samples of workmanship for his approval. Where the <b>principal agent</b> requires an assembly of various elements of the building or installation which is not incorporated in the <b>works</b>, the <b>contractor</b> shall arrange such an assembly at the <b>employer's</b> expense and the <b>contract value</b> shall be adjusted accordingly.</p>
<p>16.0</p>	<p><b>SITE AND ACCESS</b></p> <p>Clause 16.7 is amended by the addition of the following:</p> <p style="padding-left: 40px;">The <b>contractor</b> shall be deemed to have familiarised himself with all known services, servitudes, etc. Any queries relating to information regarding all known existing services, servitudes, etc. should be directed to the <b>project manager</b>.</p> <p style="padding-left: 40px;">The <b>contractor</b> shall be held responsible for damage to existing services caused or arising out of the <b>contractor's</b> operations. Wherever a service is damaged it shall be replaced at the expense of the <b>contractor</b>.</p>
<p>18.0</p>	<p><b>SETTING OUT OF THE WORKS</b></p> <p>Clause 18.1 is amended by replacing "<b>employer</b>" in the first sentence with "<b>contractor</b>".</p> <p>Cause 18.0 is amended by the addition of the following clauses at the end thereof</p> <p>18.5 The <b>contractor</b> shall continuously perform tolerance control checks throughout the contract period and report on these at regular intervals to the <b>principal agent</b> in a format approved by the <b>principal agent</b>.</p> <p style="padding-left: 40px;">Should the <b>contractor</b> fail to comply with this requirement to the satisfaction of the <b>principal agent</b>, progressively as the structure is constructed, the <b>employer</b> shall be entitled to commission a registered land surveyor to do so on the <b>contractor's</b> behalf and at the <b>contractor's</b> expense.</p> <p>18.6 The <b>contractor</b> shall provide general attendance and all reasonable assistance to the abovementioned or any other land surveyor who may be appointed by the <b>employer</b>.</p>
<p>19.0</p>	<p><b>TEMPORARY WORKS AND PLANT</b></p> <p>Clause 19.0 is amended by the addition of the following clauses:</p> <p>19.3 ...including but not limited to fencing off the site</p>

Clause	Data
	<p>19.4 The <b>contractor</b> shall provide air conditioned office accommodation for meetings suitable for 20 persons. The office accommodation is to be kept clean and fit for use at all times by the <b>contractor</b>.</p> <p>In addition the <b>contractor</b> shall provide air conditioned office accommodation for the resident engineer. The resident engineer's office will be fitted out with a desk, chair, filing cabinet, waste paper bin and internet connectivity. The resident engineer's office will be kept clean and fit for use at all times.</p> <p>19.5 The <b>contractor</b> shall provide 1No main notice board of an approved design with the title of the project and the names of the <b>employer</b>, the <b>principal agent</b>, the <b>agents</b> and the <b>contractor</b> sign written thereon. The <b>principal agent</b> shall instruct the <b>contractor</b> where the boards are to be erected".</p>
<p>24.0</p>	<p><b>PRACTICAL COMPLETION</b></p> <p>Clause 24.0 is amended by replacing the word list with lists.</p> <p>Clause 24.0 is amended by the addition of the following clauses to the end thereof:</p> <p>24.11 Without derogating from the generality of the requirements for <b>practical completion</b> the following specific requirements shall apply:</p> <p>24.11.1 <b>Defects</b> occurring after the issue of the <b>practical completion</b> list requiring remedial work that will in the opinion of the <b>principal agent</b> cause disruption will cause the issue of the certificate of <b>practical completion</b> to be withheld until such <b>defects</b> have been rectified to the satisfaction of the <b>principal agent</b>.</p> <p>24.11.2 The following certificates of compliance shall be required (excluding others that may be required by the local / national authority) from the contractor to achieve <b>practical completion</b>:</p> <ul style="list-style-type: none"> <li>a) A certificate from the contractor that all aspects of the construction regulations of 2014 have been complied with.</li> <li>b) A certificate from the <b>contractor</b> that the National Building Regulations have been complied with</li> <li>c) A certificate of compliance with respect to plumbing and drainage</li> <li>d) An electrical certificate of compliance</li> <li>e) A certificate of compliance with respect to all glazing</li> <li>f) A certificate of compliance and fire clearance certificate from the contractor and fire chief respectively.</li> <li>g) A painting guarantee.</li> <li>h) A mechanical certificate of compliance.</li> <li>i) A structural certificate of compliance.</li> <li>j) A tiling certificate of compliance.</li> <li>k) A waterproofing certificate of compliance.</li> <li>l) Any other applicable guarantees.</li> </ul> <p>24.11.3 A complete set of maintenance and operating manuals together with all workmanship and material warranties and guarantees are to be compiled and issued to the <b>principal agent</b> prior to <b>practical completion</b> being</p>

Clause	Data
	<p>granted. In addition to the abovementioned documentation a formal "on site" handover will be required to be conducted with every discipline in the presence of the <b>contractor</b> as well as the applicable services subcontractor.</p> <p>24.13 After the issue of the <b>certificate of practical completion</b>, entry upon the <b>works</b> to make good <b>defects</b> shall be at such reasonable times as shall be agreed by the <b>principal agent</b>.</p>
<p>25.0</p>	<p><b>WORKS COMPLETION</b></p> <p>Clause 25.0 is amended by changing the word list to lists.</p> <p>Clause 25.0 is amended by adding the following clauses to the end thereof:</p> <p>25.6 The <b>contractor</b> shall generally attend to <b>defects</b> during the <b>defects</b> liability period on a progressive basis and will not be permitted to wait until the end of the patent <b>defects</b> liability period or until the amount of <b>defects</b> accumulates in order to attend to a comprehensive list of <b>defects</b>.</p> <p>25.7 Should the <b>defect</b> be deemed by the <b>principal agent</b> to be urgent he shall notify the <b>contractor</b> in writing to attend to such <b>defect</b>. The <b>contractor</b> shall immediately on receipt of this notice give the <b>principal agent</b> a definite time and date on which he will start the rectification of the said <b>defect</b>.</p> <p>Should the time and date be unacceptable in the opinion of the <b>principal agent</b> or should the <b>contractor</b> not start at this agreed time and date and complete the rectification in a diligent manner, the <b>employer</b> reserves the right to complete the outstanding works and deduct the cost of such work as certified by the <b>principal agent</b> from amounts owing to the <b>contractor</b>.</p>
<p>29.0</p>	<p><b>REVISION OF DATE OF PRACTICAL COMPLETION</b></p> <p>Clause 29.1.1 shall be deleted and replaced with the following:</p> <p>29.1.1 Exceptionally inclement weather</p> <p>"Exceptionally inclement weather" shall be defined as weather conditions in excess of the monthly average recorded for the past 10 (ten) years by the nearest commonly recognised weather bureau in the region of the project.</p> <p>The <b>contractor</b> shall be deemed to have allowed in his <b>programme</b> for the <b>works</b> and opposite this item or in his rates, for the cost of all delays as a result of weather conditions which are average.</p> <p>A delay caused by exceptionally inclement weather conditions will be regarded as a delay only if, in the opinion of the principal agent, all progress on an item or items of work on the critical path of the working programme of the contractor has been brought to a halt. Delays on working days only (based on a five-day working week) will be taken into account for the extension of time, but the contractor shall make provision in his programme of work for an expected delay of "n" working</p>

Clause	Data
	<p>days caused by normal rainy weather, for which he will not receive any extension of time, where “n” equals 30 days. Extension of time during working days will be granted to the degree to which actual delays, as defined above, exceed the number of "n" workings days.</p> <p>Clause 29.0 is amended by the addition of the following clauses to the end thereof:</p> <p>29.9 Revision to the date for <b>practical completion</b> shall only be considered when work on the critical path of the agreed <b>programme</b> for the <b>works</b> is delayed.</p>
<p>31.0</p>	<p><b>INTERIM PAYMENT</b></p> <p>Clause 31.1 is deleted and replaced by the following:</p> <p>31.1 The <b>principal agent</b> shall issue an interim <b>payment certificate</b> every month until the issue of the final <b>payment certificate</b>. The <b>contractor</b> is to issue his payment requisition to the quantity surveyor by the 15<sup>th</sup> of each month in preparation for the quantity surveyor to issue a valuation to the <b>principal agent</b> by the 23<sup>rd</sup> of each month, failure to submit a claim will entitle the quantity surveyor to submit a reasonable value for the <b>works</b> done. The <b>payment certificate</b> shall be issued on the date stated [31.3] and may be for a nil or negative amount.</p> <p>Clause 31.6 is amended by the deletion of the first sentence and replaced with the following:</p> <p style="padding-left: 40px;">Materials and goods shall not, as a general rule, be included in the value certified. Should the <b>principal agent</b> agree, such materials and goods shall be included in the value certified only where, to the satisfaction of the <b>principal agent</b>, the <b>contractor</b> has issued a bank guarantee to the <b>employer</b> in a format to be approved by the <b>principal agent</b>.</p> <p>Clause 31.8 is amended as follows:</p> <p>Clause 31.8.1 is deleted and replaced with the following:</p> <p>31.8.1 Ninety per cent (90%) of such value in interim <b>payment certificates</b> issued up to the date of <b>practical completion</b>.</p> <p>Clause 31.8.2 is deleted and replaced with the following:</p> <p>31.8.2 Ninety-five per cent (95%) of such value in interim <b>payment certificates</b> issued on to the date of <b>practical completion</b> and up to but excluding the date of <b>final completion</b></p> <p>Clause 31.8.3 is deleted</p> <p>Clause 31.9 is deleted and replaced with the following:</p> <p>31.9 The <b>employer</b> shall pay to the <b>contractor</b> the amount certified in an <b>interim payment certificate</b> within thirty (30) <b>calendar days</b> of the date of receipt of the <b>contractor’s tax invoice</b> for the amount certified.</p>

Clause	Data
<p>34.0</p>	<p><b>FINAL ACCOUNT AND FINAL PAYMENT</b></p> <p>Clause 34.3 is deleted and replaced with the following clause:</p> <p>34.3 The <b>contractor</b> shall accept or object to the <b>final account</b> within forty-five (45) <b>calendar days</b> of receipt thereof. On acceptance, or should the <b>contractor</b> not object with reasons to the <b>final account</b> within such period, the <b>principal agent</b> shall issue the final <b>payment certificate</b> [34.5].</p> <p>Clause 34.10 is deleted and replaced with the following clause:</p> <p>34.10 The <b>employer</b> shall pay the <b>contractor</b> the amount certified in the final <b>payment certificate</b> within thirty (30) <b>calendar days</b> of the date of issue of the final <b>payment certificate</b> subject to the <b>contractor</b> giving the <b>employer</b> a tax invoice for the amount due.</p>
<p>36.0</p>	<p><b>TERMINATION BY THE EMPLOYER – CONTRACTOR’S DEFAULT</b></p> <p>Clause 36.1 is amended by the addition of the following clauses to the end thereof:</p> <p>36.1.3 The <b>contractor’s</b> refusal or neglect to comply strictly with any of the conditions of contract.</p> <p>36.1.4 The <b>contractor’s</b> estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force with the Republic of South Africa.</p> <p>36.1.5 The <b>contractor</b>, in the judgment of the <b>employer</b>, has engaged in <b>corrupt</b> or <b>fraudulent practices</b> in competing for or in executing the contract.</p> <p>36.1.6 The <b>contractor</b> fails to perform in terms of the <b>agreement</b> or the <b>employer</b> on reasonable ground believe that the <b>contractor</b> may not be able to comply with his obligation.</p>
<p>40.0</p>	<p><b>SETTLEMENT OF DISPUTES</b></p> <p>Clause 40.2.1 and 40.3 are deleted.</p>
<p>43.0</p>	<p><b>NEW CLAUSE – SMALL CONTRATOR AND TARGETED ENTERPRISE DEVELOPMENT</b></p> <p>New Clause 43.0 is added, as follows:</p> <p>The penalty for failing to achieve the monetary value of the target set by the Employer for contract participation by Targeted Enterprises and local SMME contractors in terms</p>

Clause	Data
	<p>of Small Contractor Development of section C3.3 Particular Specifications in Part C3: Scope of Works, is as follows:</p> <p>For SMME:</p> <ul style="list-style-type: none"> <li>• If the Contractor fails to ensure and prove that 40% of the 30% SMME Target Spend is met at the time that 50% of the total contract period is reached, the Employer may, at the Employer's discretion, step in to facilitate the Target being met for which such costs will be recovered from the Contractor through the Recovery Statement</li> <li>• If the Contractor fails to ensure and prove that 60% of the 30% SMME Target Spend is met at the time that 75% of the total contract period is reached, the Employer shall, at the Employer's discretion, apply a Penalty of 50% of the shortfall (shortfall = 75% of 30% Target minus Actual Proven Amount Spent) on the 30% SMME Target Spend Value</li> <li>• If the Contractor fails to ensure and prove that 100% of the 30% SMME Target Spend is met at the time that 95% of the total contract period is reached, the Employer shall, at the Employer's discretion, apply a Penalty of 50% of the shortfall (shortfall = 75% of 30% Target minus Actual Proven Amount Spent) on the 30% SMME Target Spend Value</li> <li>• Notwithstanding anything to the contrary herein, the Contractor will not be relieved of the Contractor's obligation to pay all amounts due to an SMME(s), on a fortnightly and/or monthly basis, regardless of when the Contractor receives payments from the Employer. Should the Contractor fail to fulfil this obligation the Employer shall, at the Employer's discretion, apply a penalty of 10% of the amount(s) due to the SMME(s) on a monthly basis and pay a portion of such amounts (for which such portion shall be determined at the Employer's discretion) directly to the affected SMME(s)</li> </ul> <p>Notwithstanding the Contractor's obligation to meet the respective Target Spends, the Contractor shall provide a status report on the progress of meeting this target in the requisite Progress Reports.</p> <p>Furthermore, it is a condition of this tender that the successful contractor is required to take full responsibility of managing all appointed Sub-contractors and the quality of their works.</p>
<p>44.0</p>	<p><b>NEW CLAUSE – PROGRESS REPORTS AND PROGRAMME UPDATES</b></p> <p>New Clause 44.0 is added, as follows:</p> <p>The Contractor is to generate progress reports and programme updates in the format to be provided by the Employer failing which Penalties will be applied as follows:</p> <ul style="list-style-type: none"> <li>• EPWP Targets &amp; Reporting - The Contractor shall ensure that EPWP Targets and Reporting requirements are met at all times. Reporting shall be in the format to be provided by the Employer and at intervals prescribed by the Employer. The penalty for failure, on the part of the Contractor, to submit any EPWP Reports (including all requisite back-up documentation) on the 20th day of each month (or the previous working day should the 20th fall on a non-working day) until the</li> </ul>

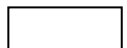
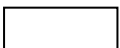
Clause	Data
	<p>issue of the Certificate of Practical Completion shall be subject to a penalty of R1000.00 per report per calendar day, until the report is submitted and shall not be reversible. The Contractor shall report on the progress of all aspects relating to the Contract as requested in the report format to be provided by the Employer.</p> <ul style="list-style-type: none"> <li>• Monthly Progress Reporting: The penalty for failure, on the part of the Contractor, to submit any monthly progress report on the 20th day of each month (or the previous working day should the 20th fall on a non-working day) until the issue of the Certificate of Practical Completion shall be subject to a penalty of R1000.00 per report per calendar day, until the report is submitted and shall not be reversible. The Contractor shall report on the progress of all aspects relating to the Contract as requested in the report format to be provided by the Employer. Progress reports shall further include a report on SMME's and Targeted Enterprise for the JDA that includes the following: <ul style="list-style-type: none"> <li>○ SMME resources on the site, i.e. supervisors, labour, plant tools and equipment</li> <li>○ SMME progress of works on site</li> <li>○ SMME Sub-contractor quality control on site</li> <li>○ SMME expenditure on the Project versus target expenditure</li> <li>○ Copies of minutes of the SMME Sub-contractor Contractor progress meetings</li> <li>○ SMME training on the Project</li> <li>○ Concerns and improvements to be made</li> </ul> </li> <li>• Interim Progress Reporting: The penalty for failure, on the part of the Contractor, to submit any interim progress report on the 10th day of each month (or the previous working day should the 10th fall on a non-working day) until the issue of the Certificate of Practical Completion shall be subject to a penalty of R500.00 per report per calendar day, until the report is submitted and shall not be reversible. The Contractor shall report on the progress of all aspects relating to the Contract as requested in the report format to be provided by the Employer. Progress reports shall further include a report on SMME's for the JDA that includes the following: <ul style="list-style-type: none"> <li>○ SMME resources on the site, i.e. supervisors, labour, plant tools and equipment</li> <li>○ SMME progress of works on site</li> <li>○ SMME quality control on site</li> <li>○ SMME expenditure on the Project versus target expenditure</li> <li>○ Copies of minutes of the SMME Sub-contractor and Contractor progress meetings</li> <li>○ SMME training on the Project Concerns and improvements to be made</li> </ul> </li> </ul>
	<p>Refer to the Preliminaries Section in the Bill of Quantities for any additional amendments to the Standard JBCC Document.</p>

**PART 2: Data Provided by the Contractor**

The Contractor is advised to read the *JBCC Series 2000 Principal Building Agreement (July 2007, Edition 5.0-reprint)* and section 3.0 *Payment and adjustment of preliminaries* contained in the associated *Contract Data CE*, published by the Joint Building Contracts Committee, in order to understand the implications of this Data which is required to be completed. Copies of these documents may be obtained from the Association of South African Quantity Surveyors (011-3154140), the Master Builders Association (011-205-9000) the South African Association of Consulting Engineers (011-4632022) or the South African Institute of Architects (011-4860684)

Each item of data given below is cross-referenced to the clause in the Conditions of Contract to which it mainly applies.

Clause	Data with reference to the JBCC Series 2000 Principal Building Agreement	
1.0	The <b>Contractor</b> is.  Name : .....  The address of the <b>Contractor</b> is: Address (physical): ..... ..... Address (postal) : .....  Telephone : ..... Facsimile: .....  E-mail : .....  TAX / VAT Registration No : .....	
2.1	The security provisions selected are:	
[14.3]	Variable construction guarantee	NO
[14.4]	Fixed Construction Guarantee and Payment Reduction	YES
[14.5]	Advanced Payment is required	Not offered
3.2.4	Contract Value shall be adjusted according to the CPAP: Not applicable  This tender is for a fixed rate contract.	
3.2.5 [3.1.1-2]	Payment of preliminaries: Option A	
3.2.6 [3.2.1-2]	Adjustment of preliminaries: Option A	





Signature

Date

**C1.3 CONSTRUCTION GUARANTEE**

**GUARANTOR DETAILS AND DEFINITIONS**

Guarantor means \_\_\_\_\_  
Physical address \_\_\_\_\_  
Guarantor's signatory 1 \_\_\_\_\_ Capacity \_\_\_\_\_  
Guarantor's signatory 2 \_\_\_\_\_ Capacity \_\_\_\_\_  
Employer means \_\_\_\_\_  
Contractor means \_\_\_\_\_  
Principal Agent means \_\_\_\_\_  
Works means \_\_\_\_\_  
Site means \_\_\_\_\_  
Agreement means The JBCC Series 2000 Principal Building Agreement  
Contract Sum means The accepted amount inclusive of tax of   
Amount in words \_\_\_\_\_  
Guaranteed Sum means The maximum aggregate amount of   
Amount in words \_\_\_\_\_  
Construction Guarantee (Insert Variable or Fixed)  (Insert expiry date)

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**AGREEMENT DETAILS**

Sections: Total sections (No or n/a)  Last section (No / Identification or n/a)

Principal Agent issues: Interim payment certificates, Final payment certificate, Practical completion certificate/s and Final completion certificate/s

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**1. 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% 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 5% 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 only practical completion certificate or last practical completion certificate where there are sections

Amounts 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 applicable practical completion certificate and up to and including the date of the only final completion certificate or last final completion certificate where there are sections

Amounts 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 applicable final completion certificate 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

Amounts in words: \_\_\_\_\_

1.2 For avoidance of doubt the Guarantor's liability limits set out in 1.1.1 to 1.1.4 shall apply in respect of any claim received by the Guarantor during the period in question

**2. 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**

Maximum Guaranteed Sum (not exceeding 10.0% of the contract sum) in the amount of:

**PERIOD OF LIABILITY**

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

Amounts in words: \_\_\_\_\_

3. 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. 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 in an interim or final payment certificate 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
  - 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 said payment certificate which entitles the Employer to receive payment in terms of the Agreement of the sum certified in 4.0
5. 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. 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. 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. 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. 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. The Guarantor chooses the physical address as stated above for all purposes in connection herewith

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

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- 11. 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. 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
- 13. Where this Construction Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court

Signed at \_\_\_\_\_

Date \_\_\_\_\_

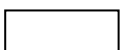
Guarantor's  
Signatory 1 \_\_\_\_\_

Guarantor's  
Signatory 2 \_\_\_\_\_

Witness \_\_\_\_\_

Witness \_\_\_\_\_

Guarantor's seal or stamp



**C1.4 OCCUPATIONAL HEALTH AND SAFETY AGREEMENT**

THIS AGREEMENT between Johannesburg Development Agency (JDA) (hereinafter called “the Employer”) on the one part, herein represented by: .....in his/her capacity as..... and..... (hereinafter called “the Contractor”) of the other part herein represented by .....in his/her capacity as .....

**WHEREAS** the Employer is desirous that certain works be constructed, being contract **JOBURG LIBRARY: ROOF REPAIRS AND FIRE PROTECTION INSTALLATION – CONTRACT NO.: JDA\_JCL01\_2020** and has accepted a tender by the Contractor for the construction, completion and maintenance of such works and whereas the Employer and the Contractor have agreed to certain arrangements and procedures to be followed in order to ensure compliance by the Contractor with the provisions of the Occupational Health and Safety Act 1993 (Act 85 of 1993).

**NOW THEREFORE THIS AGREEMENT WITNESSED AS FOLLOWS:**

1. The Contractor shall execute the work in accordance with the contract documents pertaining to this contract.
2. This Agreement shall hold good for the duration of construction, commencing from the handover of the site up to the end of the defects liability period.
3. Should the contract be terminated for any reason; this agreement shall lapse upon the date of termination.
4. The Contractor declares himself to be conversant with the following:
  - (a) All the requirements, regulations and standards of the Occupational Health and Safety Act (Act 85 of 1993), hereinafter referred to as “the Act”, together with its amendments thereto.
  - (b) All the requirements of the Construction Regulations hereinafter referred to as the “Regulations”, together with any amendments thereto.
  - (c) The Health and Safety Specification of the Employer as pertaining to the Contractor and to all his subcontractors.
5. In addition to the requirements of the contract, the Contractor agrees to execute all the works forming part of this contract and to operate and utilise all machinery, plant and equipment in accordance with the Act and the Regulations.
6. The Contractor is responsible for the compliance with the Act and the Regulations by all his subcontractors, whether or not selected or nominated and/or approved by the Employer.
7. The Contractor warrants that all his and his subcontractors’ workmen are covered in terms of the Compensation for Occupational Injuries and Diseases Act 1993 which cover shall remain in force whilst any such workmen are present on site. A letter of good standing from the Compensation Commissioner to this effect must be produced to the Employer upon signature of the agreement.

8. The Contractor undertakes to ensure that he and/or his subcontractors and/or their respective employees will at all times comply with the following conditions:

- (a) The Contractor undertakes to comply with all provisions of the Act and its Regulations.
- (b) The Contractor will be obliged to report to the Employer on a regular basis regarding compliance by the Contractor with the Act and its Regulations.
- (c) All incidents referred to in the Occupational Health and Safety Act shall be reported by the Contractor to the Department of Labour as well as to the Employer. The Employer will further be provided with copies of all written documentation relating to any incident.
- (d) The Employer hereby records an interest in the issue of any formal enquiry conducted in terms of Section 32 of the Occupational Health and Safety Act into any incident involving the Contractor and/or his employees and/or his subcontractors.

In witness thereof the parties hereto have set their signatures hereon in the presence of the subscribing witnesses:

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**for and on behalf of the Contractor who warrants to be duly authorised to do so**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

As witnesses:

1. \_\_\_\_\_

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**for and on behalf of the Employer who warrants to be duly authorised to do so**

**Name:** \_\_\_\_\_

**Designation:** \_\_\_\_\_

As witnesses:

1. \_\_\_\_\_

**C1.5 AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT NO. 85 OF 1993**

THIS AGREEMENT is made between the Johannesburg Development Agency represented by the .....(hereinafter called the EMPLOYER of the one part, herein represented by: ..... in his/her capacity as: ..... and: ..... (hereinafter called the CONTRACTOR) of the other part, herein represented by..... in his/her capacity as: ..... duly authorised to sign on behalf of the Contractor.

**WHEREAS** the CONTRACTOR is the Mandatory of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of

**CONTRACT NO.: JDA\_JCL01\_2020**

for the

**JOBURG LIBRARY: ROOF REPAIRS AND INSTALLATION OF FIRE PROTECTION**

**AND WHEREAS** the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No 85 of 1993, as amended by OHS Act Amendment Act No 181/1993 (hereinafter referred to as the ACT);

**NOW THEREFORE** the parties agree as follows:

1. The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations: Provided that should the EMPLOYER have prescribed certain arrangements and procedures that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's AGENTS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
5. The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and

JDA JBCC

**JOHANNESBURG DEVELOPMENT AGENCY (JDA)**

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Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

Thus signed at ..... for and on behalf of the **CONTRACTOR**

on this the ..... day of ..... 20.....

SIGNATURE: \_\_\_\_\_

NAME AND SURNAME: \_\_\_\_\_

CAPACITY: \_\_\_\_\_

*WITNESS:* \_\_\_\_\_

Thus signed at ..... for and on behalf of the **EMPLOYER** on this

the ..... day of ..... 20.....

SIGNATURE: \_\_\_\_\_

NAME AND SURNAME: \_\_\_\_\_

CAPACITY: \_\_\_\_\_

*WITNESS:* \_\_\_\_\_



**PART C2: PRICING DATA**

**C2.1 PRICING INSTRUCTIONS**

1. The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work (as amended) published and issued by the Association of South African Quantity Surveyors (Sixth Edition (Revised)), 1999. Where applicable the:
  - a) civil engineering work has been drawn up in accordance with the provisions of the latest edition of SABS 1200 Standardised Specifications for Civil Engineering Works.
  - b) mechanical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Refrigeration, Air-Conditioning and Ventilation Installations, published by the South African Association of Quantity Surveyors, July 1990).
  - c) electrical work has been drawn up in accordance with the provisions of the Model Bills of Quantities for Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
2. The agreement is based on the JBCC Series 2000 Principal Building Agreement, prepared by the Joint Building Contracts Committee, July 2007, Edition 5.0-reprint 1. The additions, deletions and alterations to the JBCC Principal Building Agreement as well as the contract specific variables are stated in the Contract Data.
3. The ASAQS Preliminaries compiled by the Association of South African Quantity Surveyors, August 2010, are forming part of the overall Preliminaries Bill of Quantities and the preliminaries specific variables are stated within the Preliminaries Bills of Quantities.
4. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the "Model Preambles for Trades 2008".
5. Unless otherwise stated, items are measured net in accordance with the drawings and no allowance is made for waste.
6. The prices and rates to be inserted in the Bills of Quantities are to be the full inclusive 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 tender is based, as well as overhead charges and 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.
7. A price or rate is to be entered against each item in the Bills of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities.
8. Except where rates only are required, insert all amounts to be included in the total tendered price in the "amount" column and show the corresponding total tendered price.
9. It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to [www.stanza.org.za](http://www.stanza.org.za) or [www.iso.org](http://www.iso.org) for information on standards).

10. The drawings listed in the Scope of Works used for the setting up these Bills of Quantities are kept by the quantity surveyor and can be viewed at any time during office hours up until the completion of the works.
11. Reference to any particular trademark, name, patent, design, type, specific origin or producer is purely to establish a standard for requirements. Products or articles of an equivalent standard may be substituted, subject to the Principal Agent's approval.
12. Where any item is not relevant to this specific contract, such item is marked N/A (signifying "not applicable")
13. The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminary and General) of the Bills of Quantities
14. The Bills of Quantities is not intended for the ordering of materials or programming of the works. Any ordering of materials or programming of the works, based on the Bills of Quantities, is at the Contractor's risk.
15. The amount of the Preliminary Section to be included in each monthly payment certificate shall be assessed as an amount prorated to the value of the work duly executed in the same ratio as the preliminaries bears to the total of prices excluding any contingency sum, the amount for the Preliminary and General Section and any amount in respect of contract price adjustment provided for in the contract.
16. Where the initial contract period is extended, the monthly charge shall be calculated on the basis as set out in 15 but taking into account the revised period for completing the works.
17. The amount or items of the Preliminary Section shall be adjusted to take account of the theoretical financial effect which changes in time or value (or both) have on this section. Such adjustments shall be based on adjustments in the following categories as recorded in the Bills of Quantities:
  - a) an amount which is not to be varied, namely Fixed (F)
  - b) an amount which is to be varied in proportion to the contract value, namely Value Related (V); and
  - c) an amount which is to be varied in proportion to the contract period as compared to the initial construction period excluding revisions to the construction period for which no adjustment to the contractor is not entitled to in terms of the contract, namely Time Related (T).
18. Where no provision is made in the Bills of Quantities to indicate which of the three categories in 17 apply or where no selection is made, the adjustments shall be based on the following breakdown:
  - a) 10 percent is Fixed;
  - b) 15 percent is Value Related
  - c) 75 percent is Time Related.
19. The adjustment of the Preliminary Section shall apply notwithstanding the actual employment of resources in the execution of the works. The contract value used for the adjustment of the Preliminary Section shall exclude any contingency sum, the amount for the Preliminary Section and any amount in respect of contract price adjustment provided for in the contract. Adjustments in respect of any staged or sectional completion shall be prorated to the value of each section.
20. As a guide, the Bills of Quantities have separately outlined scope of works to be executed by local SMME's as per the requirements of this tender (minimum 30% SMME spend). In this regard, separate envisaged preliminaries and general items have been included for each respective trade, and the Contractor is duly advised to strictly price for these preliminary items separately from those

of the “Main Contractors” scope; failure to do so will/may result in the tenderer being disqualified from the bidding process.

21. The quantities of work as measured and accepted and certified for payment in accordance with the conditions of contract, and not the quantities stated in the Bill of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by difference between the quantities in the Bill of Quantities and the quantities certified for payment. The Ordering of materials is not to be based on the Bill of Quantities, but only on information issued for construction purposes.

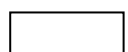
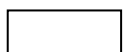
22. For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

23. the
- Unit : The unit of measurement for each item of work as defined in the Standardized, Project or Particular Specifications
  - Quantity : The number of units of work for each item
  - Rate : The payment per unit of work at each which the Tenderer tenders to do the work
  - Amount : The quantity of an item multiplied by the tendered rate of the (same) item
  - Sum : An amount tendered for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units

24. The units of measurements indicated in the bill of Quantities are metric units. The following abbreviations may appear in the Bill of Quantities:

- mm = millimetre
- m = metre
- km = kilometre
- km-pass = kilometre-pass
- m<sup>2</sup> = square metre
- m<sup>2</sup>-pass = square metre-pass
- ha = hectare
- m<sup>3</sup> = cubic metre
- m<sup>3</sup>-km = cubic metre-kilometre
- kW = kilowatt
- kN = kilonewton
- kg = kilogram
- t = ton (1 000 kg)
- % = per cent
- MN = meganewton
- MN-m = meganewton-metre
- PC Sum = Prime Cost Sum (Cost of material supplied excluding vat, profit and labour, but including transport and delivery costs)
- Prov Sum = Provisional Sum

25. Occupational Health and Safety Act and Construction Regulations  
A payment item in the Bill of Quantities has been made to allow the tenderers to price for compliance with OHS Act and the Construction Regulations. This payment item, must also include for the erection of Visitors Indemnity Signs and for ensuring that visitors receive instructions and sign an indemnity declaration.



**C2.2 BILL OF QUANTITIES**

Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 1</u></b></p>			
<p><b><u>PRELIMINARIES</u></b></p>			
<p><b><u>PREAMBLES FOR TRADES</u></b></p>			
<p>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</p>			
<p>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</p>			
<p>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</p>			
<p><b><u>PRELIMINARIES</u></b></p>			
<p>Where explanations or comments are reflected in these Preliminaries, same are to be read as supplementing as opposed to varying the provisions of the relevant clauses</p>			
<p><b><u>SECTION A: PRINCIPAL BUILDING AGREEMENT - JBCC Series 2000</u></b></p>			
<p><b>NOTES</b></p>			
<p>The JBCC Series 2000 Principal Building Agreement (May 2018 edition 6.2) prepared by the Joint Building Contract Committee shall be the applicable building agreement, amended as hereinafter described</p>			
<p>The JBCC General Preliminaries Edition 6.2 (May 2018) for use with the said JBCC Principal Building Agreement shall be deemed to be incorporated in these bills of quantities</p>			
<p><b>Carried Forward</b></p>			
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES</p>		R	

**Brought Forward**

R

Contractor's are referred to the abovementioned 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 abovementioned documents

Where any item is not relevant to this specific contract such item is marked N/A, signifying "not applicable"

**Interpretation**

1/1/1	Definitions and Interpretation (Clause 1)	Item
1/1/2	Laws, regulations and notices (Clause 2)	Item
1/1/3	Offer and Acceptance (Clause 3)	Item
1/1/4	Cession and assignment (Clause 4)	Item
1/1/5	Documents (Clause 5)	Item
1/1/6	Employer's Agents (Clause 6)	Item
1/1/7	Design Responsibility (Clause 7)	Item

**Insurances and Securities**

1/1/8	Works Risk (Clause 8)	Item
1/1/9	Indemnities (Clause 9)	Item
1/1/10	Insurances (Clause 10)	Item
1/1/11	Security (Clause 11)	Item

**Execution**

1/1/12	Obligations of the Parties (Clause 12)	Item
1/1/13	Setting Out (Clause 13)	Item

**Carried Forward**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

**Brought Forward**

R

- 1/1/14 Nominated Subcontractors (Clause 14) Item
- 1/1/15 Selected Subcontractors (Clause 15) Item
- 1/1/16 Direct Contractors (Clause 16) Item
- 1/1/17 Contract Instructions (Clause 17) Item

**Completion**

- 1/1/18 Interim completion = n/s subcontract agreement (Clause 18) Item
- 1/1/19 Practical Completion (Clause 19) Item
- 1/1/20 Completion in Sections (Clause 20) Item
- 1/1/21 Defects Liability Period and Final Completion (Clause 21) Item
- 1/1/22 Latent Defects Liability Period (Clause 22) Item
- 1/1/23 Revision of Date for Practical Completion (Clause 23) Item
- 1/1/24 Penalty for Late or Non-Completion (Clause 24) Item

**Payment**

- 1/1/25 Payment (Clause 25) Item
- 1/1/26 Adjustment to the Contract Value and Final Account (Clause 26) Item
- 1/1/27 Recovery of Expense and Loss (Clause 27) Item

**Termination**

- 1/1/28 Suspension by the Contractor (Clause 28) Item
- 1/1/29 Termination (Clause 29) Item

**Dispute**

- 1/1/30 Dispute resolution (Clause 30) Item

**Carried Forward**

R

Section No. 1  
 PRELIMINARIES  
 Bill No. 1  
 PRELIMINARIES

Brought Forward

R

**Agreement**

1/1/31 Agreement Item

**Contract Data**

1/1/32 Contract Data Item

**SECTION B: PRELIMINARIES**

**Definitions and Interpretation**

1/1/33 Definitions (Clause 1.1) Item

1/1/34 Interpretation (Clause 1.2) Item

**Documents**

1/1/35 Checking of Documents (Clause 2.1) Item

1/1/36 Provisional Bills of Quantities (Clause 2.2) Item

1/1/37 Availability of Construction Documentation (Clause 2.3) Item

1/1/38 Ordering of materials and goods (Clause 2.4) Item

**Previous work and adjoining properties**

1/1/39 Previous Work - Dimensional Accuracy (Clause 3.1) Item

1/1/40 Previous Work - Defects ( Clause 3.2) Item

1/1/41 Inspection of Adjoining Properties (Clause 3.3) Item

**The Site**

1/1/42 Handover of site in stages (Clause 4.1) Item

1/1/43 Enclosure of the works (Clause 4.2) Item

1/1/44 Geotechnical and other investigations (Clause 4.3) Item

1/1/45 Encroachments (Clause 4.4) Item

1/1/46 Existing premises occupied (Clause 4.5) Item

1/1/47 Services - known (Clause 4.6) Item

Carried Forward

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES



Brought Forward

R

**Management of the contract**

1/1/48	Management of the works (Clause 5.1)	Item
1/1/49	Progress Meetings (Clause 5.2)	Item
1/1/50	Technical Meetings (Clause 5.3)	Item

**Samples, Shop Drawings and Manufacturer's Instructions**

1/1/51	Samples of Materials (Clause 6.1)	Item
1/1/52	Workmanship Samples (Clause 6.2)	Item
1/1/53	Shop Drawings (Clause 6.3)	Item
1/1/54	Compliance with Manufacturer's Instructions (Clause 6.4)	Item

**Deposits and Fees**

1/1/55	Deposits and Fees (Clause 7.1)	Item
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**Temporary Services**

1/1/56	Water (Clause 8.1)	Item
1/1/57	Electricity (Clause 8.2)	Item
1/1/58	Ablution and welfare facilities (Clause 8.3)	Item
1/1/59	Communication facilities (Clause 8.4)	Item

**Prime cost Amounts**

1/1/60	Responsibility for Prime Cost Amounts (Clause 9.1)	Item
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**Attendance on Subcontractors**

1/1/61	General Attendance (Clause 10.1)	Item
1/1/62	Special Attendance (Clause 10.2)	Item

**GENERAL**

1/1/63	Protection of the Works (Clause 11.1)	Item
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Carried Forward

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

**Brought Forward**

R

1/1/64	Protection / Isolation of Existing works and works occupied in Sections (Clause 11.2)	Item
1/1/65	Security of the Works (Clause 11.3)	Item
1/1/66	Notice Before Covering Work (Clause 11.4)	Item
1/1/67	Disturbance (Clause 11.5)	Item
1/1/68	Environmental Disturbance (Clause 11.6)	Item
1/1/69	Works Cleaning and Clearing (Clause 11.7)	Item
1/1/70	Vermin (Clause 11.8)	Item
1/1/71	Overhand Work (Clause 11.9)	Item
1/1/72	Tenant installation by Direct contractors (Clause 11.10)	Item
1/1/73	Advertising (Clause 11.11)	Item

**SECTION C: SPECIFIC PRELIMINARIES**

1/1/74	Standard Conditions of Tender	Item
1/1/75	Special Conditions of Tender	Item
1/1/76	Tender Data Schedule	Item
1/1/77	General Conditions of Contract	Item
1/1/78	Special Conditions of Contract	Item

**OCCUPATIONAL HEALTH AND SAFETY**

1/1/79	Adherence to the Occupational Health and Safety Act of 1993 and as ammended, the laws of the Republic of South Africa and the Occupational Health and Safety Specification attached.	Item
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**FIRE PROTECTION**

1/1/80	Instructing and training the Employer's staff in operation of system and equipment prior to hand over to the Client.	Item
1/1/81	Three copies of the O&M Manuals (hard copies and CD)	Item

**Carried Forward**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

**Brought Forward**

1/1/82 As-Built Drawings (3 copies)

Item

R

1/1/83 Provision of full maintenance and guarantee of mechanical equipment and installation for the full 12 month period. The maintenance period shall start after practical completion is achieved. Service sheets to be submitted for every service carried out. Refer to tender specification.

Item

1/1/84 Provision of fire plan in laminated A3 size for each building. The plans are to be fixed in the Foyer of each floor level. Total 50no.

Item

1/1/85 Allowance for Fire department call out to review and site and provide fire certificate

Item

1/1/86 Labelling of all fire pipework as per SANS 10252 and SANS 10140.

Item

**Carried to Final Summary**

R

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES

Item No		Quantity	Rate	Amount
	<b><u>BILL NO.1</u></b>			
	<b><u>ALTERATIONS</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Specifications</u></b>			
	The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached.			
	The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.			
	<b><u>REMOVAL OF EXISTING WORK</u></b>			
	<b><u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u></b>			
2/1/1	Clay roof tiles including all ridge capping, valley tiles, etc. and set aside for re-use, cracked or broken tiles to be discarded	m2	1,500	
	<b><u>Removal of waterproofing:</u></b>			
2/1/2	Removal of existing torched-on waterproofing membrane to concrete roof slab and discard	m2	980	
2/1/3	Removal of existing torched-on waterproofing membrane, flashing, strips, etc. to metal roof sheeting and discard	m2	1,600	
	<b><u>Hacking up/off and removing granolithic, screeds, plaster, etc from concrete or brickwork and preparing surfaces for new screeds, plaster, etc</u></b>			
2/1/4	Removal of existing 150mm thick cement screed to concrete roof slab where falls are inadequate and discard	m2	80	
	<b>Carried Forward</b>			R
	Section No. 2 ROOF Bill No. 1 ALTERATIONS			

Brought Forward

R

**PREPARATORY WORK TO EXISTING SURFACES**

**Clean and inspect:**

2/1/5	Remove all oils, grease and contaminants and abrade surface of concrete slab and prepare for inspection by the Engineer.	m2	80
2/1/6	Clean metal substrate and prepare surfaces for inspection by the Engineer.	m2	3,100

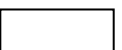
**Carried Forward to Summary of Section No. 2**

R

Section No. 2  
 ROOF  
 Bill No. 1  
 ALTERATIONS

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO.2</u></b></p> <p><b><u>WATERPROOFING</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Specifications</u></b></p> <p>The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached</p> <p>The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.</p> <p><b><u>Warranty and Maintenance</u></b></p> <p>The waterproofing will be installed under a Guarantee of no less than 10 years from the issue of the completion certificate by the Principle Agent and shall include a Maintenance plan for the waterproofing for the same period.</p> <p><b><u>WATERPROOFING TO ROOFS. BASEMENTS. ETC</u></b></p> <p><b><u>"Stoncor" Stonechem 441 or similar approved polyurea-polyurethane spray-on application waterproofing membrane :</u></b></p>			
2/2/1	To cement screed to concrete roof slabs	m2	80	
	<p><b><u>100mm wide strip of "Pro-Struct" 680 Acrylic Flashing Liquid reinforced with "Pro- Struct" 599 membrane. The top leading edge of the counterflashing will be terminated in either a reglet of the substrate (Minimum of 6 x 6mm joint), or a brickwork joint:</u></b></p>			
2/2/2	To turnups, sides and counter flash vertical terminations	m	50	
	<b>Carried Forward</b>			R
	Section No. 2 ROOF Bill No. 2 WATERPROOFING			

Brought Forward				R
	<p><b><u>Seal all joints, fixings and other potential areas of water ingress with "Pro-Struct" 203, reinforcing it with "Pro-Struct" 200 Membrane and then apply primer and "Stoncor" Alumanation 301 over entire surface:</u></b></p>			
2/2/3	To metal roof sheeting on roofs including flashings, ridge caps, trimming, etc.	m2	1,600	
	<p><b><u>"Pro-struct 506":</u></b></p>			
2/2/4	To prepared surfaces of polyurea-polyurethane spray-on application waterproofing membrane on roof slab	m2	80	
	<p><b><u>Apply CarboGuard 545 Primer and Stonchem 441 reinforcing the system with Pro-Struct 599 over all joints, laps and fixings in the substrate:</u></b></p>			
2/2/5	Substrate below Clay tile roof covering	m2	1,500	
<p><b>Carried Forward to Summary of Section No. 2</b></p>				R
<p>Section No. 2                  ROOF                  Bill No. 2                  WATERPROOFING</p>				



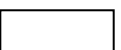
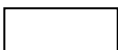
Item No		Quantity	Rate	Amount
	<b><u>BILL NO.3</u></b>			
	<b><u>ROOF COVERINGS</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Specifications</u></b>			
	The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached			
	The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.			
	<b><u>TILES</u></b>			
	<b><u>"Italcotto" Coppo Clay Roof Tiles nailed with non-corrosive tile nails to and including 38 x 38mm sawn softwood battens at 220mm centres</u></b>			
2/3/1	Roof covering with pitch not exceeding 25 degrees	m2	1,500	
2/3/2	Ridge capping	m	778	INCLUDED
2/3/3	Hip tile	m	40	INCLUDED
2/3/4	Hip end caps	No	12	INCLUDED
	<b><u>ATTIC STOCK</u></b>			
	<b><u>"Italcotto" Coppo Clay Roof Tiles</u></b>			
2/3/5	Supply including delivery of Roof tiles to the Client at designated storage facility for Attic stock	m2	800	
	<b>Carried Forward to Summary of Section No. 2</b>			R
	Section No. 2 ROOF Bill No. 3 ROOF COVERINGS			



Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>PLASTERING</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Specifications</u></b></p> <p>The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached</p> <p>The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.</p> <p><b><u>Labours</u></b></p> <p>Labours such as fair, rounded and chamfered edges, trowel cuts, throats, V-joints and angles are deemed to be included and no further claims will be entertained</p> <p><b><u>SCREEDS</u></b></p> <p><b><u>Screeds on concrete</u></b></p>			
2/4/1	120mm Thick to minimum falls of 1:100 mixed with crystalline add-mixture including all coves, etc.	m2	80	
	<p><b><u>EXTERNAL PLASTER</u></b></p> <p><b><u>Cement plaster on brickwork or concrete</u></b></p>			
2/4/2	On narrow widths	m2	15	
	<p><b>Carried Forward to Summary of Section No. 2</b></p> <p>Section No. 2 ROOF Bill No. 4 PLASTERING</p>			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 5</u></b></p> <p><b><u>PAINTING</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Specifications</u></b></p> <p>The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached</p> <p>The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.</p> <p><b><u>Munsell Colour system</u></b></p> <p>All paint colours below in accordance with Munsell System i.e. tinted hues. Pricing tendered to allow for the above.</p> <p><b><u>Paint manufacturer</u></b></p> <p>All paint to be by a SABS approved Paint manufacturer</p> <p><b><u>PAINTWORK, ETC. TO NEW WORK</u></b></p> <p><b><u>ON WATERPROOFING</u></b></p> <p><b><u>Prepare and apply two coats pva paint on</u></b></p>			
2/5/1	On "Prostruct" 560 waterproofing	m2	80	
	<p><b>Carried Forward to Summary of Section No. 2</b></p> <p>Section No. 2 ROOF Bill No. 5 PAINTING</p>			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 6</u></b></p> <p><b><u>PROVISIONAL SUMS &amp; BUDGETARY ALLOWANCES</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>General</u></p> <p>Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances</p> <p>Prime cost amounts and provisional sums are NET. Prime cost amounts include for delivery to site of all articles concerned</p> <p>Provisional sums are for material and equipment supplied and installed complete by firms of specialists</p> <p><u>Profit</u></p> <p>Where stated, the contractor may allow for profit if required</p> <p><b><u>PROVISIONAL SUMS</u></b></p> <p><b><u>Permanent access to the roof</u></b></p>			
2/6/1	Provide the sum of R 300,000.00 (Three Hundred Thousand Rands) for Permanent access to the roof, etc., executed complete	Item		300,000.00
2/6/2	Profit	Item		
2/6/3	Attendance	Item		
	<p><b><u>BUDGETARY ALLOWANCES</u></b></p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 2                      ROOF                      Bill No. 6                      PROVISIONAL SUMS &amp; BUDGETARY ALLOWANCES</p>			



Brought Forward

R

**Note: Tenderers are to note that the provisional allowances listed here under are for work to be executed by the appointed principal contractor. Tenderers are to allow in their overall P & G allowances for this scope of work as no additional P & G's will be entertained once this scope of work is realised. The Employer reserves the right to execute this work in part or in whole or omit the entire scope**

2/6/4	Provide the sum of R 200,000.00 (Two Hundred Thousand Rands) for Removing and replacing damaged flashings, ridge capping, trimming, etc. executed complete	Item	200,000.00
2/6/5	Provide the sum of R 100,000.00 (One Hundred Thousand Rands and Zero Cents for Inspection and repair to stormwater connections under building on ground level, etc. executed complete	Item	100,000.00
2/6/6	Provide the sum of R 75,000.00 (Seventy Five Thousand Rands and Zero Cents for the Waterproofing specialist inspection and reporting, etc. executed complete	Item	75,000.00
2/6/7	Provide the sum of R 120,000.00 (One Hundred and Twenty Thousand Rands) for Replacing roof sheeting fastenings, etc. executed complete	Item	120,000.00
2/6/8	Provide the sum of R 60,000.00 (Sixty Thousand Rands) for Sealing around Skylights, etc. executed complete	Item	60,000.00
2/6/9	Provide the sum of R 250,000.00 (Two Hundred and Fifty Thousand Rands) for Repairs to timber roof structure, etc. executed complete	Item	250,000.00
2/6/10	Provide the sum of R 50,000.00 (Fifty Thousand Rands) for Repairs and or replacement of valley gutters to the roof, etc. executed complete	Item	50,000.00
2/6/11	Provide the sum of R 350,000.00 (Three Hundred and Fifty Thousand Rands) for Repairs and or replacement of Rainwater Disposal, etc. executed complete	Item	350,000.00
2/6/12	Provide the sum of R 75,000.00 (Seventy Five Thousand Rands) for Earthing to the roof, etc. executed complete	Item	75,000.00

Carried Forward

R

Section No. 2  
 ROOF  
 Bill No. 6  
 PROVISIONAL SUMS & BUDGETARY ALLOWANCES

**Brought Forward**

R

2/6/13	Provide the sum of R 225,000.00 (Two Hundred and Twenty Five Thousand Rands) for Electrical Installation, etc. executed complete	Item	225,000.00
2/6/14	Provide the sum of R 200,000.00 (Two Hundred Thousand Rands and Zero Cents for Occupational Health and Safety Consultant. executed complete	Item	200,000.00
2/6/15	Provide the sum of R 350,000.00 (Three Hundred and Fifty Thousand Rands and Zero Cents for Security access at street level, executed complete	Item	350,000.00
2/6/16	Provide the sum of R 70,000.00 (Seventy Thousand Rands and Zero Cents for Temporary hoarding, executed complete	Item	70,000.00
2/6/17	Provide the sum of R 1,200,000.00 (One Million and Two Hundred Thousand Rands and Zero Cents for Access scaffolding to roofs, executed complete	Item	1,200,000.00
2/6/18	Provide the sum of R 200,000.00 (Two Hundred Thousand Rands) for Crawl boards and ladders, executed complete	Item	200,000.00
2/6/19	Provide the sum of R 200,000.00 (Two Hundred Thousand Rands) for Edge barriers, executed complete	Item	200,000.00

**Carried Forward to Summary of Section No. 2**

R

Section No. 2  
 ROOF  
 Bill No. 6  
 PROVISIONAL SUMS & BUDGETARY ALLOWANCES

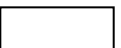
Section No. 2

ROOF

**SECTION SUMMARY - ROOF**

Bill No	Description	Page No	Amount
2/1	ALTERATIONS	108	
2/2	WATERPROOFING	110	
2/3	ROOF COVERINGS	112	
2/4	PLASTERING	113	
2/5	PAINTING	114	
2/6	PROVISIONAL SUMS & BUDGETARY ALLOWANCES	115	
<b>Carried to Final Summary</b>			R
Section No. 2 ROOF			

Item No	Quantity	Rate	Amount
<p><b><u>BILL NO. 1</u></b></p>			
<p><b><u>PLUMBING AND DRAINAGE (PROVISIONAL)</u></b></p>			
<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p>			
<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
<p><b><u>Specifications</u></b></p>			
<p>The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached</p>			
<p>The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.</p>			
<p><b><u>Fixing of pipes</u></b></p>			
<p>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</p>			
<p><b><u>Steel sectional water tanks</u></b></p>			
<p>Tanks shall comply with SABS CKS 114</p>			
<p><b><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></b></p>			
<p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described</p>			
<p>Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc</p>			
<p><b>Carried Forward</b></p>		R	
<p>Section No. 3 FIRE PROTECTION Bill No. 1 PLUMBING AND DRAINAGE (PROVISIONAL)</p>			



**Brought Forward**

R

**SANS 62-1/2 class medium Black steel piping to Fire Hydrants, reels, etc.**

Pipes shall be free of rust, flakes or other defects and shall be cleaned internally before installation. The pipework shall be c/w connections or similar approved, hangers, supports, fittings and all necessary accessories:

**SANS 62-1/2 class medium Black steel piping to Sprinkler installation**

Pipes shall be free of rust, flakes or other defects and shall be cleaned internally before installation. The pipework shall be c/w Victaulic connections, hangers, supports, fittings and all necessary accessories.

**Fire pump and tank**

The pumps shall be installed as indicated on the drawings and in accordance to manufacturers' specification and recommendations. Pumps shall be powered from backup power supply.

**FIRE SERVICE**

**Supply and Install HDPE Class 16 piping.**

3/1/1	110mm Pipe fixed not exceeding 1m to vertical and horizontal surfaces	m	900
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**Extra over HDPE Class 16 pipe for fittings**

3/1/2	HDPE adaptor to SANS 1123 1600/3 flange welded to SANS 62 pipe 1m long, with 3mm gasket and nut/bolt sets, all wrapped in Denzo wrap throughout underground portion to suit 80mm NB black steel pipe	No	3
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**Supply and Install SANS 62-1/2 class medium Black steel piping.**

3/1/3	25mm NB Pipe with screwed joints	m	158
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3/1/4	80mm NB Pipe with grooved klambon joints	m	180
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**Carried Forward**

R

Section No. 3  
 FIRE PROTECTION  
 Bill No. 1  
 PLUMBING AND DRAINAGE (PROVISIONAL)



**Brought Forward**

R

**Extra over SANS 62-1/2 class medium  
Black steel piping for fittings**

3/1/5	25mm NB Screwed union - SANS 62, medium black steel	No	72
3/1/6	25mm NB Screwed barrel nipples - SANS 62, medium black steel	No	23
3/1/7	25mm NB Screwed elbow - SANS 62, medium black steel	No	54
3/1/8	80mm NB Grooved klambon elbow - SANS 62, medium black steel	No	18
3/1/9	80mm NB Grooved klambon equal tee - SANS 62, medium black steel	No	18
3/1/10	80mm/65mm NB Concentric reducer - SANS 62, medium black steel	No	14

**Fire Hose reels**

3/1/11	Supply and install Fire Hose Reels (30m long) swing type c/w chromium plated 25mm valve, connection, fittings, fixings and dial type (100mm) glycerine filled pressure gauge with union and isolating valve suitable for systems working pressure. Allowance for Weld-o-let to connect onto existing piping.	No	23
3/1/12	Refurbish and maintain Hose Reel in line with SANS 543	No	18

**Hydrants and valves**

3/1/13	Supply and Install Fire Hydrant c/w take-off, piping, connection, fittings, valves of gunmetal and of the instantaneous female outlet type with screwed or flanged pipe connections. Right-angled valves with 65mm or 100mm internal diameter hose connections shall be fitted, unless other valve types or internal diameters are required by the local fire department. 65mm ID hose connection (screwed)	No	9
3/1/14	Refurbish and maintain Hydrant in line with SANS 1128	No	9

**Carried Forward**

R

Section No. 3  
FIRE PROTECTION  
Bill No. 1  
PLUMBING AND DRAINAGE (PROVISIONAL)

**Brought Forward**

R

3/1/15 Supply and install dual head Fire booster connection c/w take-off, piping, connection, fittings, valves of gun metal and of the instantaneous outlet type with screwed of flanged type connections. Right-angled valves with 65mm internal diameter hose connections shall be fitted, unless other valve types or internal diameters are required by the local fire department. No 3

3/1/16 80mm NB Non-Return Valve No 3

**Fire Extinguishers**

3/1/17 Supply and install 4.5Kg E1 Dry Chemical Powder fire extinguishers including back board with hook as indicated on Engineer's drawings No 54

3/1/18 Supply and install 9Kg E1 Dry Chemical Powder fire extinguishers including back board with hook as indicated on Engineer's drawings No 5

3/1/19 Service and maintain 4.5Kg E1 Dry Chemical Powder fire extinguishers No 54

3/1/20 Relocate Fire Extinguisher and backboard as indicated on Engineer's drawing No 54

**SPRINKLER INSTALLATION**

**Supply and install sprinkler bulb c/w branch:**

3/1/21 100 Degree Celsius sprinkler head No 1,500

**Supply and Install SANS 62-1/2 class medium Black steel or galvanised steel piping.**

3/1/22 25mm NB Pipe with screwed joints m 1,350

3/1/23 32mm NB Pipe with screwed joints m 2,700

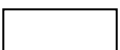
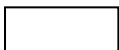
3/1/24 40mm NB Pipe with screwed joints m 675

3/1/25 150mm NB Pipe with screwed joints m 1,944

**Carried Forward**

R

Section No. 3  
 FIRE PROTECTION  
 Bill No. 1  
 PLUMBING AND DRAINAGE (PROVISIONAL)



Brought Forward

R

**Extra over SANS 62-1/2 class medium  
Black or galvanised steel piping for fittings**

3/1/26	25mm to 15mm NB Reducing Elbow - SANS 62, medium black or galvanised steel	No	540
3/1/27	40mm NB Welded sockets - SANS 62, medium black or galvanised steel	No	540
3/1/28	150mm NB Elbow - SANS 62, medium black or galvanised steel	No	68
3/1/29	150mm NB Equal tee - SANS 62, medium black or galvanised steel	No	10
3/1/30	40mm/32mm/15mm NB Screwed Reducing tee - SANS 62, medium black or galvanised steel	No	540
3/1/31	32mm/32mm/15mm NB Screwed Reducing tee - SANS 62, medium black or galvanised steel	No	540
3/1/32	32mm/25mm/15mm NB Screwed Reducing tee - SANS 62, medium black or galvanised steel	No	540

**Hydrants and valves**

3/1/33	Supply and Install sprinkler Installation 150mm NB Control Valve c/w piping, supports, activation testing, corrosion protection, paint specification, valves, instruments, alarms in accordance with SANS 10287	No	4
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**Sundries:**

3/1/34	Hydrology calculations in line with ASIB standards and sign off of calculation		Item
3/1/35	ASIB inspection and certification of installation		Item

**TESTING**

3/1/36	Test and commission the entire fire and sprinkler installation as required by SANS 10400 and SANS 10287	No	12
3/1/37	Flushing of the entire pipework and pressure testing as per SANS 10287 and 10252	No	12

Carried Forward

R

Section No. 3  
FIRE PROTECTION  
Bill No. 1  
PLUMBING AND DRAINAGE (PROVISIONAL)

Brought Forward

R

**FIRE PUMP AND TANK**

**Supply and Install fire pump set for fire water supply, complete with jockey pump, non-return valves, anti vibration connections, shutoff valves, suction and delivery manifolds, Variable speed drive (VSD), float switches, flow switches, pressure sensors and all necessary accessories to ensure a successful installation:**

3/1/38	Diesel driven pump set; delivery: 6000 litres/min @ 748kPa	No	1
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3/1/39	Jockey Pump	No	1
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**Supply and Install ABECO sectional steel storage tank for sprinkler supply, complete with ball-valve, overflow pipes, non-return valves, shut-off valves and all necessary accessories:**

3/1/40	80 000 Litre tank	No	1
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**Carried Forward to Summary of Section No. 3**

R

Section No. 3  
 FIRE PROTECTION  
 Bill No. 1  
 PLUMBING AND DRAINAGE (PROVISIONAL)

Item No		Quantity	Rate	Amount
	<b><u>BILL NO. 2</u></b>			
	<b><u>ELECTRICAL INSTALLATION</u></b>			
	The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>Specifications</u></b>			
	The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached			
	The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.			
	<b><u>ELECTRONIC INSTALLATION</u></b>			
	<b><u>SMOKE DETECTION</u></b>			
	<b><u>The following to the Smoke Detection system:</u></b>			
3/2/1	XP95 Optical Smoke Detector and mounting base	No	800	
3/2/2	Discovery MCP with Isolator, Red (Surface)	No	50	
3/2/3	MCP Transparent Hinged Protective Flap	No	50	
3/2/4	XP95 Open-Area Sounder Beacon Red (Sonos)	No	60	
3/2/5	Soteria/XP95 Input/Output Unit	No	10	
3/2/6	2 Loop Addressable Control Panel c/w 2 Loop Card	No	10	
3/2/7	12 V DC 7.5AH Battery	No	20	
3/2/8	PH30, 2-core, 1mm, Stranded Cable (500m), RS485	No	40	
3/2/9	Interface with existing detection panel	No	6	
3/2/10	Installation and Commissioning of entire Smoke detection system	No	6	
	<b>Carried Forward to Summary of Section No. 3</b>			R
	Section No. 3 FIRE PROTECTION Bill No. 2 ELECTRICAL INSTALLATION			

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 3</u></b></p> <p><b><u>MECHANICAL WORK</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Specifications</u></b></p> <p>The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached</p> <p>The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.</p> <p><b><u>Installation</u></b></p> <p>Installation and Commissioning of Fire Systems must include for all hangers, support, and trunking</p> <p><b><u>FIRE PROTECTION</u></b></p> <p><b><u>Two hour fire rated Fire stop</u></b></p>			
3/3/1	To openings	m2	10	
	<p><b><u>FIRE SUPPRESSION</u></b></p> <p><b><u>Refurbish existing suppression system in basement level:</u></b></p>			
3/3/2	Refurbish existing cylinders		Item	
3/3/3	Test and refurbish Piping		Item	
3/3/4	Refurbish Existing Control Panel and Interfaces		Item	
3/3/5	Installation and Commissioning of whole system, including providing guarantees		Item	
	<p><b>Carried Forward to Summary of Section No. 3</b></p> <p>Section No. 3 FIRE PROTECTION Bill No. 3 MECHANICAL WORK</p>			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 4</u></b></p> <p><b><u>PAINTING</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Specifications</u></b></p> <p>The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached</p> <p>The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.</p> <p><b><u>Munsell Colour system</u></b></p> <p>All paint colours below in accordance with Munsell System i.e. tinted hues. Pricing tendered to allow for the above.</p> <p><b><u>Paint manufacturer</u></b></p> <p>All paint to be by a SABS approved Paint manufacturer</p> <p><b><u>PAINTWORK, ETC. TO NEW WORK</u></b></p> <p><b><u>ON PIPING TO FIRE PROTECTION SYSTEMS</u></b></p> <p><b><u>Prepare and apply paint to all fire pipework as per SANS 10252 and SANS 10140</u></b></p>			
3/4/1	On steel piping not exceeding 300mm wide	m	2,179	
	<p><b>Carried Forward to Summary of Section No. 3</b></p> <p>Section No. 3 FIRE PROTECTION Bill No. 4 PAINTING</p>			R

Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 5</u></b></p> <p><b><u>SIGNAGE</u></b></p> <p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>Specifications</u></b></p> <p>The Tenderer to note all work measured within to be constructed in accordance with Manufacturer's instructions and the Engineer's specifications attached</p> <p>The Engineer's specifications will take precedence over the Bills of Quantities should there be any discrepancies between them.</p> <p><b><u>FIRE SIGNAGE</u></b></p> <p><b><u>Supply and installation of Photoluminescent Signage in line with SANS 1186:</u></b></p>			
3/5/1	Hose reel and extinguisher signage with directional arrow	No	117	
3/5/2	Access and Direction of travel Signage	No	180	
3/5/3	Extinguisher with directional arrow	No	27	
3/5/4	Hydrant with directional arrow	No	45	
3/5/5	Escape and Exit signage with directional arrow	No	40	
	<p><b>Carried Forward to Summary of Section No. 3</b></p> <p>Section No. 3 FIRE PROTECTION Bill No. 5 SIGNAGE</p>			R



Item No		Quantity	Rate	Amount
	<p><b><u>BILL NO. 6</u></b></p>			
	<p><b><u>PROVISIONAL SUMS &amp; BUDGETARY ALLOWANCES</u></b></p>			
	<p>The Tenderer is referred to the relevant Clauses in the separate document Model Preambles for Trades (2008 Edition)</p>			
	<p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p>			
	<p><u>General</u></p>			
	<p>Work for which budgetary allowances are provided will be measured and valued in accordance with clause 32 of the Principal Building Agreement and deducted in whole or in part if not required without any compensation for loss or profit on the said allowances</p>			
	<p>Prime cost amounts and provisional sums are NET. Prime cost amounts include for delivery to site of all articles concerned</p>			
	<p>Provisional sums are for material and equipment supplied and installed complete by firms of specialists</p>			
	<p><u>Profit</u></p>			
	<p>Where stated, the contractor may allow for profit if required</p>			
	<p><b><u>BUDGETARY ALLOWANCES</u></b></p>			
	<p><b><u>Note: Tenderers are to note that the provisional allowances listed here under are for work to be executed by the appointed principal contractor. Tenderers are to allow in their overall P &amp; G allowances for this scope of work as no additional P &amp; G's will be entertained once this scope of work is realised. The Employer reserves the right to execute this work in part or in whole or omit the entire scope</u></b></p>			
3/6/1	<p>Provide the sum of R 800,000.00 (Eight Hundred Thousand Rands) for Removal of existing Fire Protection systems, executed complete</p>	Item		800,000.00
	<p><b>Carried Forward to Summary of Section No. 3</b></p>		R	
	<p>Section No. 3 FIRE PROTECTION Bill No. 6 PROVISIONAL SUMS &amp; BUDGETARY ALLOWANCES</p>			

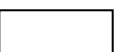
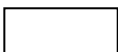
Section No. 3

FIRE PROTECTION

**SECTION SUMMARY - FIRE PROTECTION**

Bill No		Page No	Amount
3/1	PLUMBING AND DRAINAGE (PROVISIONAL)	119	
3/2	ELECTRICAL INSTALLATION	125	
3/3	MECHANICAL WORK	126	
3/4	PAINTING	127	
3/5	SIGNAGE	128	
3/6	PROVISIONAL SUMS & BUDGETARY ALLOWANCES	129	
	<b>Carried to Final Summary</b>		R
	Section No. 3 FIRE PROTECTION		

Section No	<u>FINAL SUMMARY</u>	Page No	Amount
1	PRELIMINARIES	107	
2	ROOF	118	
3	FIRE PROTECTION	130	
	SUB-TOTAL		R
	VALUE ADDED TAX		R
	<b>Carried to Offer Page (inclusive of VAT)</b>		R



**PART C3: SCOPE OF WORK**

C3.1. Description of the Works

- C3.1.1. Employer's objectives
- C3.1.2. Overview of the works
- C3.1.3. Location of the works
- C3.1.4. Temporary works
- C3.1.5. Access and working areas

C3.2. Engineering

- C3.2.1. Design services and activity matrix
- C3.2.2. Employer's design
- C3.2.3. Design brief
- C3.2.4. Drawings
- C3.2.5. Design procedures

C3.3. Procurement

- C3.3.1. Requirements
- C3.3.2. Small contractor development

C3.4. Construction

- C3.4.1. Works specifications
- C3.4.2. Plant and Materials
- C3.4.3. Construction Equipment
- C3.4.4. Existing services
- C3.4.5. Site establishment
- C3.4.6. Site usage
- C3.4.7. Permits and way leaves
- C3.4.8. Alterations, additions, extensions and modifications to existing works
- C3.4.9. Inspection of adjoining properties
- C3.4.10. Water for construction purposes
- C3.4.11. Survey control and setting out of the works
- C3.4.12. Features requiring special attention

C3.5. Management

- C3.5.1. Health and safety specification
- C3.5.2. Environmental specifications

## PART C3: SCOPE OF WORK

### C3.1 DESCRIPTION OF THE WORKS

#### C3.1.1 Employer's objectives

The Johannesburg Development Agency has been appointed by the City of Johannesburg for the roof repairs and fire installation at the Johannesburg Library located on Albertina Sisulu Road and Pixley Ka Isaka Seme Street.

The Johannesburg Development Agency (JDA)'s objective is to deliver this public infrastructure using labour intensive methods. Labour-intensive works comprise the various activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work. Whilst the work is both plant and labour intensive, the successful bidder must optimally utilise labour intensive methods to maximise employment opportunities for the local community in line with the JDA requirements.

The project is to be completed within **06 months** of the Commencement Date.

#### C3.1.2 Overview of the works

The construction of the works entail the following :

##### Civil Works :

- Removal of existing roof tiles and storing for re-use.
- Repairs to the underlying roof waterproofing membranes
- Removal and replacement of existing waterproofing on concrete slabs and gutters including screed repairs
- Timber roof trusses repairs
- Replacing of existing roof tiles
- Stormwater investigations

##### Electrical Works :

- Provide electrical lighting in the ceiling void/s
- Smoke detection
- 

##### Mechanical Works :

- Plumbing and Drainage
- Construction of fire services/ protection/ suppression
- Supply and install fire hose reels and fire extinguishers
- Supply and install new diesel drive pump set and water tanks
- Signage

#### C3.1.3 Extent of the works

The works are limited within the existing the existing library building but is not limited to:

- Offices, boardrooms, hall, and ablution facilities.
- Electrical installation to the building.
- Mechanical installation to the building.
- Fire detection and fire protection throughout the property

**C3.1.4 Location of the works**

The site is the Johannesburg Library located on Albertina Sisulu Road and Pixley Ka Isaka Seme Street.

**C3.1.5 Access and working areas**

To be confirmed once appointed.

**C3.2 ENGINEERING**

**C3.2.1 Design Services & Activity Matrix**

The following parties are responsible for the various design stages of the project.

<b>DESCRIPTION</b>	<b>RESPONSIBLE</b>
Concept, feasibility and overall process	Employers Agents / Professional Team
Basic Principal Agent and Preliminary Design	Employers Agents / Professional Team
Final design to approval for construction stage	Employers Agents / Professional Team
Temporary Works	Contractor
Preparation of as built drawings	Employers Agents / Professional Team / Contractor

**C3.2.2 Employers Design**

All permanent works required for construction shall be designed by the employer and his appointed agents / professional team.

**C3.2.3 Design Brief**

The Employer has briefed the consultants as to the design requirements.

**C3.2.4 Drawings**

N/A

**C3.2.5 Design Procedures**

Where the Contractor is required to design any sub-contract or specialist works, the relevant professional indemnity must be taken out at the contractor's costs. All shop drawings must be issued timeously for approval by the Principal Agent. A late issue of shop drawings by the Contractor will not constitute a valid claim for extension of time.

## C3.3 PROCUREMENT

### C3.3.1 Requirements

The contractor shall be required to adopt labour based techniques through the full spectrum of the works with the proviso that the Client's specific objectives regarding time and quality are not compromised. Maximisation of employment shall be of the essence on this contract.

Together with their tenders, all Tenderers are required to submit a comprehensive implementation plan clearly stating the labour content and number of jobs that shall be created. The employment of labour shall be reflected in a programme in sufficient details to enable the Project Manager to monitor and compare it with the implementation plan.

The Contractor shall be required to submit employment data on a monthly basis to the Project Manager.

**Tenderers are to also note that it is an explicit condition of this tender that all unskilled labourers on the Project are to be employed from the local community. The Contractor shall, in general, maximise the involvement of the local community.**

### C3.3.2 Small Contractor Development

#### C3.3.2.1 Definitions and Applicable Legislation

##### (A) Definitions

Unless inconsistent with the context, in these specifications the following terms, words or expressions shall have the meanings hereby assigned to them:

##### Start-up Enterprises

An enterprise that has been in existence and operating for less than two years.

##### Small Enterprises

An enterprise that has a CIDB grading designation of 1 or 2.

##### Micro Enterprises

An enterprise that has a CIDB grading designation of 3.

##### Locally based SMMEs

Enterprises that have their operational base in the ward in which the Project is to be executed or, alternatively, the members of the enterprise are resident in the particular ward.



Should suitable locally based SMME contractors as defined above not be available in the particular ward, then they shall be sourced from adjacent wards.

Black Business Enterprise

Black Business Enterprise is a legal entity which adheres to statutory labour practices, is registered with SARS and is a continuing and independent Enterprise, providing a Commercially Useful Function:

- a) Whose management and daily business operations are in the control of one or more Black Persons, and
- b) Which is at least 50,1% owned by one or more Black Persons who are Principals.”

Contract Participation

Contract Participation in terms of this contract is a process by which the Employer implements Government’s objectives by setting a target relating to small contractor development which the Contractor shall achieve as a minimum.

Contract Participation Goal (CPG)

Contract Participation Goal is the monetary value of the target set by the Employer in the Contract Participation process.

Contract Participation Performance (CPP)

Contract Participation Performance is the measure of the Contractor’s progress in achieving the CPG.

**(B)Applicable Legislation**

The following Acts, as amended from time to time, are predominant amongst those which apply to the construction industry and are listed here for reference purposes only:

- The Constitution of South Africa;
- Preferential Procurement Policy Framework Act No. 5 of 2000;
- Construction Industry Development Board Act No. 38 of 2000;
- Broad-Based Black Economic Empowerment Act No. 53 of 2003.

### C3.3.2.2 Participation and Advancement of Start-Up, Small and Micro Enterprises

The City of Johannesburg has identified job creation and access to procurement opportunities by Start-ups, Small and Micro enterprises (SMMEs) as an essential requirement towards building an economically viable City.

It is a condition of this tender that the successful contractor is required to subcontract a minimum value of work to **SMME's** equal to **30%** of the contract sum.

If it is established that the SMMEs are sufficiently resourced to execute the proposed works as a complete package the Contractor may conclude full subcontract agreements with locally based SMMEs to a minimum value of **30%**.

The form of contract to be used with SMMEs is the MBSA Domestic Subcontract Agreement or a JDA approved form of contract. The Contract Data must record the specific requirements in respect of penalties, retention and payment. With regard to the latter, the Contractor is to allow for fortnightly certificates from the SMMEs and for payment to the SMMEs to be effected within 7 days of certification. In order to achieve the goals of this policy and to ensure that the SMMEs are treated fairly and given every opportunity to advance their business whilst delivering a successful Project, the Contractor is to note the following and provide for any cost that may be associated therewith.

1. The Contractor shall subcontract the local SMME works at the Contractor's tendered rates.
2. The Contractor will be expected to have clearly specified the programme dates to the SMME contractors and these dates are to be included in the contract of agreement between the two parties.

The Contractor is to monitor the SMME contractor's progress against the programme and hold progress meetings with the SMME contractors where minutes are to be kept and signed off by both parties.

3. The Contractor is to assess the skills of the SMME contractor and provide the relevant support and training where it is necessary in order for the SMME contractor to complete the works to programme, budget and specification. The Managing Contractor will be expected to provide on-site training to the SMME contractors that will ensure that the SMME contractor's staff is suitably trained to execute the works and that they receive sufficient relevant experience on the Project.

4. The Contractor is responsible for safety compliance on the Project and will assist the SMME contractors in all aspects to achieve safety compliance, that will include:
  - a) Assisting the SMME contractors with developing their safety files, legal appointments, etc.
  - b) Assisting the SMME contractors with achieving safety on site.
  - c) Having tool box talks with the SMME contractor's employees on a daily basis.
  - d) Providing all safety equipment and signage.
  - e) Providing safety training where necessary.
  
5. Contractor is to provide all the necessary equipment for the timeous monitoring and the checking of the quality of works as carried out by the SMME contractors. The Contractor will be expected to monitor the SMME contractor's works for quality compliance and provide all the necessary support to the SMME contractors in order to achieve quality requirements. The Contractor is to ensure that if the SMME contractor's quality of works does not achieve specification the Contractor will assist the SMME contractors to achieve specification and not allow the works to continue until the quality requirements are achieved.
  
6. The Contractor is to generate monthly reports for the JDA that includes the following:
  - a) SMME contractor resources on the site, ie supervisors, labour, plant tools and equipment
  - b) SMME contractor progress of works on site.
  - c) SMME contractor quality control on site.
  - d) SMME contractor expenditure on the Project versus target expenditure.
  - e) Copies of minutes of the SMME contractor and Contractor progress meetings.
  - f) Concerns and improvements to be made.

**The Tenderers are to price the works to achieve full compliance with the above requirements. Failure of the Contractor to achieve these requirements may result in the JDA enforcing compliance by appointing 3<sup>rd</sup> parties if necessary to assist and deducting all reasonable costs for achieving compliance from money due to the Contractor.**

Following from the above, the SMME's to be contracted on the Project must be selected from the provided database which is attached on this document contract. The data base includes SMME that are youth, women owned, disabled and ex-combats. The contractor will be expected to give preference to SMME's that comply with all/most of these groups. The following information must be provided by said contractor on the date of tender closure.

1. Detailed approach and methodology on the employment of local SMME's
2. SMME/s company name/s to be employed on the Project.
3. SMME contact persons
4. Works to be executed by SMME/s
5. Programme (anticipated start, duration and end dates) applicable to the works defined in item 4 above.
6. Estimated value of the works identified in item 4 above.

**JDA reserves the right to withdraw our acceptance of offer, should the appointed contractor fail to satisfactorily address the above requirements (1 to 6) within 14 days of the commencement date of the contract. Approved documentation will form part of the contract.**

**(a) Contract Participation Goal (CPG)**

The CPG is the monetary value of the target set by the Employer and will be calculated as follows:

$CPG = \text{final contract value (excluding CPA and VAT)} \times (\text{target \% set by the Employer for Targeted Enterprises and local SMME contractors})$

The final contract value is the total value of certified work measured at the date of issue of the Certificate of Completion.

It is the Contractor's responsibility to ensure that the CPG target is achieved.

**(b) Contract Participation Performance (CPP)**

The CPP is the monetary value of the Contractor's actual progress towards achievement of the CPG calculated as follows:

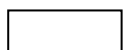
$CPP = \text{total value (excluding CPA and VAT) of contribution by Targeted Enterprises and local SMME contractors}$

The Contractor's Contract Participation Performance will be measured monthly in order to monitor the extent to which he is striving to reach the CPG. The basis of monitoring shall be the levels of the individual contributions for Targeted Enterprises and local SMME contractors. Monthly returns, in a format approved by the Employer, are required from the Contractor and shall be submitted with each interim payment certificate. Failure to adhere to this

requirement shall result in the delay of any payment due until the Employer's Agent confirms that the information has been received.

To assist in the measurement of CPP, the Contractor shall include in his contract programme details of how he will achieve the CPG. This shall include CPG achievement details for both the specific work indicated for CPG in terms of this contract for completion by Targeted Enterprises and local SMME contractors as well as details for any other work that the Contractor may use towards achieving the CPG. The detail shall be provided not later than one month after the Employer's Agent has accepted the original construction programme and shall be updated with every subsequent revision of the programme.

In the event that the Contractor fails to substantiate that any failure to achieve the Contract Participation Goal (CPG) is due to quantitative under runs, the elimination of items contracted to Targeted Enterprises and local SMME contractors, or any other reason beyond the Contractor's control which may be acceptable to the Employer, the Contractor shall be liable for a penalty as prescribed in Clause JBCC 43.0 and 44.0 of the Contract Data.



### C3.4 CONSTRUCTION

#### C3.4.1 Works specifications

##### **Applicable national and international standards**

For preambles refer to “General Specification of Materials and Methods used for Building Contracts” (GP/ASC)

##### **Particular / generic specifications**

Works are to be carried out in accordance with the construction drawings and according to the Johannesburg Development Agency, Johannesburg Roads Agency and City of Johannesburg’s norms and standards.

##### **Certification by recognized bodies**

None Applicable.

#### C3.4.2 Plant and Materials

The contactor shall ensure that adequate plant and materials are procured at his own cost and available as required in order to complete the works as specified in line with the contract programme. The contractor shall supply a report to the Principal Agent on a fortnightly basis as to the plant and materials on site (or on order), and their utilization in relation to the construction programme.

There is no guarantee given or implied that the Contractor will be permitted to utilise any or all of the plant he proposes to use in the construction of the Works.

#### C3.4.3 Construction Equipment

The contactor shall ensure that adequate construction equipment is available at his own cost as required in order to complete the works as specified in line with the contract programme. The contractor shall supply a report to the Principal Agent on a fortnightly basis as to the construction equipment on site and their utilization in relation to the construction programme.

There is no guarantee given or implied that the Contractor will be permitted to utilise any or all of the equipment he proposes to use in the construction of the Works.

#### C3.4.4 Existing Services

All known existing services and those services which require relocation and protection, are shown on the services plans. The Contractor’s attention is drawn to the fact that such services information is based on information supplied by others, and accuracy and completeness of this information has not been confirmed. The contractor will therefore be required to proceed with extreme caution in order to avoid damage to existing services.

In general, the engineer may call upon the contractor to re-excavate trenches previously dug and backfilled by others where in the opinion of the engineer such work is necessary to ensure the stability of any other works over such trenches. This in no way relieves the contractor of his responsibilities in term of the works.

**C3.4.5 Site Establishment**

The Contractor shall make available temporary facilities necessary for providing the works which are not provided by the Employer including telecommunications, security services, medical, fire protection, sanitation and toilets, waste disposal, etc.

The contractor shall not make any changes to the senior management relative to the agreement without the principal agent's express written approval.

Services and Facilities Provided by the Employer:

- Nil

Facilities Provided by the Contractor:

- The contractor is to provide facilities, necessary to complete the project as specified.
- The contractor is to provide suitable hoarding to the entire site for the entire duration of the project to meet the Principal Agent's requirements. Including any necessary making good upon completion.

Storage and Laboratory Facilities:

- The contractor is to provide facilities, necessary to complete the project as specified.

Other Facilities and Services:

- The contractor is to provide facilities, necessary to complete the project as specified.

Vehicles and Equipment:

- The contractor is to provide vehicles and equipment necessary to complete the project as specified.

Advertising Rights:

- The contractor may not place any advertising boards or the like on the site or in any public area without the express written permission of the employer.

Notice Boards:

- The contractor must place a contract notice board outside his site camp as specified by the employer.

Office Accommodation for Meeting Room:

- The contractor must provide a meeting room to accommodate a maximum of 20 people. The meeting room is to be air-conditioned.
- The contractor must provide an air-conditioned office space for the engineers for construction monitoring.

**C3.4.6 Site Usage**

The contractor will have unlimited access to the site, however all construction activities are to comply with the City of Johannesburg's by laws. The accommodation of vehicular and pedestrian traffic on the site is to be maintained at all times.

The contractor is to allow for the accommodation and diversion of pedestrian traffic in his preliminaries & general items all in accordance with the South African Road Traffic Signs Manual, The Occupational Health & Safety Act & The Construction Regulations as amended, including on-going liaison with the traffic authorities and management of traffic, alterations to kerbing and landscaping, barricading road entrances, temporary signage,

dust screens, painting of lines, etc. The traffic accommodation proposal shall be approved by the Principal Agent prior to the execution of the works.

The contractor is to maintain temporary accesses to all businesses during business hours and to all residential properties outside of business hours. In the event that the contractor cannot maintain access to residents' properties for vehicular parking and the like, the contractor is to provide alternative secure parking for residents at his own cost. Similarly, should residents be forced to park on the street due to construction activities, the contractor shall provide security personnel to guard the resident's vehicles.

The cost hereof shall be included in the contractor's preliminaries & general items.

#### **C3.4.7 Permits and way leaves**

Way leaves shall be supplied by the contractor. Contractors are to comply with the terms and conditions of the way leaves as supplied by the various service provider departments.

#### **C3.4.8 Alterations, additions, extensions and modifications to existing works**

Care must be taken not to affect the structures stability and props must be installed if there is any doubt as to the structural integrity of the building. All rubble must be removed in a manner acceptable to the Principal Agent.

The works at tender stage are not finalised and are subject to change.

The Architect will prepare a handover document including photographs of the existing building.

#### **C3.4.9 Inspection of Adjoining Properties**

Contractors are to ensure that adequate inspections of adjoining properties are carried out (and records are kept thereof) to ensure that any claims received from adjoining properties due to damage can be dealt with decisively. The settlement of any claims in this regard shall be dealt with in terms of the policies in place by the City of Johannesburg. Photographs must be taken to document the inspection.

#### **C3.4.10 Water and Electricity for Construction Purposes**

The cost for temporary water and electricity would be for the contractor's account.

#### **C3.4.11 Survey Control and setting out of the works**

By the Contractor

#### **C3.4.12 Features requiring special attention**

##### **(a) Site maintenance**



During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

**(b) Testing and quality control**

**(i) Contractor to Engage Services of an Independent Laboratory**

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Contract. These results will be taken into consideration by the Principal Agent in deciding whether the quality of materials utilised and workmanship achieved by the Contractor comply with the requirements of the Specifications. .

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Principal Agent with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" which is not under the management or control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

**(ii) Costs of Testing**

**(a) Costs of Testing**

The costs of all testing carried out by the independent laboratory shall be borne by the Contractor and shall be deemed to be included in the bided rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms of the Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out.

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (e.g. re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

**(b) Additional Tests Required by the Principal Agent**

Additional testing required by the Principal Agent, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Principal Agent, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

**(c) Subcontractors**

All matters pertaining to subcontractors (including Nominated Subcontractors) and the work executed by them shall be dealt with directly between the Principal Agent and the

Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Principal Agent will not liaise directly with any subcontractors nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising from the subcontract agreements shall be dealt with directly between the Contractor and the subcontractors and the Principal Agent will not become involved.

**C3.5 MANAGEMENT**

**C3.5.1 HEALTH AND SAFETY SPECIFICATIONS**

This part of C3.5 Management contains specifications for Health and Safety matters not covered by C3.4 Construction Specifications.

The number of each clause in this specification is prefixed with an E to differentiate these clauses and items.

**SECTION E1000: HEALTH AND SAFETY REQUIREMENTS**

**E1001 SCOPE**

This health and safety specification establishes the overarching framework within which a contractor is required to satisfy general requirements for occupation health and safety in an engineering and construction works contract.

**Note:** (1) This specification establishes general requirements to enable the employer and the contractor to satisfy the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993) and the Construction Regulations, 2014.

(2) The Construction Regulations, 2014, require an employer to stop any contractor from executing construction work which is not in accordance with the contractor's health and safety plan for the site or which poses a threat to the health and safety of persons.

**E1002 DEFINITIONS**

**Act:** the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993).

**competent person:** any person having the knowledge, training and experience specific to the work or task being performed.

**ergonomics:** the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimize human well-being and overall system performance.

**hazard:** a source of or exposure to danger.

**incident:** an event or occurrence occurring at work or arising out of or in connection with the activities of persons at work, or in connection with the use of plant or machinery, in which, or in consequence of which:

- (a) any person dies, becomes unconscious, suffers the loss of a limb or part of a limb or is otherwise injured or becomes ill to such a degree that he is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or to continue with the activity for which he was employed or is usually employed;
- (b) a major incident occurred; or
- (c) the health or safety of any person was endangered and where:

- (i) a dangerous substance was spilled;
- (ii) the uncontrolled release of any substance under pressure took place;
- (iii) machinery or any part thereof fractured or failed resulting in flying, falling or uncontrolled moving objects; or machinery ran out of control.

**health and safety plan:** a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified.

**health and safety specification:** a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons.

**inspector:** a person designated as such under section 28 of the Act.

**major incident:** an occurrence of catastrophic proportions, resulting from the use of plant or machinery, or from activities at a workplace.

**reasonably practicable:** practicable having regard to:

- (a) the severity and scope of the hazard or risk concerned;
- (b) the state of knowledge reasonably available concerning that hazard or risk and of any means of removing or mitigating that hazard or risk;
- (c) the availability and suitability of means to remove or mitigate that hazard or risk; and
- (d) the cost of removing or mitigating that hazard or risk in relation to the benefits deriving therefrom.

**risk:** the probability that injury or damage will occur.

**safe:** free from any hazard.

**scaffold:** any temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both.

**specification data:** data, provisions and variations that make this specification applicable to a particular contract.

**Structure:**

- (a) any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, batching plants, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- (b) any formwork, false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
- (c) any fixed plant in respect of work which includes the installation, commissioning, decommissioning or dismantling and where any such work involves a risk of a person falling two meters or more.

**substance:** any solid, liquid, vapour, gas or aerosol, or combination thereof.

**suitable:** capable of fulfilling or having fulfilled the intended function or fit for its intended purpose.

**E1003 INTERPRETATION**

E3.1 The Act and its associated regulations shall have precedence in the interpretation of any ambiguity or inconsistency between it and this specification.

E3.2 Compliance with the requirements of this specification does not necessarily result in compliance with the provisions of the Act.

**E1004 REQUIREMENTS**

**E4.1 General requirements**

- E4.1.1 The contractor shall execute the works in a manner that complies with all the requirements of the Act and all its associated regulations, and in so doing, minimize the risk of incidents occurring.
- E4.1.2 The contractor shall with respect to the site and the engineering and construction works that are contemplated:
  - a) Identify the hazards and evaluate the risks associated with such work constituting a hazard to the health and safety of such employees and the steps that need to be taken to comply with the Act
  - b) As far as is reasonably practicable, prevent the exposure of such employees to the hazards concerned or, where prevention is not reasonably practicable, minimize such exposure.
- E4.1.3 The contractor shall as far as is reasonably practicable, cause every employee to be made conversant with the hazards to his health and safety attached to any work which he has to perform, any article or substance which he has to produce, process, use, handle, store or transport and any plant or machinery which he is required or permitted to use, as well as with the precautionary measures which should be taken and observed with the respect to those hazards.

- E4.1.4 The contractor shall ensure that all employees under his or her control are:
- (a) informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment
  - (b) issued with proof of health and safety induction training issued by a competent person and carry proof of such induction when working on site.
- E4.1.5 The contractor shall not allow or permit any employee to enter any site, unless such person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.
- E4.1.6 The contractor shall ensure that each visitor to a construction site, save where such visitor only visits the site office and is not in direct contact with the construction work activities:
- (a) Undergoes health and safety instruction pertaining to the hazards prevalent on the site; and
  - (b) Is provided with the necessary personal protective equipment.
- E4.1.7 The contractor shall provide suitable on-site signage to alert workers and visitors to health and safety requirements.
- E4.1.8 The contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a workplace.

## **E4.2 Health and safety representatives**

- E4.2.1 The contractor shall appoint in writing one health and safety representative for every 50 employees of the contractor working on the site, whenever there are more than 20 employees on the site; to:
- (a) review the effectiveness of health and safety measures;
  - (b) identify potential hazards and potential major incidents;
  - (c) in collaboration with his employer, examine the causes of incidents;
  - (d) investigate complaints by any employee of the contractor relating to that employee's health or safety on the site;
  - (e) make representations to the contractor on matters arising from a), b), c) or d) or on general matters affecting the health or safety of the employees at the workplace;
  - (f) inspect the site with a view to the health and safety of employees, at regular intervals;
  - (g) participate in consultations with inspectors at the workplace and accompany inspectors on inspections of the workplace; and
  - (h) participate in any internal health or safety audit.

- E4.2.2 The contractor shall inform the relevant safety representative:
- (a) beforehand of inspections, investigations or formal inquiries of which he has been notified by an inspector; and
  - (b) as soon as reasonably practicable of the occurrence of an incident on the site.
- E4.2.3 The contractor shall convene health and safety meetings whenever more than two health and safety representatives have been appointed for the site. These meetings shall be attended by all health and safety representatives and shall be convened at least once every month to:
- (a) make recommendations to the employer regarding any matter affecting the health or safety of persons on the site; and
  - (b) discuss any incident on the site in which or in consequence of which any person was injured, became ill or died.
- E4.2.4 The contractor shall consult with the health and safety committee on the development, monitoring and review of the risk assessment.

**E4.3 Appointment of construction supervisor and safety officers**

- E4.3.1 The contractor shall appoint a full-time competent employee designated in writing as the construction supervisor for the site, with the duty of supervising the performance of the work falling within the scope of the contract and may appoint one or more competent employees to assist the appointed construction supervisor.
- E4.3.2 A contractor may having considered the size of the Project, the degree of dangers likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction safety officer in writing, who has in the contractor's opinion the necessary competencies and resources, to assist the contractor in the control of all safety related aspects on the site.
- E4.3.3 The contractor shall ensure that the construction supervisor is in possession of the most recently updated version of the fall protection plan.
- E4.3.4 The contractor shall ensure that the construction supervisor is in possession of the most recently updated version of the fall protection plan.
- E4.3.5 The contractor shall ensure that the following activities, as relevant, are carried out under the supervision of a competent person and that such persons are appointed in writing:
- (a) all formwork and support work operations;
  - (b) excavation work;
  - (c) demolition work;
  - (d) scaffolding work operations;
  - (e) suspended platform work operations;
  - (f) operation of batch plants; and
  - (g) the stacking and storage of articles on the site.

#### **E4.4 Risk assessment**

E4.4.1 The contractor performing work falling within the contract shall, before the commencement of any such work and during construction work, cause a risk assessment to be performed by a competent person appointed in writing. Such an assessment shall as a minimum:

- (a) identify the risks and hazards to which persons may be exposed to;
- (b) analyse and evaluate the identified risks and hazards;
- (c) document a plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified;
- (d) provide a monitoring plan; and
- (e) provide a review plan.

**Note:** A risk assessment is an important step in protecting workers as well as complying with the law. It helps you focus on the risks that really matter in a particular workplace – the ones with the potential to cause real harm. Workers and others have a right to be protected from harm caused by a failure to take reasonable control measures. The following four steps are recommended:

Identify the hazards by looking at what could reasonably be expected to cause harm, ask employees or their representatives what they think, obtain advice from trade associations or publications on health and safety, check manufacturer's instructions or data sheets for chemicals and equipment as they can be very helpful in spelling out the hazards and putting them in their true perspective, review accident and ill-health records, think about long-term hazards to health (e.g. high levels of noise or exposure to harmful substances) as well as safety hazards etc.

Identify who may be harmed and how by identifying how groups of people might be harmed i.e. what type of injury or ill health might occur.

Evaluate the risks and decide on precautions by doing everything 'reasonably practicable' to protect people from harm i.e. by looking at how things are done, what controls are in place and how the work is organised and comparing this against good practice to see if more can be done to bring practices up to standard. Consider if the hazard can be got rid of all together, and if not how can the risks be controlled so that harm is unlikely, e.g. try a less risky option (e.g. switch to using a less hazardous chemical); prevent access to the hazard (e.g. by guarding); organise work to reduce exposure to the hazard (e.g. put barriers between pedestrians and traffic); issue personal protective equipment (e.g. clothing, footwear, goggles etc.); and provide welfare facilities (eg first aid and washing facilities for removal of contamination).

Record the findings by writing down the findings of the risk assessment.

E4.4.2 The contractor shall ensure that as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated and addressed in the risk assessment.

E4.4.3 The contractor shall require a competent person to prepare a fall protection plan in compliance with the requirements of the Construction Regulations.

E4.4.4 Notwithstanding the provisions of the fall protection plan, the contractor shall ensure that:



- (a) all unprotected openings in floors, edges, slabs, hatchways and stairways are adequately guarded, fenced or barricaded or that similar means are used to safeguard any person from falling through such openings;
- (b) no person works in an elevated position, unless such work is performed safely as if working from a scaffold or ladder;
- (c) notices are conspicuously placed at all openings where the possibility exists that a person might fall through such openings;
- (d) fall prevention and fall arrest equipment is:
  - (i) suitable and of sufficient strength for the purpose or purposes for which it is being used having regard to the work being carried out and the load, including any person, it is intended to bear; and
  - (ii) securely attached to a structure or plant and the means of attachment thereto is suitable and of sufficient strength and stability for the purpose of safely supporting the equipment and any person who is liable to fall; fall arrest equipment is only used where it is not reasonably practicable to use fall prevention equipment; and
- (e) suitable and sufficient steps are taken to ensure, as far as is reasonably practicable, that in the event of a fall by any person, the fall arrest equipment or the surrounding environment does not cause injury to the person.

E4.4.5 Where roof work is being performed on a construction site, the contractor shall ensure that it is indicated in the fall protection plan that:

the roof work has been properly planned;

the roof erectors are competent to carry out the work;

no employees are permitted to work on roofs during inclement weather conditions or if weather conditions are a hazard to the health and safety of the employees;

prominent warning notices are to be placed where all covers to openings are not of sufficient strength to withstand any imposed loads and where fragile material exists;

the areas mentioned in paragraph (d) are to be barricaded off to prevent persons from entering;

suitable and sufficient platforms, coverings or other similar means of support have been provided to be used in such a way that the weight of any person passing across or working on or from fragile material is supported; and there is suitable and sufficient guard-rails or barriers and toe-boards or other similar means of protection to prevent, so far as is reasonably practicable, the fall of any person, material or equipment.

E4.4.6 The contractor shall ensure that:

- (a) all reasonably practicable steps are taken to prevent the uncontrolled collapse of any new or existing structure or any part thereof, which may become unstable or is in a temporary state of weakness or instability due to the carrying out of construction work;
- (b) no structure or part of a structure is loaded in a manner which would render it unsafe; and

- (c) specification data prepared by the designer of the structure is taken into account in the risk assessment;

Note: The specification data provided by the designer should outline known or anticipated dangers or hazards relating to the works and make available all information required for the safe execution of the work. It should provide as relevant, geotechnical information (or make reference to reports provided in the site information), the loading the structure is designed to withstand, the methods and sequence of construction.

**E4.5 Health and safety plans**

- E4.5.1 The contractor shall prior to commencing the works to which this specification applies, submit to the employer for approval a suitable and sufficiently documented health and safety plan, based on this specification and the risk assessment that is conducted.
- E4.5.2 The health and safety plan shall as a minimum provide:
  - (a) the information contained in Table 1 in respect of each of the hazards associated with work falling within the scope of the contract (see Figure 1); and

Table 1: Example of the format of a health and safety plan

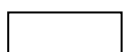
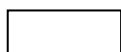
What are the hazards?	Who might be harmed and how?	What are the safe work procedures for the site?	What further action is necessary (monitoring and review)?	Action by whom	Action by when

- (b) an outline of the manner in which the contractor intends complying with the requirements of this specification.

- E4.5.3 The contractor shall discuss the submitted health and safety plan with the employer’s representative, modify such plan in the light of the discussions and resubmit the modified plan for approval.
- E4.5.4 The contractor shall apply the approved health and safety plan from the date of commencement of and for the duration of the works to which this specification applies.
- E4.5.5 The contractor shall conduct periodic audits for compliance with the approved health and safety plan at intervals agreed upon with the employer, but at least once every month.
- E4.5.6 The contractor shall update the health and safety plan whenever changes to the works are brought about.

**E4.6 Subcontractors**

- E4.6.1 The contractor may only subcontract work in terms of a written subcontract and shall only appoint a Sub-contractor should he be reasonably satisfied that such a Sub-contractor has the necessary competencies and resources to perform the work falling within the scope of the contract safely. Such a subcontract shall require that the Sub-contractor shall:
  - (a) co-operate with the contractor as far as is necessary to enable both the contractor and Sub-contractor to comply with the provisions of the Act; and



- (b) as far as is reasonably practicable, promptly provide the contractor with any information which might affect the health and safety of any person at work carrying out work or any person who might be affected by the work of such a person at work or which might justify a review of the health and safety plan.
- E4.6.2 The contractor shall provide any Sub-contractor who is submitting a tender or appointed to perform a sub-contract falling within the scope of the contract, with the relevant sections of this specification and associated specification data which might be pertinent to the sub-contract.
- E4.6.3 The contractor shall take reasonable steps as are necessary to ensure:
- (a) co-operation between all Sub-contractors to enable each of those Sub-contractors to comply with the requirements of the Act and associated regulations; and
  - (b) that each Sub-contractor's health and safety plan is implemented.
- E4.6.4 The contractor shall conduct periodic audits for compliance with the approved health and safety plan of each and every Sub-contractor working on the site at intervals agreed upon with such contractors, but at least once per month.
- E4.6.5 The contractor shall stop any contractor from executing construction work which is not in accordance with the contractor's or Sub-contractor's health and safety plan for the site or which poses a threat to the health and safety of persons.
- E4.6.6 The contractor shall ensure that where changes to the works occur, sufficient health and safety information and appropriate resources are made available to the Sub-contractor to execute the work safely.
- E4.6.7 The contractor shall ensure that:
- (a) every Sub-contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site;
  - (b) potential Sub-contractors submitting tenders have made provision for the cost of health and safety measures during the construction process; and
  - (c) every Sub-contractor has in place a documented health and safety plan prior to commencing any work on site which falls within the scope of the contract.
- E4.6.8 The contractor shall receive, discuss and approve health and safety plans submitted by Sub-contractors.
- E4.6.9 The contractor shall ensure that all Sub-contractors are informed regarding any hazard as stipulated in the risk assessment before any work commences, and thereafter at such times as may be determined in the risk assessment.
- E4.6.10 The contractor shall reasonably satisfy himself that all employees of Sub-contractors are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment. The contractor shall satisfy himself and ensure that all Sub-contractor employees deployed in the site are:
- a) informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the risk assessment; and
  - b) issued with proof of health and safety induction training issued by a competent person and carry proof such induction when working on site.

#### **E4.7 Reporting of incidents**

The contractor shall notify the employer's representative of any incident as soon as possible after it has occurred and report such incidence to an inspector.

#### **E4.8 Administration**

##### **E4.8.1 Notification of intention to commence construction work**

The contractor shall notify the Provincial Director of Labour in writing using a form similar to that contained in Annexure A of the Construction Regulations issued in terms of the Act before construction work commences and retain a copy of such notification in the health and safety file where such work:

involves the demolition of a structure exceeding a height of 3m;

involves the use of explosives to perform construction work;

involves the dismantling of fixed plant at a height greater than 3m;

exceeds 30 days or will involve more than 300 person days of construction work; and includes:

- (a) excavation work deeper than 1m; or
- (b) working at a height greater than 3 m above ground or a landing.

##### **E4.8.2 Health and safety file**

**E4.8.2.1** The contractor shall maintain on site a health and safety file on site which contains copies of the following, as relevant:

- (a) the notification made to the Provincial Director of Labour in terms of 4.4.1;
- (b) the letters of appointment of health and safety representatives;
- (c) the minutes of all health and safety meetings;
- (d) a comprehensive and updated list of all the Sub-contractors (nominated, selected or domestic) employed on site by the contractor, indicating the type of work being performed by such Sub-contractors;
- (e) a copy of each and every subcontract agreement;.
- (f) the contractor's health and safety plan;
- (g) the health and safety plans of all the contractor's Sub-contractors who are required to provide such plans;
- (h) the recommendations made to the contractor by the health and safety committee referred to in 4.2.3
- (i) any report made to an inspector by the health and safety committee referred to in 4.2.3; and

- (j) the findings of all audit reports made regarding the implementation of the contractor's or a Sub-contractor's health and safety plan;
- (k) proof that the contractor and every Sub-contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer;
- (l) the inputs of the safety officer, if any, into the health and safety plan;
- (m) a copy of risk assessments made by competent persons;
- (n) details of induction training conducted whenever it is conducted;
- (o) proof of all Sub-contractor's induction training whenever it is conducted;
- (p) letters of appointments for competent persons to supervise prescribed activities;
- (q) proof of the following where suspended platforms are used:
  - (i) a certificate of system design issued by a professional engineer, professional certificated engineer or a professional engineering technologist;
  - (ii) proof of competency of erectors;
  - (iii) proof of compliance of operational design calculations with requirements of the system design certificate;
  - (iv) proof of performance test results;
  - (v) sketches indicating the completed system with the operational loading capacity of the platform;
  - (vi) procedures for and records of inspections having been carried out;
  - (vii) procedures for and records of maintenance work having been carried out;
  - (viii) proof that the prescribed documentation has been forwarded to the provincial director;
- (r) records of the register of inspections made by a competent person immediately before and during the placement of concrete or any other load on formwork; and
- (s) the names of the first aiders on site and copies of the first aid certificates of competency.

E4.8.2.2 The health and safety file shall be made available for inspection by any inspector, Sub-contractor, employer's representative, employer's agent, health and safety representative or employee of the contractor upon the request of such persons.

E4.8.2.3 The contractor shall hand over the health and safety file to the employer upon completion of the contract together with a record of all drawings, designs, materials used and other similar information concerning the completed structure.

**E4.9 First aid, emergency equipment and procedures**

The contractor shall where more than five employees are employed at a workplace, provide a first aid box or boxes at or near the workplace which shall be available and accessible for the treatment of injured persons at that workplace. Such first aid boxes shall contain suitable first aid equipment.

The contractor shall ensure that where there are more than 10 employees employed on the site that for every group of up to 50 employees at that workplace, at least one person is readily available during normal working hours, who is in possession of a valid certificate of competency in first aid.

**C3.5.2 ENVIRONMENTAL SPECIFICATIONS**

This part of C3.5 Management contains specifications for Environmental matters not covered by C3.4 Construction Specifications.

The number of each clause in this specification is prefixed with an F to differentiate these clauses and items.

**SECTION F1000 : ENVIRONMENTAL MANAGEMENT**

**F1001 SCOPE**

The Contractor is required to comply with the requirements of the detailed EMP throughout construction.

The following are standardised additional specifications applicable. They are intended to assist the appointed Contractors to fulfill the environmental requirements of the Project. The objective of the EMP is to ensure that the potential impacts upon the environment are minimised, and that upon completion of each section of work the area is left in a clean and sustainable condition.

Overall the environmental impacts of the Project are considered to be low as long as the listed procedures are followed. These are given in the EMP.

The Contractor is advised that there are cost implications to the EMP and these must be factored into the tendered price.

**F1002 ENVIRONMENTAL MANAGEMENT PLAN**

**F2.1 Objectives**

The prime objective of the EMP is to minimise or avoid significant environmental impacts by using a pro-active approach and planning procedures.

The second objective is to have a plan in place to rehabilitate areas that have been impacted upon and, thirdly,

To have a plan in place for emergency situations that arise and are detrimental to the environment e.g. fuel or bitumen spills.

The Contractor will be responsible for the day-to-day implementation of the EMP, by himself and all other Sub-contractors. During the course of construction regular compliance audits will be undertaken. This environmental auditing will be conducted by qualified environmental practitioners.

**F2.2 Environmental Control**

The Contractor will oversee the environmental aspects of the construction phase of the Project in consultation with the Engineer.

The Contractor will report back to the bi-weekly site meetings with regards to compliance to the environmental specifications.

### **F2.3 Environmental Awareness Programme**

The Engineer will implement an Environmental Awareness Programme for the Contractor, his staff, Sub-contractors and all people working on the Project. The initial session will be immediately prior to construction commencing.

### **F2.4 Method Statements**

The Contractor shall submit written method statements for activities that are identified by the Engineer, as being potentially harmful to the environment, or for work that is to be undertaken in areas identified as being environmentally sensitive.

Such activities include dewatering of excavations, pumping, working with cement, erection of construction camps and fuel stores, etc.

The Method Statement shall cover applicable details with regard to:

- construction procedures,
- materials and equipment to be used,
- getting the equipment to and from site,
- how the equipment/ material will be moved while on site,
- how and where material will be stored,
- the containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur,
- timing and location of activities,
- compliance/ non-compliance with the Specifications, and
- any other information deemed necessary by the Engineer.

Method statements shall be submitted at least 7 days prior to commencing work on the activity to give the Engineer time to study the method statement and consult with contractor and specialists and to obtain written approval of the method statements. The Contractor shall not commence on that activity until such time as the method statement has been agreed to in writing by the Engineer. This will be done within this 10 day period.

Any changes required to the method statements once construction has commenced must be agreed upon in writing with the Engineer before being instituted.

### **F2.5 Working Areas**

Regardless of the extent of the work, the following applies to all of these areas:

- All materials must be stockpiled or stored in a designated area (at each site) avoiding sensitive areas.
- No materials must be left on site once work is completed neither may they be dumped at any other place on site.
- Litter bins and containers for waste materials must be provided by the Contractor at each site. Bins should be weatherproof and scavenger proof.
- All waste must be placed in the bins and containers. No waste may be left lying on the site.
- Visible anti-litter signs must be displayed around the waste collection points and all employees must be encouraged to observe site rules pertaining to solid waste management practices. A



concerted effort should be made to collect and dispose of materials suitable for recycling, separately from the other solid waste.

- No burning or burial of waste is permitted.
- Any soils contaminated by the contractor must be removed or rehabilitated. If a significant amount of soil has to be removed fresh soil must be imported and the site rehabilitated by grading and planting vegetation.
- All waste must be removed to an authorised landfill site, or taken to a facility for recycling.
- Any excess road building materials must either be:
  - taken to a site for stockpiling and future re-use,
  - used for localised rehabilitation, or
  - removed from site by the contractor for disposal.
- The contractor shall provide waste bins for solid waste collection and storage. Such bins should be placed at designated areas within the site. The refuse collected from the site must be removed for landfill disposal at least once a week.
- Vehicles may not park in the road reserve except with the prior permission of the Engineer.
- Every care should be taken to avoid damaging vegetation or land when vehicles are in use.
- Fuel tanks, pumps, and all equipment using oil, diesel, etc. must have drip trays. The drip trays must have sufficient capacity to contain liquids that will spill in the case of failure of the tanks, etc. The waste liquids taken from the trays must be disposed of at a landfill which permits disposing of liquid wastes.
- Only emergency repairs to vehicles and equipment may take place on site. Where emergency repairs take place it is the responsibility of the contractor to ensure that all waste (e.g. spare parts and oils) are removed from site as soon as possible. All other repairs must take place at a yard off-site, where facilities are suitable and waste facilities are appropriate.
- Whenever practical a tarpaulin should be laid down, prior to emergency repairs taking place, to protect the environment from contamination.
- No natural vegetation may be gathered, removed or destroyed in the course of the Project, except where agreed to by the landowner.
- No hunting is permitted.
- Fires are prohibited.
- Erosion control measures must be implemented if the need arises.
- Pollution of water courses by any means must be avoided.
- No defacement of any natural or other features will be allowed; this includes markings for road works, unless markings are restricted to the road surface.
- Dust suppression measures should be implemented if and when required.
- Chemical toilets must be provided at all sites and must be within walking distance of the workers. They must be serviced on a regular basis in order to be kept clean and hygienic. The

toilets must be placed in a sheltered place and should be locked after working hours if they are outside a camp area. Alternative arrangements to use existing toilets with owners' written consent may be allowed when submitted in writing.

- All waste from toilets must be disposed of at a permitted landfill or waste treatment works.

## **F2.6 On-site Workers Camp**

### **F2.6.1 Site Camp**

The campsite selection should be carried out in consultation with the landowner or relevant authority.

The site must be selected with due regard to the environment. Due care should be taken to avoid areas where sensitive vegetation and habitats occur.

When the site selection process has been completed, the contractor will define the boundaries of the site and erect a fence with a controlled access around it if practical.

All activities associated with the camp must be restricted to the demarcated area.

It is the responsibility of the contractor to ensure the safety of all personnel within the boundaries of the site. The contractor should have an on-site contingency plan detailing measures to be observed in the case of a health, safety or environmental emergency.

The contractor should ensure that all employees, employed by him and/or employed by Sub-contractors, have a clear understanding of safety regulations and procedures.

### **F2.6.2 Water, wastewater, and storm water**

Site occupants must have access to safe drinking water.

If water is stored on site a clear distinction should be made between drinking water and multi-purpose water storage facilities.

All water used on site must be taken from a legal source and comply with recognised standards for potable and other uses.

Wastewater that is contaminated with soaps, detergents and other undesirable materials, such as grease and oils, should be collected in conservancy tanks and disposed of safely in a wastewater treatment facility.

It is illegal to discharge water into a public stream if the quality does not conform with required health standards.

In all camps storm water must be managed to prevent erosion.

Run-off will be diverted to control ponds so that silt may settle and any pollutants are trapped.

Subsequently, any pollutants must be treated, or removed and disposed of at a permitted landfill site or recycling facility.

All materials should be protected from the rain to prevent them being washed into stormwater channels.

### **F2.6.3 Ablution Facilities**

The contractor shall provide proper and adequate sanitary facilities for all site employees.

These facilities shall be maintained in good and working condition at all times. Odours emanating from these facilities should be controlled within acceptable levels.

### **F2.6.4 Fires and Cooking Facilities**

Fires will not be allowed.

The contractor must supply cooking facilities that are suitable for the environment and are not liable to cause the outbreak of fires. Fire-fighting equipment must be supplied by the Contractor at suitable locations.

## **F2.7 Plant and Equipment Storage Facility**

### **F2.7.1 Plant**

At the end of the shift all plant should be driven or transported back to the campsite for proper and safe overnight storage.

The contractor should ensure that equipment left elsewhere is stored in a manner that will not impact negatively upon the environment.

The plant should be regularly inspected for fuel and oil leaks that may be harmful to the environment, and/or aquatic life if washed into a stream or river.

### **F2.7.2 Hazardous Materials**

Hazardous materials should be stored under lock and key in designated areas with properly displayed and visible warning signs.

All storage of hazardous materials must comply with legislation and regulations.

## **(c) F1003 REHABILITATION**

Upon completion of each section of work the site must be cleared of all equipment, waste and any rehabilitation work must be undertaken. This may include local grading of soils and re-vegetation where sites have been disturbed.

Immediately after the demolition of the campsite, the contractor shall restore the site to its original state, paying particular attention to its appearance relative to the general landscape.

It is imperative that any potential erosion problems are addressed. This may require subsequent site visits to monitor the efficacy of erosion control measures.

## **(d) F1004 EMERGENCY PLANS**

The onus is on the contractor to assess the potential risks to the environment as a result of the Project. For example, accidental spillage of materials may pollute the soil or any water body.

The contractor must draw up a suitable emergency plan to contain such pollution. The emergency plans and procedures must be taught to all the workers on site, so that everyone is prepared to cope with an emergency.

Appropriate equipment must be available to carry out the emergency plans.

**(e) F1005 ENVIRONMENTAL AUDITING AND PENALTIES**

On a regular basis, a qualified auditor will carry out a site audit to ascertain and verify the contractor's level of compliance with the requirements of the EMP.

Transgression will be treated as a contravention of the contractual agreement.

Deviation from these prescribed requirements will be met with penalties that are intended to enforce compliance.

It is a requirement that the contractor keep concise records of mitigatory measures undertaken at each site to minimise environmental impacts.

Any emergency situations that impact upon the environment should be recorded by the contractor together with the action that was taken to rehabilitate and remediate the site.

A copy of all completed environmental audits will be given to the contractor and the employer by the auditor.

Any public complaints regarding the environment must be recorded and discussed with the Engineer to determine an appropriate course of action.

The contractor will be responsible for all costs incurred in the rehabilitation of sites.

The contractor will be responsible for all costs incurred where emergency procedures are implemented to deal with accidents that impact upon the environment.

The contractor will be responsible for ensuring that all procedures required to rehabilitate all sites are implemented.

If third parties are called to the site to perform clean up and rehabilitation procedures, the contractor will be responsible for all costs.

Penalties will be imposed for contravention of the EMP, as specified in the EMP:

**PART C4: SITE INFORMATION**

**Information Only**

All data and descriptions contained in this section of the contract documents are given for information purposes only and cannot be interpreted as prescriptive despite the fact that the text may give the opposite perspective. If any conflict arises between the content of this section and other sections of the contract documents, the latter take precedence.

**C4.1 LOCALITY PLAN**



**C4.2 CONDITIONS ON SITE**

No geotechnical and topographical survey have been commissioned for the site

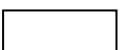
**C4.3 OCCUPATIONAL HEALTH & SAFETY SPECIFICATIONS**

To Be Confirmed.

**C4.4 ENGINEER'S ROOF REPORT**

Attached.

**PART C4.4: ENGINEER'S ROOF REPORT**



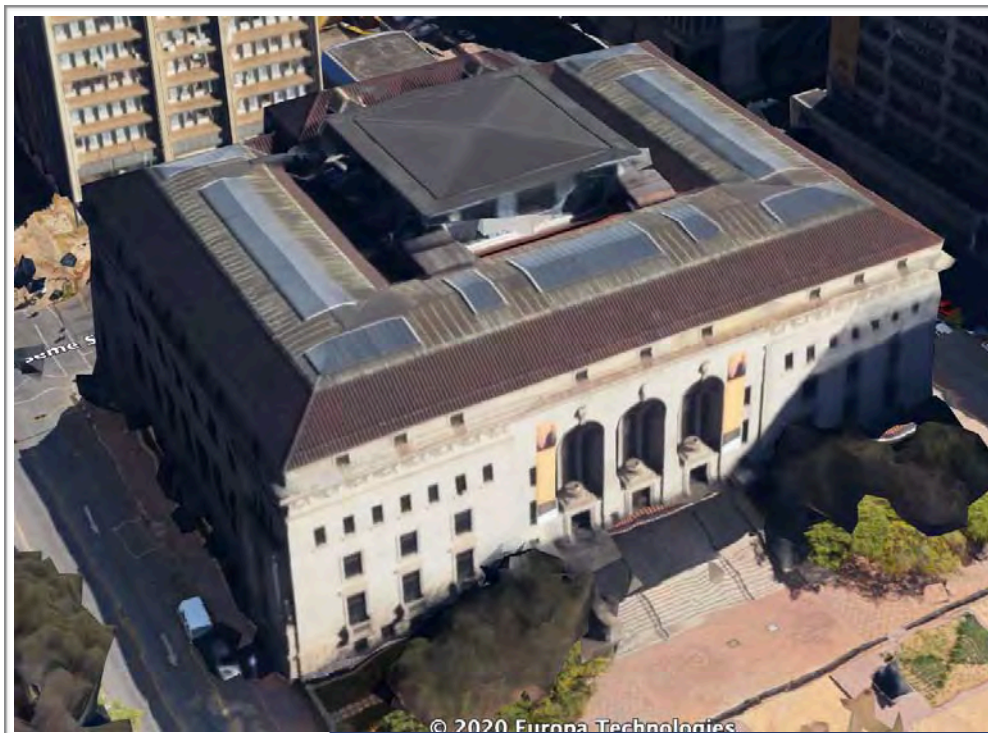


# JOHANNESBURG CITY LIBRARY

## ROOF REPAIRS

TECHNICAL SPECIFICATION

MARCH 2020



Prepared by TVNA Consulting Engineers

173 Saint Georges Road

Observatory 2198

T +27 (0)11 4873467

F +27 (0)86 667 3938

## TABLE OF CONTENTS

1. EXECUTIVE SUMMARY.....	3
2. GENERAL INFORMATION .....	4
2.1. Client's Details	4
2.2. Consulting Engineer's Details	4
3. TERMS OF REFERENCE.....	5
3.1. SITE INFORMATION	5
3.2. SCOPE OF WORKS	6
4. TECHNICAL SPECIFICATIONS .....	12
4.1. Flat slab roof	12
4.2. Sheet metal roof	12
4.3. Clay tiled roof	13
4.4. Increase Boxgutter profile & stormwater drainage	13
5. DRAWINGS.....	14
6. SCHEDULE OF QUANTITIES .....	15
7. HEALTH AND SAFETY .....	16
8. HERITAGE REQUIREMENTS .....	18
8.1. PHRA-G Conditions	18
8.2. General	19
8.3. Demolition	19
8.4. Woodwork and Timber	19
9. EVALUATION CRITERIA .....	19
ANNEXURES:.....	20



## 1. EXECUTIVE SUMMARY

MAP AFRICA Consulting Engineers appointed TVNA Consulting Engineers to investigate the condition of the roof waterproofing, and to develop a solution to address the present leaking and damage to internal finishes.

The site is located between Albertina Sisulu, Pixley Ka Isaka Seme, Helen Joseph and Simmonds streets in Johannesburg CBD.

The building is classified as a heritage site, and is subjected to the restrictions, controls and approvals of the Provincial Heritage Resources Authority - Gauteng (PHRA-G). An application was lodged with PHRA-G for the proposed work, and is subject to their approvals and conditions.

The work comprises of the following workgroups, namely:

- a) Concrete flat roofs to be waterproofed,
- b) Pitched tiled clay roofs, removed, seal substrate and relay.
- c) Pitched smooth metal roofs to be waterproofed.
- d) Increase box gutter size.
- e) Remove and replace stormwater down pipes with larger diameter pipes.
- f) Repair or replace timber beams in roof.

All necessary safety measures as required by the OHS Act are to be included and provided.

## 2. GENERAL INFORMATION

### 2.1. Client's Details

Johannesburg Development Agency  
Address: 3 Helen Joseph Street  
Newtown  
Johannesburg  
2000

Telephone: 011-46887800  
Email:

### 2.2. Consulting Engineer's Details

LEAD CONSULTANT: MAP AFRICA Consulting Engineers

Address: 1<sup>st</sup> Floor Aptus House  
Riverworld Park  
53 Autumn Road  
Rivonia  
2128

Telephone: 011-2343819  
Email: sidesh@mapafrica.co.za

Responsible Person: Sidesh Sirputh

TVNA Consulting Engineers

Address: 173 St Georges Road,  
Observatory  
Johannesburg  
2198

Telephone: 011-4873467  
Fax: 0866831358  
Email: theo@masandetvna.co.za

Responsible Person: T.E. van Niekerk  
Registration Number: 950627

### 3. TERMS OF REFERENCE

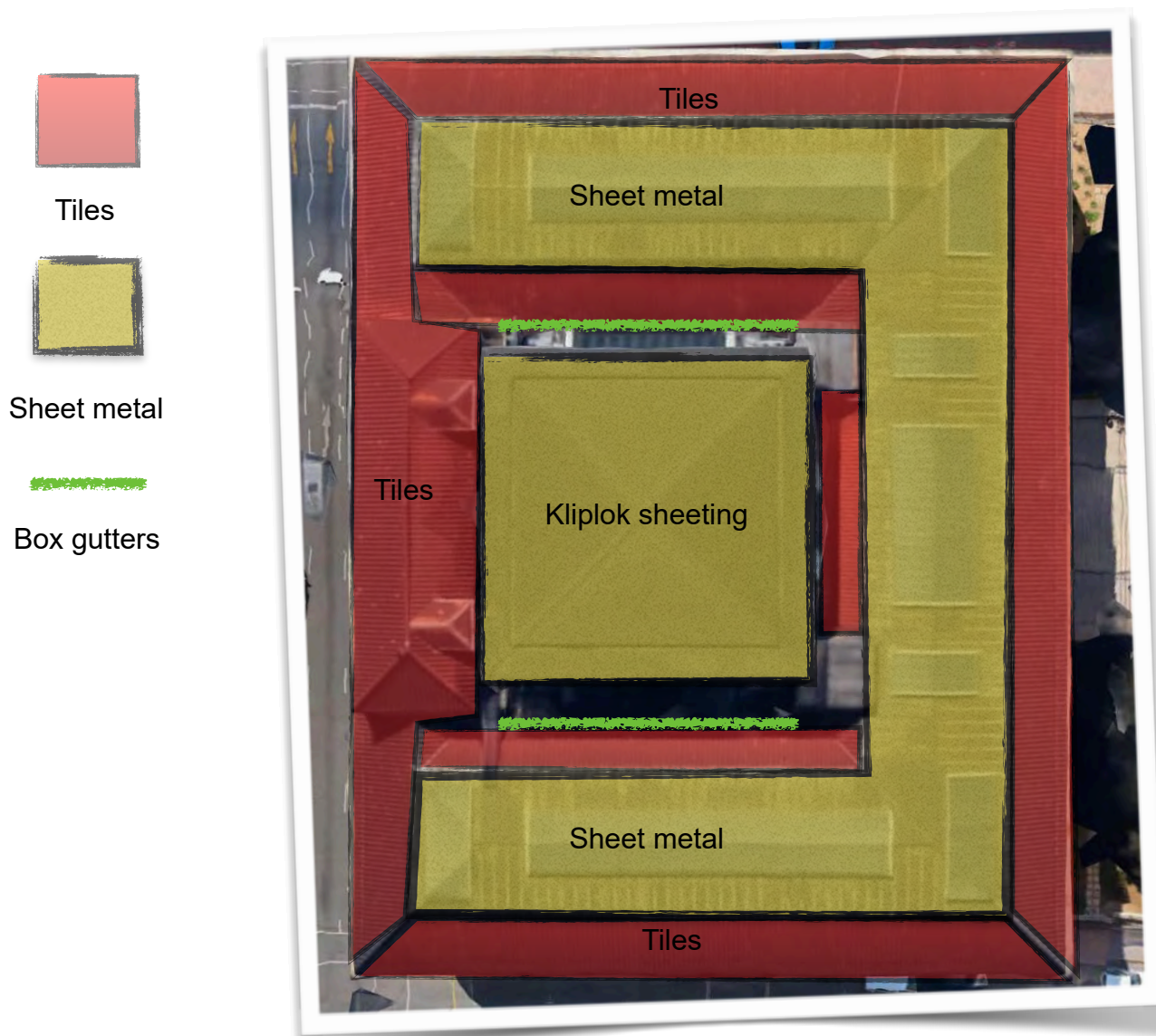
MAP AFRICA Consulting Engineers appointed TVNA Consulting Engineers to investigate the condition of the roof waterproofing, and to develop a solution to address the present leaking and damage to internal finishes. This is part of a larger upgrade of the CITY LIBRARY by MAP AFRICA.

The building is classified as a heritage site, and is subjected to the restrictions, controls and approvals of the Provincial Heritage Resources Authority - Gauteng (PHRA-G). An application was lodged with PHRA-G for the proposed work, and is subject to their approvals.

#### 3.1. SITE INFORMATION

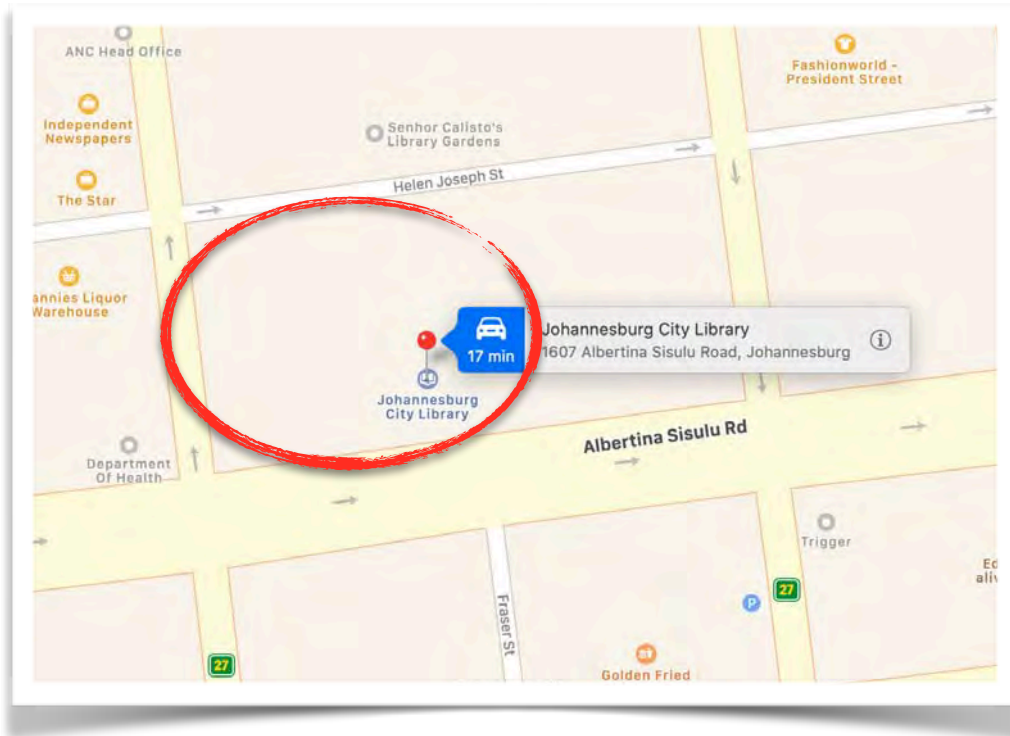
##### 3.1.1. SITE DESCRIPTION

The site comprises one building with a collection of roofs in terms of heights, finishes and construction. The roofs are grouped into groups, namely clay tiled pitched roofs, and sheet metal pitched roofs. Refer to the schematic below for the grouping clarification.



### 3.1.2. LOCALITY MAP

The site is located between Albertina Sisulu, Harrison, Helen Joseph and Rissik streets.



### 3.2. SCOPE OF WORKS

The project comprise the following main work groups:

- Temporary access scaffolding and safety structures,
- Treatment of the concrete flat roofs, increase the box gutter cross section, and related elements,
- Treatment of the clay tiled pitched roofs and related elements,
- Treatment of the copper sheet pitched roofs and related elements.
- Replace existing stormwater down pipes with larger diameter pipes.
- Replace and repair timber beams in roof,

The groups are detailed further as follows:

3.2.1. Concrete roofs

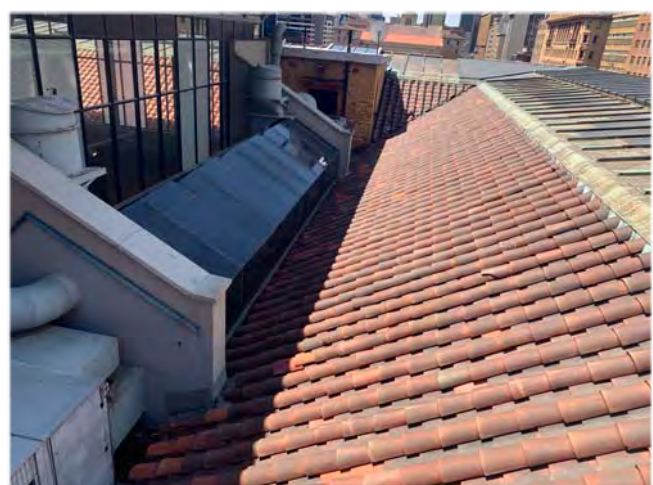


The scope of work for this work group comprise the following:

- a) Erect safety measures as required,
- b) Strip existing torched-on waterproofing and dispose,
- c) Demolish screeds where falls are insufficient,
- d) Apply new screeds to improved falls,
- e) Clear all fullbore drains, and if blocked, inspect by camera for repairs,
- f) Apply new spray-on waterproofing coating with adequate side laps,
- g) Seal around all roof skylights.



3.2.2. Clay Tiled roofs

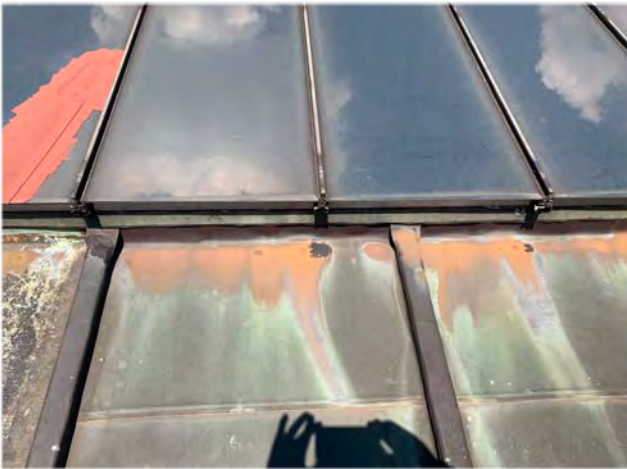


The scope of work for this work group comprise the following:

- a) Erect safety measures as required, including all approvals from local council if using pedestrian walkway space,
- b) Strip existing clay tiles, store the clay tiles for re-use,
- c) Clean, inspect, repaint and seal existing metal sheeting underneath tiles,
- d) Install new battens to metal sheeting for new tiles,
- e) If excessive breaking of existing clay tiles, replace with new clay tiles, tile type match appearance of old clay tiles as approved by PHRA-G, **clay "roman" type tile** (also referred to as an "up an over" tile). *Note the clay tiles must be imported, and will require lead time of approximately 8-10 weeks.*

- f) Seal all valleys, hips and ridges,
- g) Paint and refurbish all gutters and downpipes.
- h) Reinstate lightning conductors in place.

3.2.3. Metal Roofs



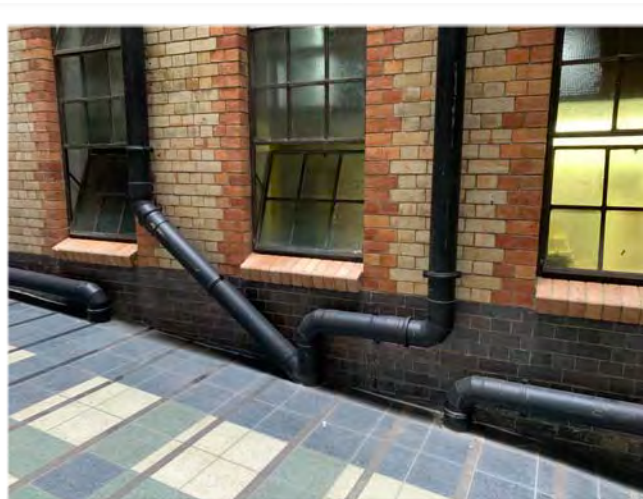
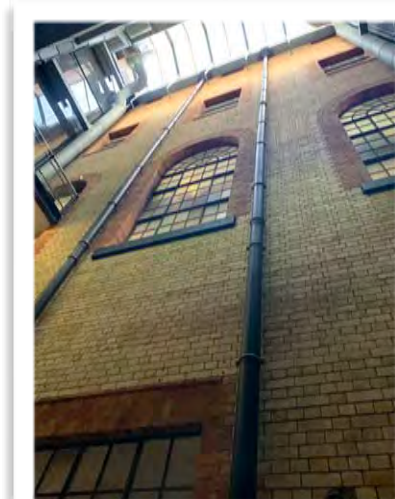
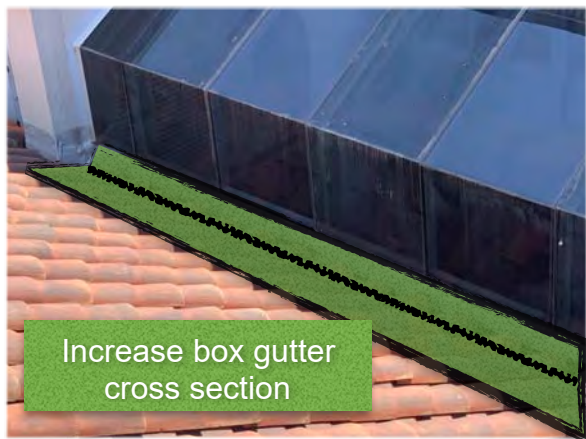
The scope of work for this work group comprise the following:

- a) Erect safety measures as required, including all approvals from local council if using pedestrian walkway space,
- b) Strip existing waterproofing seals and coatings, and dispose,
- c) Clean, inspect, prime, repaint and seal existing metal sheeting,
- d) Replace all loose flashing, screws and fixings,
- e) Seal around existing skylights.



- f) Seal all valleys, hips and ridges,
- g) Reinstate lightning conductors in place where applicable.
- h) Install fall arrest lines along roof ridge for permanent maintenance access.
- i) Install new steel walkways, stairs and cat ladders for maintenance access.

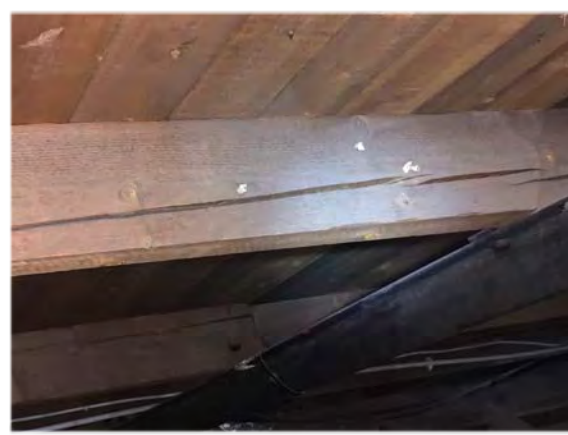
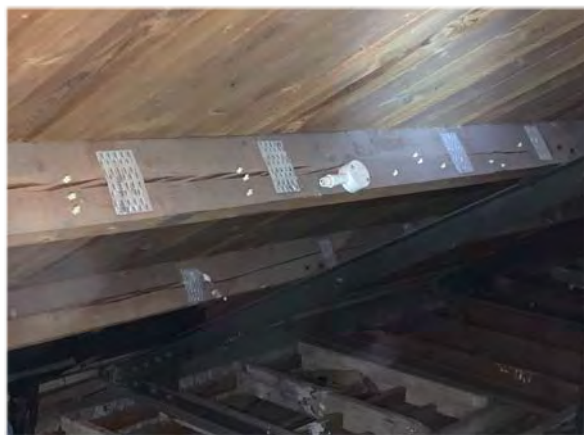
3.2.4. Box Gutter & Stormwater Downpipes





- a) Cut back four rows of tiles
- b) Reline the existing gutter to larger cross section. The maximum achievable depth will be up the glass shopfront height, with 150mm extra onto the sloped roof.
- c) Relay tiles to new dimensions.
- d) Replace existing fullbore outlet with larger diameter full bores.
- e) Increase existing Dropbox outlet to match new fullbore and downpipes sizes. It is important to retail the appearance of the existing dropbox for heritage purposes.
- f) Replace existing PVC downpipes with new 200mm dia PVC downpipes (painted black), complete with new brackets, etc
- g) Introduce two new downpipes to drain the concrete flat roof sections (under chillers) complete with fullbore inlets. It is not necessary to copy the drop boxes, as these inlets will be concealed.
- h) Ensure proper discharge at stormwater release points. Existing pipes discharge into existing stormwater drains, and free flowing water must be ensure. The contractor will have to expose and investigate the drainage scenario, and any improvements will be discussed and agreed with the Engineer.
- i) A camera inspection of the existing stormwater pipes must be done to ensure full functionality.
- j) Install two new fullbore outlets on ground level, at lowest point of the floor, to enable draining the floor in case of flooding.

3.2.5. Repair or replace timber beams



- a) Inspect all roof timber beams for cracks.
- b) Repair moderately cracked beams with gang nail plates to match existing.
- c) Remove and replace severely cracked beams with new sections.
- d) Remove and replace localised water damaged tongue-and-groove boards.

## 4. TECHNICAL SPECIFICATIONS

### 4.1. Flat slab roof

The area where the rooftop chillers and other mechanical equipment is positioned is considered confined, with difficult accessible sections. Therefor an elastic spray-on product is required to ensure proper coverage throughout.

- Strip and dispose of existing waterproofing material.
- Remove all oils, grease or other contaminants by scrubbing, rinsing and cleaning to produce a water break-free surface. Abrade surfaces where necessary by etching, blasting or grinding.
- Inspect roof falls for proper drainage, and identify areas where screeds must be modified.
- Apply new screed to minimum 1% falls to outlets, with crystalline add-mixture to supplier's application. Internal corners should be covered to 50mm and external corners radiused to 25mm. All exposed brickwork, where the waterproofing is to be terminated, must be plastered to a smooth and true finish
- Apply a polyurea-polyurethane spray-on application waterproofing membrane, Stoncor Stonechem 441 or similar approved. (If any alternative is offered, comprehensive comparative specifications must be provided to demonstrate matching properties). Specifications attached in **Annexure A**
- **Lap all sides** to suppliers' directions along all balustrades, upstands and plinths. **Counter flash** all vertical terminations with a 100mm wide strip of Pro-Struct 680 Acrylic Flashing Liquid reinforced with Pro- Struct 599 membrane (as per the Technical Data Sheet of Pro-Struct 680). The top leading edge of the counter-flashing will be terminated in either a reglet of the substrate (Minimum of 6 x 6mm joint), or a brickwork joint.
- **Flood Test:** On completion of the waterproofing installation, the waterproofing contractor is to seal all outlets and flood test the area. A certificate or letter is to be obtained from the main contractor establishing that the waterproofing treatment was handed over in a watertight and workmanlike manner.

### 4.2. Sheet metal roof

This section covers all corrugated or flat metal roofs and sheeting, other than the sheeting under the clay tiles.

- Remove the existing waterproofing strips and membranes.
- Clean the metal substrate thoroughly ensuring all dust, loose debris and other contaminants are removed
- Inspect the roof for loose or missing screws, and replace and repair as necessary.
- Seal all joints, fixings and other potential areas of water ingress of Pro-Struct 203, reinforcing it with Pro-Struct 200 Membrane.
- Apply primer to suppliers specifications.

- Apply Stoncor Alumanation 301 or similar over ENTIRE surface.
- Refit new gutters and downpipes.
- Specifications attached in **Annexure A**

#### **4.3. Clay tiled roof**

- Remove the clay tiles. The clay tiles must be preserved and stored for re-use, and any broken tiles disposed.
- Thoroughly clean the metal substrate by degreasing and rinsing with clean potable water. Steel surface shall be cleaned to remove dirt, grease, oil, water, etc., and then very thoroughly blast cleaned. Mill scale, rust and foreign matter shall be removed completely.
- Finally, the surface shall be cleaned with a vacuum cleaner, clean dry compressed air or a clean brush. Any remaining traces of contamination shall show only as slight stains in the form of spots or stripes. The appearance of the prepared surface shall correspond to the prints designated Sa 2 1/2 of ISO Specification 8501-I specification.
- Install new 38mm x 38mm timber battens for new roof tiles to match existing.
- Prior to applying the waterproofing system, compatibility and adhesion tests of the proposed waterproofing system onto the metal substrate must be conducted to determine whether additional surface preparation is required.
- Apply Carboguard 545 Primer to the substrate, in strict accordance with the attached product data sheet.
- Apply Stonchem 441 to the primed substrate, reinforcing the system with Pro-Struct 599 over all joints, laps and fixings in the substrate.
- Install recovered tiles complete with all ridges, hips and valleys. Seal all ridges with cementitious grout to suppliers specifications. Where tiles shortage occurred, substitute with new Terracota tiles as per the specification.
- Specifications attached in **Annexure B**

#### **4.4. Increase Boxgutter profile & stormwater drainage**

- Strip all existing membranes and seals from joints.
- Shape and seal existing gutter to increase the cross section to maximum. The target is to increase the gutter to the shopfront height, plus 200mm free-board.
- Stop tiles short of box gutter profile to maximise gutter performance.
- Replace full bore outlets Saint Gobain 3530 domed vertical eared roof outlet, outlet 180mm dia.
- Remove existing metal drop boxes, and increase to new dimensions, and refit.
- Remove existing pvc downpipes, and replace with new 200mm dia downpipes, including new brackets, all painted black.
- Increase discharge points diameter to match new pipes.

- Install new Saint Gobain 3870 flat vertical outlet in existing floor, and connect to stormwater drainage.

## 5. DRAWINGS

No formal drawings are available on the project.

The contractor must submit sketches of their proposed access and safety system for approval by the Engineer and Client prior to commencing work.

## 6. SCHEDULE OF QUANTITIES

### PREAMBLE TO THE SCHEDULE OF QUANTITIES AND RATES

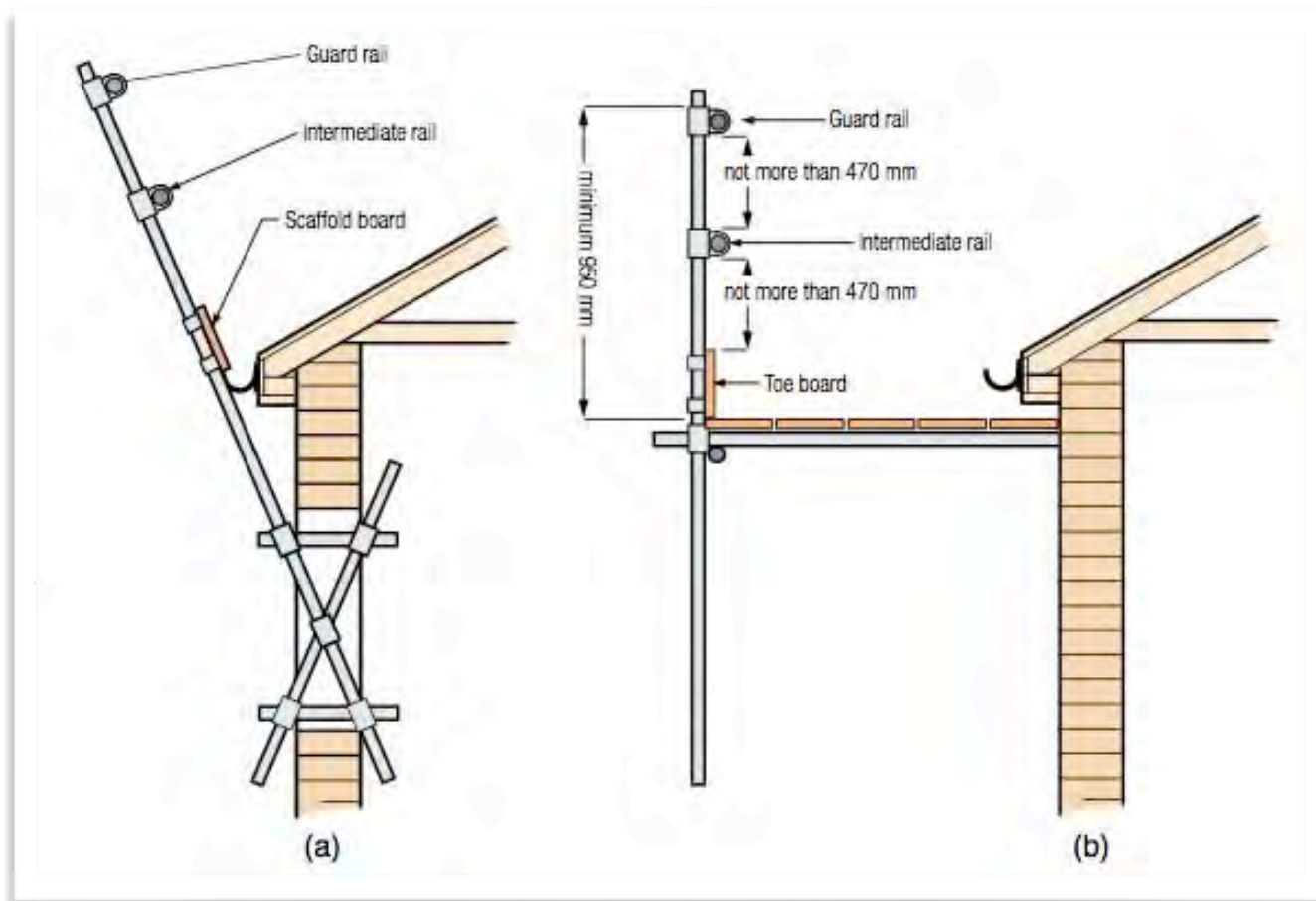
- a) The Standard Commercial Terms and Conditions, The Special Commercial Terms and Conditions, the Specifications (including the Project Specification), and any Drawings are to be read in conjunction with the Schedule of Quantities and Rates.
- b) The Schedule comprises items covering the Service Provider's profit and costs of general liabilities and of the design, manufacture, supply, installation and commissioning of temporary and permanent Works. The Proposer is at liberty to insert a rate of his own choosing for each item in the Schedule and any item against which no quantity (where applicable) or rate is entered will be considered to be covered by other items in the Schedule.
- c) The quantities and rates inserted in the Schedule are to be inclusive prices to the Employer for the work described under the several items. Such prices shall cover all costs and expenses that may be required in and for the Works, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the Tender is based. All rates and amount shall be nett, exclusive of Value Added Tax (VAT) and shall be carried to the summary page in their nett form. VAT will then be calculated on the total of the nett amounts.
- d) All quantities and rates as set forth and inserted in the Schedule and extended to the totals for each portion of the Schedule, shall be considered as being totally inclusive for the whole of the Works as stipulated, or as can reasonably be inferred from these Documents.
- e) All product guarantees are deemed to be included in the rates, and installation and application rates will include all necessary inspections and approvals to maintain guarantees.
- f) "Complete" as it is used in the Schedule means the complete system or unit as specified in the particular documents.
- g) Each item in the Schedule which is priced, shall be filled in black ink.
- h) All quantities shall be considered as final and sufficient for the work described. The Proposer shall satisfy himself as to the sufficiency of quantities but may not change quantities. Quantities shall be re-measured and payment shall be made according to the adjusted total only.
- i) In case of arithmetical errors in the multiplication of rates and quantities in the Proposal, the amount shall not be changed. In case of incorrect summation of amounts in the Proposal, the Lump Sum total shall remain fixed.

## 7. HEALTH AND SAFETY

Safety during construction is paramount, and the Contractor must adhere to the statutory construction regulations and other regulatory requirements.

The following serves as a guideline to the access and safety scaffolding:

- One point of entry will be allowed from street level. No access is allowed from inside the building.
- All roof structures must be inspected prior to erection of working platforms or scaffolding onto roof structures. Any discrepancies must be reported to the Engineer for assessment.
- Stacking of materials may only be done on roof sections able to withstand the load safely, and must be restricted to limit concentrated loads on the structure.
- **A secure means of entry and exit is essential.** A general access scaffold or tower scaffold (preferably of the stairway design) will be required to provide suitable access. A properly secured ladder is the minimum requirement for short term access.
- **Permanent security** guards or lockable gates will be required at the access point. Access to the site must be controlled and limited at all times.
- **Edge Protection Barriers:** All exposed roof edges to be enclosed with an edge protection barrier. Edge protection should include or be equivalent to:
  - a main guard rail at least 950 mm above the edge;
  - a toe board and brick guard where there is risk of objects being kicked off the edge of the platform; and
  - a suitable number of intermediate guard rails or suitable alternatives positioned so that there is no gap more than 470 mm.
  - Roof parapets may provide equivalent protection but if it does not, extra protection will be required as described above.
- **Crawl boards and Roof ladders:** On sloping roofs, roof workers should not work directly on tiles, as they do not provide a safe footing, particularly when they are wet. Use roof ladders and proprietary staging to enable safe passage across a roof. It must be designed for the purpose, of good construction, properly supported, and, if used on a sloping roof, securely fixed by means of a ridge hook placed over the ridge, bearing on the opposite roof or other support. It should be used in addition to eaves-level edge protection. *Gutters should not be used to support any ladder.*
- **Work platforms:** Adequate and secure work platforms from which to carry out the work are required where necessary.
- **Fall mitigation:** Providing adequate platforms and edge protection may not always be possible or reasonably practicable. If so, safety nets, soft landing systems, or other measures may be necessary to minimise the consequences of any potential injury. If nets are used it must be properly installed by competent riggers as close under the work surface as possible to minimise the distance fallen.



- **Personal fall arrest systems:** Devices such as harnesses with a sufficiently strong anchorage points are necessary throughout, the contractor must determine where the anchorage points should be, and clearly indicate it on site. The contractor will be responsible to monitor user discipline and active monitoring for compliance.
- **Falling material:** A tidy site must be maintained to prevent material which could fall from accumulating. Material may never be thrown from a roof or scaffold, and enclosed rubbish chutes are to be used if lowering material to the ground in containers is not possible. Rubbish chutes must discharge into skips to dispose of spoil material to spoil level.
- Public safety must be maintained throughout, and all scaffolding and pedestrian walkways must be barricaded to prevent accidental or unauthorised access. Where necessary, the contractor must obtain permission from council to barricade sidewalks.



## 8. HERITAGE REQUIREMENTS

The Contractor will be required to comply with, and adhere to, the requirements imposed by the **Provincial Heritage Resources Authority - Gauteng (PHRA-G)**, which are, but not limited to, the following:

### 8.1. PHRA-G Conditions

- **CAUTION** – Additional caution needs to be taken when working with heritage buildings as damage can often not be repaired and items cannot be replaced.
- **PROTECTION** – Sufficient care needs to be taken when working on the building knowing its historic and cultural significance. Allowance needs to be made for the protection of areas from damage and theft while working including areas used for the stockpiling of material and construction waste. This is particularly true for surfaces which are exposed and difficult to repair (natural stone, timber elements, clay roof tiles etc), important details and copper roofing elements. Where protection is used this should be made out of soft board or ply wood boards and must not be directly fixed to the area that is being protected. Corners of window frames, sandstone projections etc. should be protected from damage, particularly in high traffic areas. An ironmongery, fittings or materials temporarily removed to aid the construction process or for safe keeping from potential damage should only be done so with the express permission of the architect and heritage consultant. These should be individually labelled and packed for safe keeping and future reinstallation.
- **SAMPLES** – Samples of all work, methods of repair and restoration etc. need to be assessed and approved by the heritage architect prior to any work being undertaken. These should be prepared early on in the project (possibly even as part of the tender process) to allow for an assessment of weathering etc.
- **FINISHES** - All repairs and work undertaken should be done so as to match the colour, profile, specification and finish of the original.
- **WEATHER PROOF** – Existing buildings should be kept weather proof at all times to prevent water damage.
- A permit will be issued prior to commencement of any work, to be read in conjunction with the PHRA-G approved plans,
- A copy of the permit must be kept on site at all times,
- The permit is subject to a general appeal period of 14 days. The permit will be suspended should an appeal be received by PHRA-G within 14 days from the date of issuing of the permit.
- No work may be done during the appeal period, until the Appeals Committee heard the case and made a decision.
- An A3 copy of the approved permit must be displayed on the main street façade for the 14 days appeal period.
- The permit is valid for two years and not transferable.
- The issuing of the permit does not exempt the contractor from other statutory applications to local authorities.
- PHRA-G must be notified when the work is completed.



## **8.2. General**

- Additional caution needs to be taken when working with heritage buildings as damage can often not be repaired and items cannot be replaced.
- Movable or removable items that may be damaged or stolen during the construction process should be put into safe keeping and securely locked away. These should only be reinstalled after the completion of the project.
- No item is to be disposed of without approval of the professional team and heritage consultant.
- Any items found on site, regardless of their perceived value, should be put to one side to be assessed by the architect and heritage consultant prior to disposal.
- The site and building should be kept secure at all times.
- The buildings should be kept weather proof to prevent water damage.
- Vertical access to the roof (be it done internally or externally) should allow for the protection of existing surfaces and fittings from damage.

## **8.3. Demolition**

- No demolition is to take place without prior confirmation of its extents with the Engineer.
- Any fittings recovered during demolition are to be retained and are not to be disposed of without permission from the professional team and heritage consultant.
- Chasing/chopping of existing surfaces should be limited where ever possible. Where this needs to occur it should be away from any existing fittings and decorative wall finishes (such as tiles). The extents of all chasing / chopping must be confirmed with the professional team and heritage consultant prior to the start of work.

## **8.4. Woodwork and Timber**

- Woodwork should be protected from damage during construction.
- The balustrade of the staircase, should they be used for access, should be covered with soft board or similar covering to protect it from damage.

# **9. EVALUATION CRITERIA**

The tenders will be evaluated on the following criteria:

- a) Standard commercial compliance as per COJ Procurement Policy (submission of required statutory documentation, etc).
- b) Schedule of Quantities:
  - All line items to be priced,
  - No alterations to quantities,

- Arithmetic correctness,
  - Comparison of individual rates to check for unusual outliers,
  - Check for omissions.
- c) Technical experience and competency of tenderer.
- d) Products proposed if deviating from specification. NOTE: The tenderer must submit a comprehensive comparison with specified materials to demonstrate compliance and equivalent performance. The Engineer will not search through spec-sheets to find justification for alternative products.

## **ANNEXURES:**

- Annexure A: Material Specifications and Specsheets - STONCOR
- Annexure B: Material Specifications and Specsheets - ROOF TILES
- Annexure C: Heritage Mitigating Conditions

**ANNEXURE A**

**MATERIAL SPECIFICATIONS**

## POLYUREA-POLYURETHANE HYBRID LINING

### PRODUCT DESCRIPTION

Stonchem 441 is a 100% solids polyurea-polyurethane hybrid lining system applied at nominal thickness of 0.75 to 3.0mm, depending on conditions of use. This immersion grade lining provides durable, flexible, waterproof membrane that can withstand significant impact and abrasion. This system can be applied over a broad range of substrates and in varied environmental conditions. Stonchem 441 has very good resistance to wastewater, caustics and moderate concentrations of acids.

### USES, APPLICATIONS

- Wastewater treatment / storage
- Bulk tank farms
- Tank liners
- Chutes
- Parking structures
- Refrigerators / freezers
- Flexible deck flooring
- Interior walls and ceilings
- Secondary containment areas
- Waterproofing
- Scrubber decks
- Mechanical rooms
- Helicopter decks
- Truck loading ramps
- Mezzanines
- Laboratories

### PRODUCT ADVANTAGES

- 100% Solids (Solvent-free)
- Optional non-skid surface
- Superior abrasion resistance
- Seamless and monolithic
- Suitable for a broad range of substrates
- Water tight
- Can be applied in cold environments
- Excellent crack bridging capabilities

### CHEMICAL RESISTANCE

Stonchem 441 is formulated to resist a variety of chemical solutions. Refer to the Stonchem 400 Series Chemical Resistance Guide, which lists reagent concentration and temperature recommendations.

### PACKAGING AND COVERAGE

**Primer:** Stondri MVT  
5lt kit Part A & B – Approximately 10-12m<sup>2</sup>/5lt

**Lining:** Stonchem 441  
15lt kit 1 x 10lt Base : 1 x 5lt Activator  
Bulk kits available on request

Thickness	Application Coverage
0.750mm	20m <sup>2</sup> /15lt kit
1.500mm	10m <sup>2</sup> /15lt kit
3.0mm	5m <sup>2</sup> /15lt kit

### TYPICAL PROPERTIES AT 25°C

<b>Tensile Strength (ASTM D-638)</b>	18 MPa
<b>Hardness (ASTM D-2240, Shore D)</b>	50
<b>Abrasion Resistance (ASTM D-4060, CS-17)</b>	0.035gm max. weight loss
<b>Elongation (ASTM D-638)</b>	125%
<b>Low Temperature Flexibility (ASTM D-522)</b>	-23°C
<b>Flammability (ASTM D-648)</b>	Class I
<b>VOC (ASTM D2369, Method E)</b>	< 1 g/l
<b>Cure Rate</b>	8 Hours for foot traffic 24 Hours for chemical or immersion
<b>Colour</b>	Light Grey

**NOTE:** The above physical properties were measured in accordance with the referenced standards. Samples of the actual system, including binder and filler, were used as test specimens.

To the best of our knowledge the technical data contained herein are true and accurate at the date of issuance and are subject to change without prior notice. User must contact StonCor Africa to verify correctness before specifying or ordering. No guarantee of accuracy is given or implied. We guarantee our products to conform to StonCor Africa quality control. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited to replacement of products. Prices and cost data, if shown, are subject to change without prior notice. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY STONCOR AFRICA, EXPRESS OR IMPLIED, STATUTORY, BY OPERATION OF LAW OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

## STORAGE CONDITIONS

Store all components of Stonchem 441 between 13 to 30°C in a dry area, out of direct sunlight. **BE SURE TO HANDLE AND STORE PROPERLY.** The shelf life is 2 years in the original, unopened container.

## SUBSTRATE

Stonchem 441, with Stondri MVT, is suitable for application over concrete, wood, brick, quarry tile, metal or Stonhard mortar systems. For questions regarding other possible substrates or an appropriate primer, contact your local Stonhard representative or Technical Service.

## SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond and system performance. The substrate must be dry and properly prepared utilising mechanical methods. Questions regarding substrate preparation should be directed to your local Stonhard representative or Technical Service.

## PRIMING

Stondri MVT must be applied to the prepared surface and cured to a tack-free state before applications of the Stonchem 441 begins. For outgassing substrates, a second coat of primer may be applied. The use of a primer seals the substrate and enhances bonding. The primer should be applied using a rubber squeegee.

**Note: Primer should be applied later in the day as the substrate begins to cool.**

## APPLICATION GUIDELINES

For optimal working conditions, substrate temperature must be between 15 to 27°C. Cold areas must be heated until the slab temperature is above 13°C to ensure the material achieves a proper cure. A cold substrate will make the material stiff and difficult to apply. Warm areas or areas in direct sunlight must be shaded or arrangements made to work during evenings or at night. A warm substrate (15 to 27°C) will aid in the material's workability; however, a hot substrate (27 to 32°C) or a substrate directly in the sun will shorten the material's working time and cause other phenomenon such as pinholing and bubbling. Substrate temperature should be greater than 3°C above dew point.

Application and curing times are dependent upon ambient and surface conditions. Consult StonCor Africa's Technical Service Department if conditions are not within recommended guidelines.

## APPLYING STONCHEM 441

**Squeegee Application:** If applying the material by hand the process is as follows:

If the components can be heated using heating bands, the material should be heated to approximately 30 to 35°C. Regardless of the application method, premix the grey polyol as it tends to separate in the container. Due to the nature of the materials they must be portioned in separate containers and then poured into the mixing bucket.

- Pour the polyol and Isocyanate into the mixing bucket. If the material has not been heated, the material should be mixed for 90 seconds using a drill and the appropriately sized mixing blade. Otherwise, mix the material for 60 seconds.
- Once the material has been thoroughly mixed, pour it onto the substrate and spread the material to appropriate thickness using a notched squeegee and roller.

## Spray Application:

- As indicated above, the Stonchem 441 can be spray applied. Doing so requires a plural component spray rig with a 2:1 ratio proportion. The preferred spray rig is the following: Spray pump and heating unit – WIWA Duo Mix 230, as manufactured by WIWA Wilhelm Wagner LP
- Spray gun – WIWA 500F Airless Spray gun with one port of entry for the mixed two-component lining material. The spray gun shall be fed by a 6mm swiveling WHIP hose that contains mixed material.  
**NOTE: WHIP hose contains mixed material requiring that spray be continuous or a purge bucket be available to purge the lines after 15 to 20 seconds of inactivity. Purging can be done with 2 or 3 squeezes on the gun.**
- Drum heaters are required to heat the material to approximately 35°C.
- The following minimum services shall be provided to run the spray equipment and heaters:
  - Electric: Single phase, 220 volt
  - Compressed Air: 185 CFM @ 90psi, treated to assure dry air supply. Moist air is unacceptable and can adversely affect the material.
- Once the polyol has been pre-mixed, both components are heated and the proper pressures are achieved, spray apply the required thickness of Stonchem 441 to the primed substrate.

## CURING

The surface of Stonchem 441 will be tack-free in 8 hours at 21°C. The coated area may be put back into service in 24 hours at 21°C, conditions permitting.

## PRECAUTIONS

- Acetone is recommended for clean-up of Stonchem 441 isocyanate or polyol / amine resin material spills. Use these materials only in strict accordance with the manufacturer's recommended safety procedures. Dispose of waste materials in accordance with government regulations.
- Avoid contact with Stonchem 441 polyol resin and Isocyanate, as they may cause skin, respiratory and eye irritation.
- The use of NIOSH/MSH approved respirators using an organic vapor / acid gas cartridge is mandatory during spray applications.
- The selection of proper protective clothing and equipment will significantly reduce the risk of injury. Body covering apparel, safety goggles or safety glasses and impermeable gloves are required.
- In the event of accidental eye contact, immediately flush eyes with copious amounts of water for 15 minutes and seek medical attention.
- If material is ingested, immediately contact a physician. **DO NOT INDUCE VOMITING.**
- Use only with adequate ventilation. Inhalation of vapors may cause severe headaches, nausea and possibly unconsciousness.

## NOTES

- Material Safety Data Sheets for Stonchem 441 are available online at [www.stoncor.co.za](http://www.stoncor.co.za), under Products or upon request.
- Specific information regarding the chemical resistance of Stonchem 441 is available in the Stonchem 400 Series Chemical Resistance Guide.
- A staff of technical service engineers is available to assist with product application, or to answer questions related to Stonhard products.
- Requests for technical service or literature can be made through local sales representatives and offices or corporate offices located worldwide.

**CAUTION: MAY CONTAIN FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRONIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NONFERROUS TOOLS AND TO WEAR CONDUCTIVE AND NONSPARKING SHOES**



## StonCor Africa (Pty) Ltd

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## One Part, Low Modulus, Polyurethane Elastomeric Sealant

### KEY BENEFITS SUMMARY

- Ideal for use in high movement, high performance joints up to +100 % / -50 %
- Excellent resistance to weathering, ageing and the effects of UV exposure
- Easy to use: Single component and rapid curing, with no primer required in most applications
- Can provide a 3 hour fire and temperature rating for joints in concrete walls and floors
- Meets the requirements of BS EN ISO 11600 F-25LM, DIN 18540 F, SNJF elastomère 1ère cat and CAF approved

### PRODUCT INFORMATION

#### Description

Tremco PU515 is a low modulus, one part, moisture curing polyurethane.

#### Usage / Purpose

Tremco PU515 is a high performance sealant. It is ideal for use in a range of demanding construction applications.

Tremco PU515 is particularly suitable for sealing dynamically moving joints in precast concrete construction and curtain wall joints.

It is ideal for sealing wide vertical joints up to 100 mm, and for perimeter caulking of windows, doors, panels, etc.

Compatible with most building materials such as concrete, brickwork, natural and artificial stone, steel, aluminium, wood, ceramic tiles, rigid plastics, etc.

#### Colours

White. Other colours available subject to min order quantity and lead time.

#### Packaging

600 ml sausage packs (20 per case).

#### Availability

Direct from Tremco illbruck (see back of leaflet for address and telephone details) or via local and national distributors.

### USAGE GUIDELINES

#### Joint Design Considerations

- Joints should be designed in accordance with BS 6093.
- For the purposes of joint width calculation in BS 6093 the MAF of Tremco PU515 is +100 % to -50 %.
- For optimum performance, the width to depth ratio of PU515 should be 2:1 subject to a minimum depth of 10 mm on porous substrates and 6 mm on non-porous substrates.
- A maximum depth of 15 mm should be maintained for joint widths of 30 mm or more.
- Sealant width should never be less than sealant depth.
- For fillet joints the minimum bite onto each surface should be 10 mm for porous substrates and 6 mm for non-porous substrates.

#### Preparation

- Joint faces should ideally be clean, dry, sound and free from grease and any other contaminants likely to impair adhesion.
- Loose friable material must be removed and arrisses made good.
- Tremco PU515 is non-staining on a number of different substrates. If in doubt, contact Tremco illbruck Technical Services.

- Application to damp surfaces is possible but should not be attempted without first consulting with a Tremco illbruck Technical Sales Representative. Tremco PU515 is NOT recommended for prolonged immersion in water.
- Install smooth faced, closed cell polyethylene foam rod under 20 % - 30 % compression.
- Where joint depth is insufficient to allow the use of a polyethylene foam rod, a silicone faced self-adhesive bond breaker tape should be used.

#### Priming

Tremco PU515 provides excellent unprimed adhesion to most common building substrates, however, based on the results of in-house testing, a primer may be recommended for certain installations/applications.

#### Application

- Application should be in accordance with BS 8000:16 - "Code of practice for sealing joints in buildings using sealants".
- Apply between +5 °C and +50 °C.
- All beads should be tooled after application to ensure firm, full contact with the joint faces.

#### Coverage Rate

(Approximate Linear Metres per 600 ml Sausage)

WIDTH	6 mm	10 mm	20 mm	25 mm
DEPTH (min)				
6 mm	16.7	10.0	-	-
10 mm	-	-	3.0	
12 mm	-	-	-	2.0

#### Cleaning

Immediately remove excess sealant and smears adjacent to the joint (use masking tape where appropriate). Equipment may be cleaned with xylol or toluol while sealant is in an uncured state.

## TECHNICAL INFORMATION

	Method	Result
Composition		One part moisture curing polyurethane
Specific Gravity		1.28
Consistency	Boeing Jig	Non-sag
Skin Forming Time	at +23 °C, 50 % RH	40 minutes
Cure Rate	at +23 °C, 50 % RH	4 mm / 1st day 10 mm / 6 days
Tensile Strength	ISO 8339	0.26 MPa
Ultimate Elongation	ISO 8339	634 %
Modulus at 100 %	ISO 8339	0.13 MPa
Hardness Shore A		15
Elastic Recovery	ISO 7389	89 %
Service Temperature Range		-40 °C to +90 °C
Movement Capability	ISO 9047	+100 % / -50 %

### Storage

Store in dry conditions between +5 °C and +25 °C. The storage temperature should not exceed +25 °C for extended periods of time. Keep away from heat sources.

### Shelf Life

12 months when stored in its original unopened packaging.

### Health & Safety Precautions

Product Health and Safety Data Sheet must be read and understood before use.

### Technical Service

Tremco illbruck has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

### Guarantee / Warranty

Tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco illbruck written instructions and (b) in any application recommended by Tremco illbruck, but which is proved to be defective, will be replaced free of charge.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco illbruck Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.





**FLEXIBLE WATERPROOF FLASHING SYSTEM**

**HIGHLY FLEXIBLE REINFORCED WATERPROOFING SYSTEM  
DURABLE, UV-RESISTANT  
EXCELLENT ADHESION TO MOST ROOFING MATERIALS**

**PRINCIPAL USES**

Flashings, parapet walls, sealing laps and roofing screws on corrugated or galvanised roofs.

**INSTRUCTIONS**

All surfaces must be clean, sound and dry. Remove all loose materials with a wire brush. Metal surfaces should be free of rust. All brickwork surfaces should be plastered to a true, smooth finish.

**PRIME COAT**

If surface is porous, apply a prime coat using 1 part Pro-Struct 680 Acrylic with 1 part clean water.

**FIRST COAT**

Apply a generous coat of Pro-Struct 680 liquid by brush or roller at approximately 1,0 litre/m<sup>2</sup>. While still wet, the Pro-Struct WP1100 reinforcing fabric is placed into the first coat and is smoothed out carefully ensuring the fabric is wetted out with no wrinkles.

**SATURATION COAT**

Immediately after fabric has been placed, a second coat of Pro-Struct 680 Liquid can now be applied at approximately 0,5 litre/m<sup>2</sup> to fully saturate the membrane from both sides. Allow to touch dry.

**TOPCOAT**

A final coat of Pro-Struct 680 Liquid can now be applied at approximately 0,3 litre/m<sup>2</sup>.

**CLEANING**

Clean tools immediately with water.

**CAUTION**

Always apply during good weather conditions and avoid applying if rains are expected within 12 hours.

**TYPICAL PROPERTIES AT 25°C**

<b>Finish</b>	Semi Gloss
<b>Colours</b>	Grey, Charcoal, Terracotta and White
<b>Type</b>	Flexible reinforced resin
<b>Drying Time Surface</b>	8-12 Hours
<b>Volume Solids</b>	42%
<b>Application Temperature</b>	5°C to 35°C
<b>Theoretical Coverage</b>	1,8-2 litres/m <sup>2</sup> with reinforced membrane
<b>Apply By</b>	Brush or roller
<b>Apply Over</b>	Clean, dry, sound masonry and clean galvanized steel surfaces
<b>Thinner</b>	Water
<b>Total Thickness of Applied System</b>	1-1,5mm with Pro-Struct 200 Membrane
<b>VOC Content</b>	6g/l

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**EXCELLENT ADHESION AND CRACK BRIDGING PROPERTIES  
APPROXIMATE COLOUR AND APPEARANCE OF CONCRETE  
GIVES EVEN APPEARANCE TO PATCHY AND IRREGULAR OFF-SHUTTER CONCRETE  
ELASTOMERIC CEMENTITIOUS WATERPROOFING COATING WHICH REDUCES CHLORIDE ION PENETRATION AND CARBONATION OF CONCRETE**

**TYPICAL PROPERTIES AT 25°C**

<b>Colour</b>	Light Grey Cementitious Colour
<b>Number of Components</b>	2, i.e. 20kg Powder + 8.7kg Polymer
<b>Mix Ratio</b>	Mix entire kit
<b>Yield</b>	19 Litres
<b>Recommended Coverage</b>	9.5m <sup>2</sup> at 2mm thick
<b>Apply Over</b>	Concrete or bricks and blocks
<b>No. of Coats Required</b>	1 to 2, depending on surface profile and porosity
<b>Apply By</b>	Block Brush / Spray
<b>Curing Time</b>	3 Days at 25°C
<b>Cleaning</b>	Water
<b>Application Temperature</b>	5 to 40°C

**PRODUCT DESCRIPTION:**

Flexicoat is a two-component polymer modified cementitious coating which forms an elastomeric waterproofing membrane. Flexicoat is used for the protection and waterproofing of concrete and brick structures and can be used in conjunction with Pro-Struct 599 Polypropylene non-woven geotextile for waterproofing systems.

**USES:**

- Excellent weather resistance.
- Forms an effective barrier to sulphates and chlorides.
- When mixed, the product does not segregate or settle. Important when applying away from the point of mixing.
- Does not check, crack or powder.
- Good crack accommodation after curing (maximum of 0.3mm).
- Ease of application by block brush.

**SURFACE PREPARATION:**

Surface must be clean, sound and free of shutter oil, curing compound, etc. Prior to application, the surface should be cleaned with a wire brush and thoroughly soaked with water. Dampening to be maintained immediately ahead of application to avoid ravelling.

**MIXING AND APPLICATION:**

Pro-Struct 506 Flexicoat is a two part kit – add the binder to the mixing vessel before adding the powder. This is mixed to a typical smooth slurry using a slow speed paddle mixer for a minimum of 3 minutes. Apply by block brush, ensuring mix is occasionally stirred to avoid settling.

Can be sand blinded prior to the installation of tiles when used with Pro-Struct 599.

**CAUTION:**

Under no circumstances should the binder be added directly to the dry power mix. Do not use polyester geotextiles.

**STORAGE:**

Store under dry conditions in accordance with SABS specification for cement.

**RUBBERISED BITUMINOUS WATERPROOFING**

**MULTI-PURPOSE WATERPROOFING COMPOUND  
RUBBERISED BITUMEN EMULSION FOR  
APPLICATION BY BRUSH OR ROLLER**

**PRINCIPAL USES**

A flexible waterproof coating used in conjunction with Pro-Struct 200 reinforcing fabric as a flexible waterproofing system for flashings, parapet walls and overlaps in roof sheeting.

**INSTRUCTIONS**

All surfaces must be clean, sound and dry. Remove all loose materials with a wire brush, or by sandblasting. Metal surfaces should be free of rust.

**PRIME COAT**

If surface is porous (e.g. concrete or fibreboard), apply a primer coat using 1 part Pro-Struct 203 liquid with 1 part clean water. Galvanised metal surfaces must be primed with Acrylast 3000.

**NB:** It is recommended that the Pro-Struct 203 liquid be stirred prior to and during application, as this will improve the workability.

**FIRST COAT**

Apply a generous coat of Pro-Struct 203 liquid by brush or roller at approximately 1 litre/m<sup>2</sup>. While still wet the reinforcing fabric Pro-Struct 200 is placed into the first coat and is smoothed out carefully, ensuring the fabric is wetted out with no wrinkles, and allow to dry.

**SATURATION COAT**

Apply at right angles to the first coat. A second coat of Pro-Struct 203 liquid is applied at approximately 1 litre/m<sup>2</sup> to fully saturate the membrane from both sides. Allow to touch dry.

**OPTIONAL**

A final coat of Pro-Struct 203 liquid can now be applied again at right angles to the previous coat, ensuring that no sign of the reinforcing is visible.

**PROTECTIVE COATING**

It is highly recommended that a protective coating be applied to prevent any damage from ultra-violet light. 4 Days should be allowed before applying the protective coating. Pro-Struct 202 Bituminous Aluminium Paint is recommended as a UV coating.

**CLEANING**

Clean equipment with Pro-Struct 105 Epoxy Brush Cleaner and rinse off with water.

**TYPICAL PROPERTIES AT 25°C**

Colour	Black
Consistency	Thixotropic Liquid
Shelf Life	12 Months from date of manufacture
Drying Time	24 Hours
Solids % Mass	49%
Application Temperature Range	5°C to 40°C
Theoretical Coverage of Reinforced System	3-5m <sup>2</sup> /litre/coat
Optional Coat	0,75 litres/m <sup>2</sup>

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**BITUMINOUS PRIMER**

**A SEALER OR PRIMER FOR ALL POROUS AND  
NON-POROUS SURFACES**

**PRINCIPAL USES**

As a primer for all Bituminous systems, including Deltaplast and Scudoplast.

**SPECIFICATION**

Surfaces to be coated with Pro-Struct 201 Bituminous Primer at a rate of  $\pm 3-5\text{m}^2/\text{litre}$ , depending on surface porosity. On very porous surfaces, a second coat may be necessary.

**MIXING**

Stir well before use, using a flat paddle.

**INSTRUCTIONS**

Surfaces must be clean, sound and dry. All surfaces must be free from oils and grease and laitance removed from cementitious surfaces. Pro-Struct 201 is a one part bituminous primer and is ready for use. Application must be done by brush or roller. Primer must be allowed to dry completely, prior to overcoating to prevent entrapment of solvents.

**CAUTION**

Brushes are to be cleaned by using Pro-Struct 105 Epoxy Brush Cleaner and washed off with soap and water. Clean hands with a solvent-wetted rag. Adequate ventilation must be allowed for and do not smoke or use a flame during application. Avoid prolonged contact with skin and inhalation as product contains aromatic and aliphatic solvents.

**TYPICAL PROPERTIES AT 25°C**

Colour	Black
No. of Components	1
Coverage	$\pm 3-5\text{m}^2/\text{litre}$
Apply Over	Clean, dry surface
Flash Point	30°C
Drying Time	2-4 Hours
Solids % Mass	32%
Application Temperature	10°C to 35°C
Overcoat Time	4-6 Hours
Shelf Life	12 Months

**Safety: Material is flammable and the necessary safety precautions need to be taken in the handling of his product.**

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## Selection & Specification Data

<b>Generic Type</b>	Reflective fibred aluminium coating
<b>Description</b>	Alumanation 301 is a premium grade, industrial maintenance, self-priming, high build aluminium coating formulated from specially processed asphaltic liquids, non-drying oils, a proprietary blend of natural and synthetic fibres, and a fine aluminium pigment. Alumanation 301 contains no asbestos. It reflects heat, prevents corrosion and protects against mild acid and alkali fumes on a variety of substrates, including metal, concrete, transite, built-up roofing and modified bitumen.
<b>Features</b>	<ul style="list-style-type: none"> <li>- Used for the rust proofing and weatherproofing of metal roofs, sidewalls, tanks, bridges, structural steel, electrical transmission towers, piping, guard rails, etc.</li> <li>- Can be applied in colder temperatures than its water-based counterpart.</li> <li>- The thick one-coat application makes it very economical and easy to use product.</li> <li>- Aluminium finish is highly reflective, protecting the roof from harmful UV as well as keeping building cooling costs to a minimum.</li> </ul>
<b>Colour</b>	Aluminium
<b>Finish</b>	Semi-gloss
<b>Dry Film Thickness</b>	200 microns – Inland Environment 300 microns – Coastal & Industrial Environment
<b>Specific Gravity</b>	1.06 ± 0.02
<b>Solids by Mass</b>	61% ± 1%
<b>Solids by Volume</b>	47% ± 1%
<b>Flexibility at 0°C</b>	Passes 6mm diameter mandrel bend
<b>Theoretical Coverage</b>	2.35m <sup>2</sup> /litre at 200 microns 1.57m <sup>2</sup> /litre at 300 microns The surface dictates the actual coverage.
<b>Limitations</b>	Do not apply when the air or surface temperature is below 5°C or when rain is imminent. Not recommended for use over tar surfaces, slate, tile, wood, shingles or where water continuously ponds. Do not apply over newly installed asphalt built-up roofs without allowing the roof to cure for a minimum of 90 days.

## Substrates & Surface Preparation

<b>General</b>	Remove all debris, dirt, dust and loose gravel by sweeping with a stiff broom or power cleaning equipment or by using high pressure power wash. Remove any oil or grease from surface to be coated. All surfaces must be clean and dry.
<b>Metal</b>	Rust and flaking or peeling paint shall be wire brushed, scraped or pressure washed to ensure a sound surface. No priming is necessary because of the rust inhibiting oils in Alumanation 301. Seams, fasteners and protrusions shall be repaired as needed. Refer to Alumanation 301 Specification Guide.
<b>Built-up Roofing</b>	Torn flashings, faulty copings, parapet walls, large blisters and surface breaks shall be repaired.

## Application Equipment

<b>General</b>	Apply Alumanation 301 by brush, roller or spray. Do not apply when the surface temperature is less than 3°C above the dew point. Precautions should be taken to prevent overspray from settling on nearby objects or structures when spraying in windy conditions.
<b>Spray</b>	Airless or conventional spray methods: Examples of airless equipment are Graco 45:1 King, Graco 30:1 Bulldog, Graco GH533 and GH733 (gas powered) or equivalents. Airless spray tip recommendation would be a reversible self-cleaning tip .043" to .055" with a fan angle of 40° to 50°.
<b>Maintenance</b>	It is recommended that the coating installation be checked on a regular maintenance schedule. Recoating may be necessary at various intervals, depending upon the severity of conditions. Small area touch-up can be made at any time by following recommended application procedures.
<b>Mixing</b>	Mechanically mix material prior to use.

## Curing Schedule

Drying time at 25°C	24 Hours
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## Cleanup & Safety

<b>Cleanup</b>	Use Thinner # 85
<b>Safety</b>	Read and follow all caution statements on this product data sheet and on the material safety data sheets for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective creams on face, hands and all exposed areas.

## Packaging, Handling & Storage

<b>Shipping Weight (Approximate)</b>	Alumanation 301	<u>5 Litre</u> 5.5kg	<u>20 Litre</u> 22kg
<b>Flash Point</b>	35°C		
<b>Storage Temperature &amp; Humidity</b>	4 to 43°C 0 to 100%		
<b>Shelf Life</b>	12 Months minimum when stored at 25°C		



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November 2016 replaces March 2012

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**ANNEXURE B**

**MATERIAL SPECIFICATIONS**

**ROOF TILES**





Il marchio delle grandi industrie del cotto.

## 20 YEARS WARRANTY

**Industrie Cotto Possagno S.p.a.**, hereinafter referred to also as the **Company**, guarantees its clay products listed in point 13 (bent tiles, tiles and special pieces) in the conditions listed below, for the validity term indicated in point 10.

1. The Company guarantees its products against failures affecting their function, including freezing and permeability, as per the acceptance limits set by standards UNI EN 1304 - 1024 - 538 - 539/1 - 539/2 and any subsequent amendments.
2. The warranty is subject to a correct laying of the product, for which clay fittings produced by the Company, such as ridge tiles, end tiles, three-way tiles and aerators must be used. The product must be laid in compliance with the instructions in the General Catalogue of the Company and/or in the specific manuals by the trade association ANDIL (Italian Association of Clay Brick and Roof Tile Manufacturers) and, in all cases, in compliance with the standards in force (UNI 8178 - 8627 - 9308/1 - 9460 - 10724 and any subsequent amendments). It is advisable not to use plaster or any other adhesives as this obstructs the expected ventilation necessary for the roof covering.
3. The warranty is valid if the roof is built in compliance with the instructions in the "chart of slopes" supplied in the General Catalogue of the Company.
4. The warranty does not cover any products broken during transport, during handling at building sites, or by weather events considered unusual. Any water seepage caused by incorrectly laid gutters and downspouts and/or windows on the roof are not covered by this warranty.
5. The Company shall not be held liable for any accidental and/or consequential damage, including injuries to people, and damage to the building or its content.
6. This warranty includes the intervention of the Company only in the event the technical features of the product, from the viewpoint of freezing, watertightness and breaking load resistance, do not comply with the acceptance limits provided for by the standards in force. This warranty is not valid in case of non-compliances other than those indicated.
7. This warranty entails the Company's commitment to provide the customer with a new product to replace the one that the Parties considered damaged and/or non-compliant with the technical specifications previously described. The new product shall be delivered to the customer at the Company's premises, located in Possagno (TV), and the customer shall be responsible for the withdrawal, transport and laying expenses. Whenever the product to be replaced is "out of production", the Company agrees to provide the customer with a substitute product.
8. The product supplied to replace the non-compliant one according to this warranty shall be guaranteed for a period equivalent to the time remaining for the replaced product.
9. In order to make this warranty valid and effective, the customer must submit the documents proving the purchase of the product, such as the transport document and the sales invoice, which shall have been duly paid.
10. The warranty is valid for 20 (twenty) years starting from the date the product is delivered.
11. This warranty, which replaces any previous ones, shall apply only to products listed in point 13 and manufactured after the date it was published, march 01, 2012. Any future changes to the conditions of guarantee apply only to products sold after the date of the amendment.
12. Any dispute shall fall within the jurisdiction of the Competent Court in the area in which the Industrie Cotto Possagno S.p.a. is headquartered (Treviso).
13. Clay products (bent tiles, tiles and special pieces), covered by this warranty: Coppo Antica Possagno, Coppo d'Autore, Coppo Vecchio Chiaro, Coppo Vecchio Scuro, Coppo Francia, Coppo Serenissima, Coppo Veneto Antico, Coppo Canale Antico, Coppo con Dentello Rosso, Coppofermo Rosso, Coppo Umbro Toscano Rosato, Coppo Umbro Toscano Antico, Coppo Canavese Rosso da 23 cm, Coppo T50 Rosso, Tegola Sarda Rossa, Tegola Sarda Antichizzata, Tegola Sarda Canale Antico, Coppo Rosso Liscio, Coppo Rosso Rigato, Coppo Rosato Liscio, Coppo Rosato Rigato, Unicoppo Extra Rosso, Unicoppo Extra Ardesia, Unicoppo Extra Antica Possagno, Unicoppo Extra d'Autore, Unicoppo Extra Francia, Unicoppo Extra Serenissima, Unicoppo Extra Vecchia Fornace, Unicoppo Extra Veneto Antico, Unicoppo Extra Selezione tipo "a mano".

Possagno, 01 marzo 2012

Presidente e Legale Rappresentante

Dott. Alessandro Vardanega





# TECHNICAL MANUAL

## CLAY ROOFING TILES

### *Coppo Clay Roof Tiles*



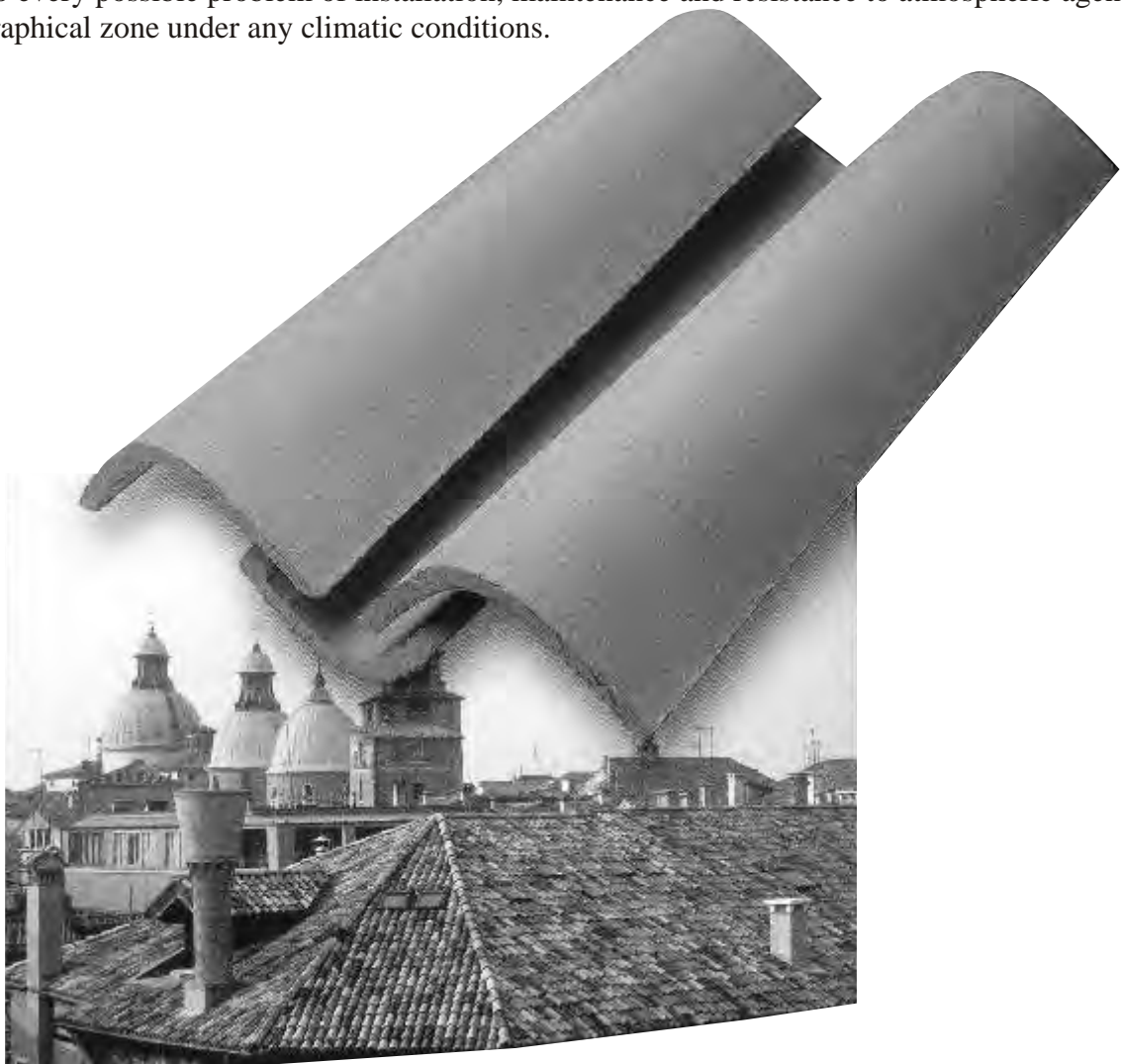
**ITALCOTTO**  
CLAY ROOFING TILES

# *Coppo Clay Roof Tiles*

*The finest Italian roof tiles.*

Of all roof tiles, bent tiles are surely the most classical and the richest in tradition. They are the ideal solution for buildings of high historical and architectural value and provide the best type of protection for the most complex roof structures thanks to the particular morphology of the elements that can be overlaid in different ways with ample tolerances. This type of installation ensures, among other things, ample and effective air circulation under the roof. Industrie Cotto Possagno produces several different lines of bent tiles for roofing, each suitable for special uses or highly refined aesthetic demands. The "Traditional" line consists of the typical red, pink or beige bent tiles; then there is a line of antiqued bent tiles, with a number of different models, designed for use in full respect of the environment and especially for urban renewal projects.

All the bent tiles produced are suitable for use on ventilated roofs. The ventilation systems used by Industrie Cotto Possagno are ideal for every engineering need, and have been developed to provide the solution to every possible problem of installation, maintenance and resistance to atmospheric agents in any geographical zone under any climatic conditions.



**ITALCOTTO**  
CLAY ROOFING TILES



# Coppo Clay Roof Tiles



*Formed originally by the shape of the human thigh, the distinctive rounded curve of the Coppo clay tile is complemented by the warm, rich colour of terracotta clay. Versatile, frost resistant, fully waterproof, colour fast and durable, this extremely robust tile has high mechanical strength that helps it to endure the severest abuses that transport, handling and laying can inflict.*

## **INSTALLATION**

### **UNDERLAYMENT:**

Recommended underlayments installed over the sheathing are dependent on roof pitch and local weather conditions.

On roofs below 21 degrees, tiles should be considered as a decorative finish only and laid over an impervious built-up membrane. On pitched roofs of 21 degrees or greater, cover entire roof area with plastic underlaying.

Underlayment should be laid parallel to the eaves with minimum 100mm horizontal lap and 150mm vertical lap with a minimum 300mm upstand at all abutments. An additional layer of underlayment should be secured with large flat-headed non-corrosive roofing nails at 150mm centres.

### **EAVES:**

At the eave a 38 x 50 softwood cant strip should be installed to the fascia board. This will support the toe of the eave course of tiles and set them at the correct angle.

The eave course of tiles should be set to overhang the fascia board by at least 50mm, dependant on gutter detail. Each tile should be secured with a single non-corrosive nail, through the hole provided. The nails should not be driven tightly against the tile.

### **FIXING**

All pitched roofs are affected by wind pressure and this varies dependent upon the pitch of the roof, the exposure of the building and the height

of the roof from the ground. Please check with your local building code, but as a general rule:

1) The field tiles are installed by placing the initial layer (under tile) with the concave side upwards and having the narrow side of the tile on the eave side. These tiles are laid between the vertical battens with a 120mm overlap. The under tile has a moulded hook which affixes itself to the horizontal batten.

2) On top of the initial layer tiles are laid concave side down with the wide part of the tile on the eave side so as to cover the joints between tiles. For this reason the first row should be laid using shortened tiles. The top tiles need to be individually nailed with a non-corrosive nail of sufficient length to penetrate the batten. (+- 63mm clout nail).

3) Storm clips: as a precaution top tiles can be clipped to reduce the effects of wind uplift. (Stainless steel clip Type - S)  
See batten layout illustration.

### **RIDGE:**

A wood nailer should be secured to the apex of the ridge to support the ridge tiles. It should be set at a height to allow the ridge tiles to rest on the top course of field tiles. The top course of field tiles should be finished close to the ridge board.

The interlocking ridge tiles should be secured to

the ridge nailer with a non-corrosive nail. Where they interlock they should be bedded in mortar. Where it is necessary to finish the top course of field tiles with a cut, the installer should cut the tile, on site, and drill the head of the tile and nail in the normal way.

The resulting gap between the ridge tile and field tile can be filled with colour matched mortar (oxide).

Ensure that no bedding is visible on the exposed surface of the tiles.

#### ***HIPS:***

A wood nailer should be secured to the apex of the hip. It should be set at a height to allow the hip tile to be supported for nailing and rest on the adjacent cut field tiles.

The field tiles either side of the hip should be cut close to the wood nailer and all cut tiles firmly secured. Small cut tile pieces can be secured using a silicon adhesive.

Ensure that the first hip tile is set at the same angle as the others. Secure to the nailer with a single non-corrosive nail and where the hip tiles overlap they should be secured with mortar. The hip tile should be bedded in colour matched mortar and either flush pointed or back bedded. Ensure that no mortar marks the face of the tiles.

#### ***VALLEYS:***

Open valleys should be formed using a long-life lead flashing. The valley metal should be a minimum of 500mm wide for short valleys and 600mm wide for longer valleys and in length, no greater than 2.5m. Sheets should be lapped by 100mm and not soldered.

On a steep valley with unequal pitches you might consider a 25mm crease on the centre line to reduce the force of the water and direct the flow. A wide open valley is strongly advised in locations that will experience high snow loading or where heavy roof debris accumulation is likely. The edge of the valley metal should be turned over 120mm and secured to the deck with cleats. The tile should be cut to form an open valley 150mm wide, The cut tiles should be secured without puncturing the valley metal. Open valleys should be bedded in mortar and flush pointed. You should ensure that the valley discharges evenly over the fascia board into the gutter.

#### **ABUTMENTS:**

##### **Side Abutments:**

Where field tiles finish against a vertical abutment the underlayment should be turned up the wall at least 150mm and over the deck an even amount. The edges of the deck flashing should be turned up 25mm to form a secret gutter, directing water down the roof and discharging into the gutter. The flashing should be firmly secured to the wall. You might consider setting the flashing in a bed of flexible roof cement, to give additional protection, at this vulnerable junction. The tiles can then be laid close to the wall. On brick abutments a cover flashing let into a mortar joint can be installed.

##### **Head Abutments:**

The underlayment will be returned up the wall at least 150mm and secured. The top course of field tiles will then be laid. Where it is necessary to finish the top course with a cut tile, the installer should cut the tile on site, and drill each head, then secure to the deck in the normal way. The resulting gap under the tiles can either be filled with colour match mortar or with a purpose-made rubber top filler. Ensure that no bedding is visible on the exposed surface of the tiles. A metal flashing should be formed to the correct angle, it should abut the wall by at least 150mm and cover the head of the tiles by 150mm. With a brick abutment, the flashing can be returned into the mortar joint and a cover flashing installed. When flashing behind a chimney it is always advisable to form a saddle to divert the water around the chimney. The saddle should be weathered in suitably compatible flashing material.

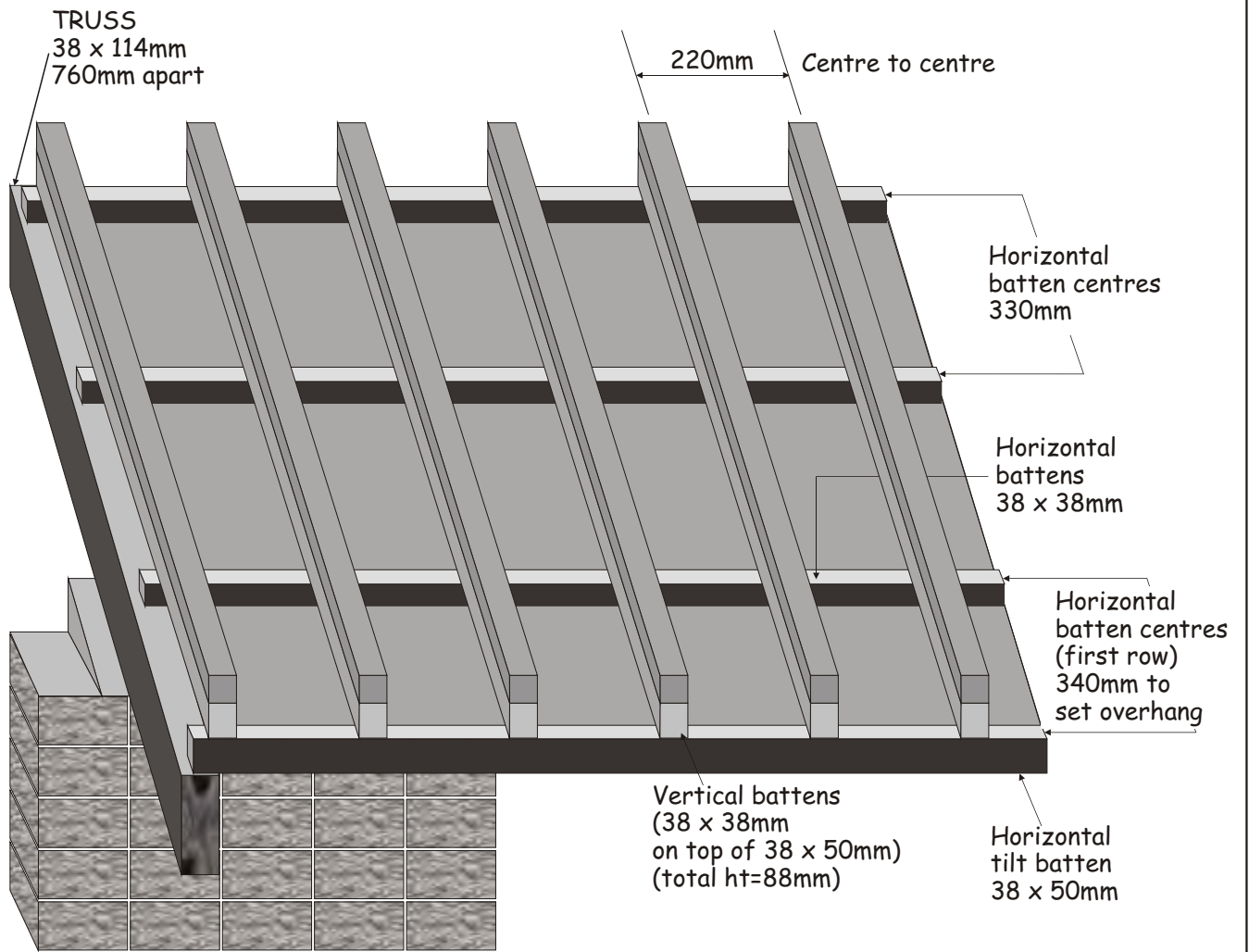
##### ***PACKING OF MATERIAL***

Pallets: 252-280 pieces per pallet.

##### **SPECIAL PIECES:**

- a) Hip and ridge tiles: 2,5 pieces per linear metre
- b) Hip end caps

# Coppo Clay Roof Tiles



**SUGGESTED BATTEN LAYOUT**

**ANNEXURE C**

**HERITAGE MITIGATING CONDITIONS**

Mitigation Measures recommended in the Heritage Impact Assessment

#### GENERAL MITIGATION MEASURES

- **PROTECTION** – Sufficient care needs to be taken when working on the building knowing its historic and cultural significance. Allowance needs to be made for the protection of areas from damage and theft while working including areas used for the stockpiling of material and construction waste. This is particularly true for surfaces which are exposed (the stone façade), important details and copper elements.
- **CONTRACTOR** – the demonstration of relevant experience working on historic buildings and working with the specified roof tile need to be required by the contractor as part of the tender documentation.

#### ROOF TILES

- The new roof tiles must be a clay “roman” type tile (also referred to as an “up an over” tile) as specified.
- The original roof tiles must be carefully assessed and removed for possible reuse. Should sufficient tiles be salvaged to re-roof selected section of the roof of the building then this should occur in preference to the replacement with new roof tiles.
- Should in not be possible to salvage sufficient roof tiles the roof should be retiled with the specified and agreed roof tile.
- The old roof tiles should be removed and retained for reuse on other historic buildings should they not be reused.

#### SHEETING ROOFS

- Should sheeting be replaced the new sheeting should match the profile of the original.
- Sheeting that is repainted should be repainted in a red oxide colour as per the original colour scheme

#### FLAT ROOFS

No specific mitigation measures required

#### GUTTERS

- The profile of the new gutters should match that or the original
- The gutters should be repainted in a colour to match the original

#### DOWNPIPES

- Internal courtyard or roof top level downpipes should be replace to match the original.
- External façade downpipes should only be replace where necessary. The relining of the downpipes is preferable over replacement
- The profile of the new downpipes should match that or the original
- The gutters should be repainted in a colour to match the original

## HERITAGE WATCH LIST FOR TENDER DOCUMENTS

### General

- Additional caution needs to be taken when working with heritage buildings as damage can often not be repaired and items cannot be replaced.
- Movable or removable items that may be damaged or stolen during the construction process should be put into safe keeping and securely locked away. These should only be reinstalled after the completion of the project.
- No item is to be disposed of without approval of the professional team and heritage consultant.
- Any items found on site, regardless of their perceived value, should be put to one side to be assessed by the architect and heritage consultant prior to disposal.
- The site and building should be kept secure at all times.
- The buildings should be kept weatherproof to prevent water damage.
- Vertical access to the roof (be it done internally or externally) should allow for the protection of existing surfaces and fittings from damage.

### Demolition

- No demolition is to take place without prior confirmation of its extents with the architect.
- Any fittings recovered during demolition are to be retained and are not to be disposed of without permission from the professional team and heritage consultant.
- Chasing/chopping of existing surfaces should be limited where ever possible. Where this needs to occur it should be away from any existing fittings and decorative wall finishes (such as tiles). The extents of all chasing / chopping must be confirmed with the professional team and heritage consultant prior to the start of work.

### Woodwork and Timber

- Woodwork should be protected from damage during construction.
- The balustrade of the staircase, should they be used for access, should be covered with soft board or similar covering to protect it from damage.